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RESULTS OF BOUNDARY LAYER TRANSITION TESTS OF THE 25-SCALE RIGHT-HAND WING AND TRUNCATED AFT FUSELAGE MODEL (94-O) IN THE AEDC VKF "B" HYPERSONIC WIND TUNNEL (CH9OA, MA29)

SPACE SHUTTLE AEROTHERMODYNAMIC DATA REPORT

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April, 1979

DMS-DR-2451
NASA CR-151,772

RESULTS OF BOUNDARY LAYER TRANSITION TESTS OF THE 0.025-SCALE RIGHT-HAND WING AND TRUNCATED AFT FUSELAGE MODEL (94-0) IN THE AEDC VKF "B" HYPERSONIC WIND TUNNEL (OH90A, MA29)

by

J. W. Foust
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Prepared under NASA Contract Number NAS9-13247

by

N79 - 77457

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for

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Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

WIND TUNNEL TEST SPECIFICS:

Test Number:	AEDC HWTB V41B-P4A, V41B-K7A (Blockage Study)
NASA Series Number:	OH90A, MA29
Model Number:	94-0
Test Dates:	March 3, 1978 through March 11, 1978
Occupancy Hours:	64

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ABSTRACT

Test OH90A was conducted in the AEDC VKF "B" Hypersonic Wind Tunnel with the purpose of evaluating boundary layer transition on the lower surface of the space shuttle orbiter wing during simulated re-entry flight conditions. Boundary layer transition effects were simulated by varying step and gap irregularities at the RSI/RCC (reusable surface insulation/reinforced carbon carbon) interface in the insulation material near the leading edge of the wing. Re-entry conditions simulated were Mach 8 at freestream unit Reynolds numbers from 0.5×10^6 to 3.5×10^6 per foot. Model angles-of-attack were 30 and 40 degrees.

One hundred twenty-eight (128) runs consisting of infrared and phase-change paint data were obtained to support the test objective. Tabulated and plot source reduced data are included in the Appendices of this report.

The model configuration, instrumentation, test procedures, and data reduction are described in this report.

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INTRODUCTION

This test, Rockwell designation OH90A, was part of a large program to evaluate the effects of aerodynamic heating on the space shuttle orbiter. It was specifically designed to study boundary layer transition on the lower surface of the orbiter wing. Gaps and steps in the wing insulation material were simulated to determine the effect of such irregularities on the state of the boundary layer.

The tests were conducted in the 50-inch Hypersonic Wind Tunnel (B) at a freestream Mach number of 8. The freestream unit Reynolds number was varied from 0.5×10^6 to 3.5×10^6 per foot. Model angles-of-attack of 30 and 40 degrees were run with zero model roll angle. Several model configurations with various insulation tile gaps and step heights were tested. An infrared scanning camera and the phase-change paint technique were used on different runs to measure the heat-transfer coefficient on the wing lower surface.

Prior to the boundary layer transition test, in a separate test entry, a blockage study was conducted to determine the maximum allowable model size for OH90A. This test was run in Tunnel B on October 14, 1976, under ARO Project Number V41B-K7A (Rockwell designation MA29). The results of that study are also included in this report.

This data package is one of two prepared for the OH90A test entry. It reports the results from the first four test shifts. A 0.04-scale orbiter forebody model was tested during the fifth and final shift of this entry. This was in support of the OH103 test program, and the data are reported in a separate data package.

NOMENCLATURE

SYMBOL	DESCRIPTION
ALPHA-MODEL	model angle-of-attack in the pitch plane (positive direction, nose down), degrees
ALPHA-SECTOR	tunnel sector angle, degrees
b	model wing span, inches
BETA(TO), β, BETA (0.9TO)	semi-infinite slab parameter $\beta = \frac{H(TAW)\sqrt{\Delta t}}{\sqrt{\rho ck}}$ for this test, data were reduced with TAW defined as either TO or 0.9TO
c	specific heat of model material, $\frac{Btu}{lbm\text{-}^oR}$
CAMERA	denotes location of camera recording paint pictures TOP - camera on top of tunnel
DELTIME, Δt	time model was exposed to flow before taking phase-change paint picture or IR digitizing, sec.
GROUP	identification number for each tunnel injection
H(TO)	model heat-transfer coefficient based on tunnel stilling chamber temperature, TO, $Btu/ft^2\text{-}sec\text{-}^oR$
H(TO)/HRFR	H(TO) non-dimensionalized by HRFR
H(0.9TO)	model heat-transfer coefficient based on 0.9TO, $Btu/ft^2\text{-}sec\text{-}^oR$
H(0.9TO)/HRFR	H(0.9TO) non-dimensionalized by HRFR
HRFR	reference heat-transfer coefficient based on Fay-Riddell theory, $Btu/ft^2\text{-}sec\text{-}^oR$ $= \left[\frac{8.172(P01)^{0.5}(MU\text{-}0)^{0.4}(1 - (P\text{-}INF)/P01)^{0.25}}{(RN)^{0.5}\ (TO)^{0.15}}\right] x$ $[0.2235 + 0.0000135\ (TO + 560)]$

SYMBOL	DESCRIPTION
	where P01 = stagnation pressure downstream of a normal shock, psia
	MU-0 = air viscosity based on T0, lbf-sec/ft^2
	RN = reference nose radius = 0.04 ft.
INITIAL TEMP, T_i	model temperature measured prior to a run, ^oR
INJECT TIME	time required for model to reach centerline, sec.
k	model material thermal conductivity, Btu/ft-sec-^oR
MACH, M_∞	freestream Mach number
MU-INF	freestream viscosity
PAINT TEMP, T_{pc}	denotes the rated melting temperature of the selected paint, ^oF
PCK½, $\sqrt{\rho ck}$	see $\sqrt{\rho ck}$
PIC NO	denotes the frame number for each picture for a selected group. The number in brackets is the paint melt temperature in ^oF
P-INF, p_∞	freestream pressure, psia
PO, P_o	tunnel stilling chamber pressure, psia
Q-INF, q_∞	freestream dynamic pressure, psia
RE/FT, Re_∞	freestream unit Reynolds number, ft.$^{-1}$
RHO-INF	freestream density, slugs/ft.^{3}
ROLL NO	identification number for each roll of paint film
T	temperature, ^oR
TAW, T_{aw}	adiabatic wall temperature, ^oR
TBAR (TO)	$\frac{TW - T_i}{TO - T_i}$, where TW is the phase-change paint temperature

NOMENCLATURE (Concluded)

SYMBOL	DESCRIPTION
TBAR (0.9TO)	$\frac{TW - T_i}{0.9TO - T_i}$, where TW is the phase-change paint temperature
T-INF, T_∞	freestream temperature, ^oR
T_i	initial model surface temperature, ^oR
TIME, t	time, sec.
TO, T_o	tunnel stilling chamber temperature, ^oR
TW, T_w	measured model surface temperature, ^oR
V-INF	freestream velocity, ft/sec
y	spanwise distance from model centerline, in.
β	semi-infinite slab parameter, $\frac{H(TAW)\sqrt{\Delta t}}{\sqrt{\rho ck}}$
ρ	model material density, lbm/ft^3
$\sqrt{\rho ck}$	square root of the product of the model density, specific heat and thermal conductivity, $Btu/ft^2 - sec^{1/2} - {}^oR$

REMARKS

Test OH90A nominal operating conditions are presented in Table I. Run schedules for both the blockage test and the boundary layer transition test are presented in Table II. Part 1 of Table II presents the data groups at each test condition for the NASA/RI MA29 blockage test; Part 2 presents the data groups at each test condition for the NASA/RI OH90A transition test.

CONFIGURATIONS INVESTIGATED

In order to maximize the model scale without blocking the wind tunnel, a partial model, with the right wing cut away, was used. This blockage model, shown in Figure 1, consisted of a flat plate cut to match the wing planform, with a cone-cylinder to simulate the fuselage.

Based on the results of the blockage tests, the OH90A model (model 94-0), shown in Figure 2, was a 0.025-scale version of the shuttle orbiter. The basic model structure was steel, with interchangeable leading edge sections made of copper and Novamide. Internal water passages were provided for cooling the leading edge. The wing lower surface panels, also interchangeable, were made of Novamide 700/55, an insulator with good radiation properties in the infrared region.

Details of the simulated wing insulation are seen in Figure 3. Two types of insulation, designated as reuseable surface insulator (RSI) and reinforced-carbon-carbon (RCC), will be used on the orbiter, and both were included in the design of the OH90A model. The RSI simulation consisted of a single tile at each of six spanwise locations, as indicated in Figure 3a. Two leading edge sections gave two different chordwise positions for these tiles (see Figures 3a and 3b). Each individual tile could be adjusted to change the gap around the tile and the height of the tile above (or below) the wing surface. The RCC simulation consisted of copper and Novamide segments inserted into the wing leading edge to simulate misalignment or roughness. The segments could be arranged at semi-span locations shown in Figures 3c and 3d, with

variable gaps between the segments. The trailing edge of each segment on the lower wing surface extended 0.575-inch (model scale) from the leading edge.

Following is a summary of the simulated insulation step heights and gap variations:

A. Step heights perpendicular to the local mold line (inches):

Forward RSI Tiles	=	±0.003 ±0.005 ±0.007 ±0.010 ±0.012 ±0.015 ±0.020
Aft RSI Tiles	=	±0.005 ±0.007 ±0.010 ±0.012 ±0.015 ±0.020 ±0.025 ±0.030
RCC Segments (at Trailing Edge)	=	±0.003 ±0.005 ±0.007 ±0.010 ±0.012 ±0.015 ±0.020

B. Gap variations (inches):

Forward RSI Tiles (See insert, Figure 3a)	=	0.01 0.02
Aft RSI Tiles	=	0.01 0.02

RCC Segments (at Trailing Edge) = 0.002

RCC Segment Gap = 0.060*
(See Figures 3c and 3d)

* Fences of various shapes and thicknesses were installed in the 0.060-inch gaps.

Nomenclature to describe the model 94-0, vehicle 5 configuration wing is W_{116}. Dimensional data are presented in Table III.

Drawings of the 94-0 wing model can be found in Reference 1.

INSTRUMENTATION

Tunnel B stilling chamber pressure was measured with a 100- or 1000-psid transducer referenced to a near vacuum. Based on periodic comparisons with secondary standards, the uncertainty (a bandwidth which included 95-percent of residuals) of the transducers is estimated to be within ±0.1 percent of reading or ±0.06 psi, whichever is greater for the 100-psid range, and ±0.1 percent of reading or ±0.5 psi, whichever is greater for the 1000-psid range. Stilling chamber temperature measurements were made with Chromel Alumel thermocouples which have an uncertainty of ±(1.5°F + 0.375 percent of reading) based on repeat calibrations.

The infrared (IR) system which was used to measure model surface temperatures on some runs utilized an AGA Thermovision 680 camera which scans at the rate of 16 frames per second. The camera has a detector which is sensitive to infrared radiation in the 2-to 6-micron wavelength band. Infrared camera calibrations are performed with a standard black body reference source and have consistently been within ±1 percent of the camera manufacturer's calibration and are repeatable within ±1 percent in absolute temperature.

Initial model temperatures were recorded for data reduction of the IR and phase-change paint data and the precision of the measurement is estimated to be ±1.0 percent. A total time differential for exposure to the tunnel flow is also required, and the precision of this measurement is on the order of ±0.2 seconds. The interpretation of the wall

temperature from the phase-change paint technique is estimated to be ±1.0 percent of the paint rated value.

For RSI tile simulation, the copper leading edge section of the wing was instrumented with 4 30-gauge iron constantan thermocouples to monitor boundary layer transition. The thermocouples are shown in Figure 3a.

TEST FACILITY DESCRIPTION

Tunnel B, Figure 4, is a closed-circuit hypersonic wind tunnel with a 50-inch diameter test section. Two axisymmetric contoured nozzles are available to provide Mach numbers of 6 and 8, and the tunnel may be operated continuously over a range of pressure levels from 20 to 300 psia at $M_\infty = 6$, and 50 to 900 psia at $M_\infty = 8$. Stagnation temperatures up to 1350°R are obtained through the use of a natural gas-fired combustion heater. The entire tunnel (throat, nozzle, test section, and diffuser) is cooled by integral, external water jackets. The tunnel is equipped with a model injection system, which allows removal of the model from the test section while the tunnel remains in operation. A description of the tunnel may be found in Reference 2.

TEST PROCEDURES

Installation

Model 94-0 was mounted in the "B" tunnel in the inverted position. A series of pre-bent sting sectors positioned the model at 30 degrees angle-of-attack with the tunnel pitch sector at zero. Pitching of the tunnel sector to -10 degrees then positioned the model at the required maximum of 40 degrees angle-of-attack.

A test run log showing all configurations tested and the variables for each is presented in Table II, Part 1 for the MA29 blockage test and Table II, Part 2 for the CH90A test. Photographic data obtained during the test included 70-mm sequence photographs from the top of the test section on the paint runs, 70-mm pictures of the IR monitor screen, and a shadowgraph picture for each run. A log of the photographic data is presented in Table IV for MA29 and Table V for CH90A.

Operating Procedures

General

In the VKF continuous flow wind tunnels (A, B, C), the model is mounted on a sting support mechanism in an installation tank directly underneath the tunnel test section. The tank is separated from the tunnel by a pair of fairing doors and a safety door. When closed, the fairing doors, except for a slot for the pitch sector, cover the opening to the tank, and the safety door seals the tunnel from the tank area. After the model is prepared for a data run, the personnel access door to the installation tank is closed, the tank is vented to the tunnel flow,

the safety and fairing doors are opened, and the model is injected into the airstream. After data acquisition is completed, the model is retracted into the tank, and the sequence is reversed with the tank being vented to atmosphere to allow access to the model in preparation for the next run.

Phase-Change Paint Tests

Prior to each test run, the model configuration was prepared, the model attitude was set, and the proper paint was sprayed on the Novamide wing panel insert. The paint temperature was chosen based on estimates of the expected heat-transfer coefficient and, as the test progressed, on the results from previous runs. The model was injected into the tunnel flow for a test run, and a television monitor was used to view the development of the melt patterns. When a satisfactory melt was observed, the model was retracted. Exposure time generally ranged from 10 to 30 seconds. After being retracted into the tank, the model was washed with alcohol to remove the remains of the old paint and also to cool it in preparation for the next run.

Infrared Tests

For infrared runs, the desired model configuration was injected into the tunnel at the proper attitude, and the output of the IR camera was viewed on the color video monitor. The developing color patterns were observed as the model surface temperature increased. When the temperature was high enough to cause a satisfactorily strong signal from the camera, a single complete frame was digitized. The model was then

retracted and cooled in preparation for the next run.

Data Acquisition

Instrumentation outputs were recorded using the VKF digital data scanner in conjunction with the VKF analog subsystem. All instruments other than the infrared camera were scanned at the rate of approximately ten times per second. Data acquisition began at model lift-off, under the control of a PDP 11/40 computer, utilizing the random access data system (RADS). The first data scan included all non-varying parameters, such as tunnel conditions and model attitude. For any time-dependent quantities the scan continued at the ten loop per second rate until the model left the tunnel centerline.

The AGA 680 infrared camera scanned the model to produce a complete picture at the rate of 16 frames per second. The camera output was recorded on analog tape and simultaneously displayed on a color television monitor. The increase in model surface temperature with time was thus observed, and a time was chosen to digitize a single frame of IR data. The model was exposed to the tunnel flow for between 10 and 30 seconds.

The phase-change paint melt patterns were recorded with a camera located on top of the tunnel. Seventy-millimeter sequence photographs were taken at nominal one-second intervals, beginning at lift-off and continuing until the model left the tunnel centerline. While it was in the tunnel the model was observed by means of a television camera. The video signal was recorded on tape for immediate playback and study prior

to the next run.

Taken together, all the data obtained during a given injection cycle are termed a data group and are identified in the data tabulations by a group number.

DATA REDUCTION

For each group, the tabulated data begin with a listing of tunnel conditions and model information plus other pertinent parameters (e.g. IR camera f-stop or phase-change paint temperature) required to characterize the run and use the data. Following this, the model heat-transfer data are presented.

Reduction of both infrared and phase-change paint data is based on the assumption that the surface temperature history is that of a homogeneous, semi-infinite slab subjected to an instantaneous and constant heat transfer coefficient. The surface temperature rise is then given by:

$$\frac{T_w - T_i}{T_{aw} - T_i} = 1 - e^{\beta^2} (\text{erfc} \ \beta) \tag{1}$$

and

$$\beta = H(TAW)\sqrt{\Delta t}/\sqrt{\rho ck} \tag{2}$$

For this test TAW was assumed equal to 0.9T0. The material property, $\sqrt{\rho ck}$, used in Equation 2 was assumed to be 0.0532 $Btu/ft^2\text{-}sec^{1/2}\text{-}^oR$ for all values of T_w.

The Fay-Riddell stagnation-point heat-transfer coefficient, HRFR, based on a 0.025-ft-radius sphere, was used to normalize the computed aerodynamic heat-transfer coefficients. (The radius of this hypothetical sphere would be one foot for corresponding full-scale orbiter conditions).

Phase-Change Paint

For the paint data, the model surface temperature T_w in Equation 1 is set equal to the phase-change temperature of the paint being used for

that particular data group. This then defines β. The only remaining quantity required to calculate the heat-transfer coefficient from Equation 2 is Δt, the time that the model has been exposed to the flow. This is recorded for each paint photograph. For a given photograph then, Equation 2 defines a value of heat-transfer coefficient which corresponds to any observed boundary between melted and unmelted paint.

Infrared

For the infrared data, the model surface temperature at any point is given by:

$$T_W = \frac{K_2}{\ell n \left[1 + \dfrac{\gamma \epsilon_o K_1}{(\text{cnts-cntsr}) + \dfrac{\gamma \epsilon_r K_1}{\left(e^{K_2/T_r} - 1 \right)}} \right]} \qquad (3)$$

where

T_W = temperature at point in question, ^oR

T_r = reference plate temperature, ^oR

ϵ_o = emissivity of model

ϵ_r = emissivity of reference plate

γ = IRTRAN window transmission factor

K_1, K_2 = constants defined for each IR camera lens and f-stop from calibration data using a black-body source

cnts = camera output at point in question, counts

cntsr = camera output at a point on the reference plate, counts

The temperature obtained from Equation 3 is used in Equation 1 to evaluate β. The heat-transfer coefficient is then calculated from Equation 2, using an exposure time based on the time at which the IR frame was digitized.

One complete frame of infrared data consists of 70 scan lines with 110 points per line for a total of 7700 discrete spots. The above procedure is carried out to obtain a temperature and heat-transfer coefficient value for each of these spots. Before these data are printed, the temperature and the heat-transfer coefficient is normalized by the Fay-Riddell reference value.

The infrared data are presented in two other forms in addition to the digital data tabulations previously described. As discussed in data acquisition, the output of the IR camera is displayed in real time on a color television monitor. A 70-mm camera was used to photograph the monitor screen simultaneously with the single-frame digitizing process. On the television monitor the total temperature range which the system is setup to measure is divided, in a nonlinear fashion, into ten separate colors, starting with blue for the lowest temperature and progressing through white for the highest. Each color then represents a temperature band within the total range, and the interface between two colors corresponds to one particular temperature.

The color photographs of the infrared monitor can be used to obtain surface temperature if a calibration of color versus temperature is known. Such a calibration is a function of the sensitivity setting of the monitor, the camera f-stop, and the material emissivity. The emissivity of the Novamide 700/55 from which the lower surface wing panels were made was measured in the 2-6 micron band on a sample of the material supplied by Rockwell International. The camera spectral response is a function of wavelength, and when the spectral data from the Novamide were weighted with this factor, an effective emissivity of 0.96 was obtained. The temperatures at the nine color interfaces have been calculated for the f-stop/sensitivity combinations used in this test and are presented in Table VI. The f-stop and sensitivity applicable to each group of data are given on the first page of the IR data printout.

The infrared data are also presented in the form of a contour map, as illustrated in Figure 5. The IR camera measures a count level for each of the 7700 spots in one frame. In the contour maps, each of 41 symbols is assigned a range of counts. The ranges do not overlap, so each of the 7700 spots is then represented by one symbol, and the computer prints the complete matrix of 7700 symbols. The minimum count level used and the size of the increment represented by one symbol are variable, and by a judicious choice of these two parameters, it is usually possible to produce a map on which the background is suppressed so that the model stands out clearly, and contours of constant count level (and

consequently constant heat-transfer coefficient) are readily discernible. This form of the data presentation is inherently qualitative. However, these maps are quite useful for locating "hot spots" and therefore are helpful in selecting the appropriate locations from which to plot the primary tabulated data.

In order for the IR data to be truly useful in making plots of heat-transfer coefficients versus model coordinates, it is necessary to define model positions in terms of Line and Point numbers. This was done by taking pre-test infrared pictures of the model with a grid-line pattern attached. The dimensions of the grid pattern are shown in Figure 6. The pairs of numbers indicated at several of the intersections are the IR line and point numbers, respectively, which define the location of the intersection within the IR picture. With this information, and the accompanying model dimensions, any spot on the wing surface can be related to a spot in the IR picture.

Measurement Uncertainty

An evaluation of the influence of random measurement errors is presented to provide a partial measure of the uncertainty of the final test results presented in this report. Although evaluation of the systematic measurement error (bias) is not included, it should be noted that the instrumentation precision values (given in instrumentation section) used in this evaluation represent a total uncertainty combination of both systematic and two-sigma random error contributions.

Test Conditions

Uncertainties in the basic tunnel parameters P_o and T_o (see instrumentation section) and the two-sigma deviation in Mach number, determined from test section flow calibrations, were used to estimate uncertainties in the other freestream properties, using the Taylor-series method of error propagation.

		Uncertainty (±), percent				
M_∞	Re/ft x 10^{-6}	M_∞	P_o	T_o	HRFR	Re/ft
7.90	0.50	0.4	0.48	0.4	1.0	1.2
7.92	0.75	↓	0.32	↓	↓	↓
7.94	1.00	↓	0.24	↓	↓	↓
7.96	1.50	0.3	0.16	↓	0.8	1.0
7.98	2.00	↓	0.12	↓	↓	↓
7.99	2.50	↓	0.10	↓	↓	↓
7.99	3.00	↓	↓	↓	↓	↓
8.00	3.50	↓	↓	↓	↓	↓

The uncertainty in model angle-of-attack (α) is estimated to be ±0.5 degrees.

Data

In this test, data were obtained using the AGA 680 Thermovision System and temperature-sensitive phase-change paint. The influence of random measurement errors for each of these test techniques is presented in this section.

Heat-transfer coefficient measurements, H(0.9T0), for this test ranged from about 0.02 to 0.002 Btu/ft^2-sec-^{o}R. Overall estimated uncertainty in absolute values of heat-transfer coefficient from the two instrumentation methods is as follows:

	Uncertainty (±), percent	
H(0.9T0), Btu/ft^2-sec-^{o}R	IR	Phase Change
~ 0.002	15	14
~ 0.020	12	11

These values were derived using a Taylor-series method of error propagation with the instrumentation uncertainties listed in the instrumentation section, combined with uncertainties listed below:

Item	Estimated Uncertainty (±)
$\sqrt{\rho ck}$	±10% of assumed value
T_i	±1.0% of measured value
$TW)_{IR}$	±1.2% of measured value
$TW)_{phase\text{-}change}$	±1.0% of paint rated value
TAW	±0.4%
$\Delta t)_{IR}$	±0.1 sec. absolute
$\Delta t)_{phase\text{-}change}$	±0.2 sec. absolute

It should be noted that the dominant term in the uncertainty calculations for IR and phase-change paint technique is the uncertainty value of the model thermal properties (ρck).

RESULTS AND DISCUSSION

Data from the blockage test consisted of go — no-go determinations based mainly on observations of the shock wave system on the model by means of the shadowgraph system. The shadowgraph pictures have been delivered previously to Rockwell International. Included in this package is a summary of the tunnel conditions and model attitudes tested and the results for each. This is presented in Table VII.

Computer tabulations of the phase-change paint data from the OH90A test entry are presented in Appendix A of this report. Tabulated data from the IR runs are contained in Appendix B of this report. The IR data are also presented in the form of a plot of H(0.9TO)/HRFR versus Point Number for six spanwise locations, which were chosen to correspond with the locations of the six simulated RSI tiles. These illustrate the variation of the heat-transfer coefficient along a chord-line passing through each tile. These plots are included in Appendix C of this report. IR contour plots are presented in Appendix D. All photographic data have been transmitted under separate cover to Mr. J. W. Cummings, Rockwell International, Space Division, and a copy is on file at AEDC.

On occasion during the test various data system components failed to function properly. In addition, some data groups were run simply to check out the system. For these reasons there are several group numbers for which no actual model data exist, and these are indicated in the test log presented in Table II.

Data presented with this report and reduction procedures described herein were extracted directly from Reference 3.

REFERENCES

1. J. W. Cummings, "Pretest Information for the 0.025-Scale Right Hand Wing and Truncated Aft Fuselage Model 94-0, in the AEDC VKF "B" Hypersonic Wind Tunnel - Test OH90," Rockwell International Space Division Report SD77-SH-0221, dated August 23, 1977.

2. Test Facilities Handbook (Tenth Edition), "von Karman Gas Dynamics Facility," Arnold Engineering Development Center, dated May, 1974.

3. D. W. Stallings, "NASA/RI OH90A Transition Test," AEDC-VKF Project V41B-P4A, dated March, 1978.

TABLE I. TEST CONDITIONS

TEST : OH90A,NA29			DATE : March, 1978
TEST CONDITIONS			
MACH NUMBER	REYNOLDS NUMBER (per unit length x 10-6)	STAGNATION PRESSURE (pounds/sq. inch)	STAGNATION TEMPERATURE (degrees Rankine)
7.90	0.50	105	1260
7.92	0.75	155	1270
7.94	1.00	210	1275
7.96	1.50	320	1290
7.98	2.00	425	1300
7.99	2.50	555	1320
7.99	3.00	670	1330
8.00	3.50	800	1335

BALANCE UTILIZED: _____

	CAPACITY:	ACCURACY:	COEFFICIENT TOLERANCE:
NF			
SF			
AF			
PM			
RM			
YM			

COMMENTS:

TABLE II. RUN NUMBER COLLATION SUMMARY

Part 1 MA29 Run Log

October 14, 1976

DATA GROUP	CONFIGURATION	M_∞	P_o PSIA	T_o °F	ALPHA MODEL, DEG.				COMMENTS
1	0.025 scale	7.90	105	800	40				Center of rotation = 0"
2	↓	↓	↓	↓	45				
3	↓	↓	↓	↓	30				
4	↓	7.99	555	860	45				
5	↓	8.00	850	880	45				
6	0.025-scale w/T.E. Extension	7.90	105	800	40				
7	↓	↓	↓	↓	45				
8	↓	↓	↓	↓	40				
9	↓	↓	↓	↓	43				
10	↓	↓	↓	↓	42				
11	↓	7.94	244	850	42				
12	↓	7.94	285	855	45				
13	↓	7.97	360	863	45				
14	↓	7.98	442	866	45				
15	↓	7.99	555	860	45				
16	↓	↓	↓	↓	42				
17	↓	↓	↓	↓	40				
18	↓	↓	↓	↓	40				
19	↓	8.00	850	880	40				Center of rotation = 16", this group only
20	↓	8.00	850	880	42				

TABLE II. RUN NUMBER COLLATION SUMMARY (Continued)

Part 2 OH90A Run Log

March 3, 1978

DATA GROUP	CONFIGURATION	DATA TYPE	M_∞	P_o PSIA	T_o °F	ALPHA MODEL, DEG.	Re/ft x 10^{-6}	TILE GAP, INCHES	TILE HEIGHT, INCHES	COMMENTS
1	RSI Forward	IR	7.99	555	860	30	2.5	0.01	0.000	Transmission error-no data
2	↓	IR	↓	↓	↓	30	↓	↓	↓	
3		PAINT				30				
4		IR				40				
5		PAINT				↓				DEC-10 fault-no data
6		PAINT	↓	↓	↓		↓			
7		IR	8.00	800	875		3.5			Model rolled - Data questionable
8		↓	↓	↓	↓	30	↓			Frame size error-no data
9						30				
10						40				
11		PAINT				40				
12		PAINT	↓	↓	↓	30	↓			
13		IR	7.94	210	815	30	1.0			
14		IR	↓	↓	↓	40	↓			Counter malfunction-Group does not exist
15		IR				40				
16		PAINT				40				
17		PAINT				30			↓	
18		IR				30			0.005	
19		IR				40				
20	↓	PAINT	↓	↓	↓	40	↓	↓	↓	

TABLE II. RUN NUMBER COLLATION SUMMARY (Continued)
Part 2 OH90A Run Log (Continued)

March 3, 1978

DATA GROUP	CONFIGURATION	DATA TYPE	M_∞	P_o PSIA	T_o ^oF	ALPHA MODEL, DEG.	Re/ft x 10^{-6}	TILE GAP, INCHES	TILE HEIGHT, INCHES	COMMENTS
21	RSI Forward	PAINT	7.94	210	815	30	1.00	0.01	0.005	
22	↓	↓	7.99	555	860	30	2.50	↓	↓	
23	↓	↓	7.99	555	860	40	2.50	↓	↓	
24	↓	IR	8.00	800	875	30	3.50	0.00	0.00	
25	↓	IR	↓	↓	↓	40	↓	↓	↓	
26	↓	PAINT	↓	↓	↓	30	↓	↓	↓	
27	↓	↓	7.99	555	860	30	2.50	↓	↓	
28	↓	↓	↓	670	820	30	3.00	0.01	↓	
29	↓	↓	↓	670	820	40	3.00	↓	↓	
30	↓	↓	7.98	425	840	30	2.00	↓	↓	
31	↓	↓	7.98	425	840	40	2.00	↓	↓	
32	↓	↓	7.96	320	830	30	1.50	↓	↓	
33	↓	↓	↓	↓	↓	30	↓	↓	↓	
34	↓	↓	↓	↓	↓	40	↓	↓	↓	
35	↓	↓	7.94	210	815	40	1.00	↓	0.01	
36	↓	↓	7.94	210	815	40	1.00	↓	↓	
37	↓	↓	7.92	155	810	30	0.75	↓	↓	
38	↓	↓	7.92	155	810	40	0.75	↓	↓	
39	↓	↓	7.90	105	800	30	0.50	↓	↓	
40	↓	↓	7.90	105	800	40	0.50	↓	↓	

TABLE II. RUN NUMBER COLLATION SUMMARY (Continued)
Part 2 OH90A Run Log (Continued)

March 3, 1978

DATA GROUP	CONFIGURATION	DATA TYPE	M_∞	P_o PSIA	T_o °F	ALPHA MODEL, DEG.	Re/ft x 10^{-6}	TILE GAP, INCHES	TILE HEIGHT, INCHES	COMMENTS
41	RSI Forward	PAINT	7.96	320	830	30	1.50	0.01	0.01	
42		PAINT				40				
43		IR				30				Digitized early - Data questionable
44						30				
45						40				
46			7.98	425	840	30	2.00			
47		PAINT				30				
48						30			0.005	
49						40				
50			7.96	320	830	30	1.50			
51			7.96	320	830	40	1.50			
52			7.94	210	815	30	1.00			
53		IR	7.99	670	870	30	3.00			
54		PAINT	7.99	670	870	30	3.00			
55			7.99	670	870	40	3.00			
56	RCC Novamide		7.98	425	840	30	2.00	0.00	0.00	Camera malfunction - No pictures
57						40				
58						30				
59						40				
60			7.96	320	830	30	1.50			

TABLE II. RUN NUMBER COLLATION SUMMARY (Continued)
Part 2 OH90A Run Log (Continued)

March 3, 1978

DATA GROUP	CONFIGURATION	DATA TYPE	M_∞	P_o PSIA	T_o °F	ALPHA MODEL, DEG.	Re/ft x 10^{-6}	TILE GAP, INCHES	TILE HEIGHT, INCHES	COMMENTS
61	RCC Novamide	PAINT	7.96	320	830	40	1.50	0.00	0.00	
62	↓	↓	7.99	555	860	30	2.50	↓	↓	
63	↓	↓	↓	555	860	40	2.50	↓	↓	
64	↓	↓	↓	670	870	30	3.00	↓	↓	
65	↓	↓	↓	↓	↓	40	3.00	↓	↓	
66	↓	IR	↓	↓	↓	30	3.00	↓	↓	Transmission error - No data
67	↓	PAINT	8.00	800	875	30	3.50	↓	↓	
68	↓	PAINT	8.00	800	875	40	3.50	↓	↓	
69	↓	IR	7.99	670	870	30	3.00	↓	↓	
70	↓	PAINT	7.98	425	840	30	2.00	0.01	0.00	
71	↓	↓	7.98	425	840	40	2.00	↓	↓	
72	↓	↓	7.99	555	860	30	2.50	↓	↓	
73	↓	↓	7.99	555	860	30	2.50	↓	↓	
74	↓	↓	7.96	320	830	30	1.50	↓	↓	
75	↓	↓	7.96	320	830	40	1.50	↓	↓	
76	↓	↓	7.94	210	815	30	1.00	↓	↓	
77	↓	↓	↓	↓	↓	40	↓	↓	↓	
78	↓	↓	↓	↓	↓	30	↓	↓	0.01	
79	↓	↓	↓	↓	↓	40	↓	↓	0.01	
80	↓	↓	7.90	105	800	30	0.50	↓	0.01	

TABLE II. RUN NUMBER COLLATION SUMMARY (Continued)

Part 2 OH90A Run Log (Continued)

March 3, 1978

DATA GROUP	CONFIGURATION	DATA TYPE	M_∞	P_o PSIA	T_o °F	ALPHA MODEL, DEG.	Re/ft x 10^{-6}	TILE GAP, INCHES	TILE HEIGHT, INCHES	COMMENTS
81	RCC Novamide	PAINT	7.90	105	800	40	0.50	0.01	0.01	
82	↓	↓	7.93	155	810	30	0.75	↓	↓	
83	↓	↓	7.93	155	810	40	0.75	↓	↓	
84	↓	↓	7.96	320	830	30	1.50	↓	↓	
85	RSI Aft	↓	↓	↓	↓	30	↓	↓	0.00	
86	↓	↓	↓	↓	↓	30	↓	↓	↓	
87	↓	↓	↓	↓	↓	40	↓	↓	↓	
88	↓	↓	7.94	210	815	30	1.00	↓	↓	
89	↓	IR	↓	↓	↓	30	↓	↓	↓	
90	↓	IR	↓	↓	↓	30	↓	↓	↓	
91	↓	IR	↓	↓	↓	40	↓	↓	↓	
92	↓	PAINT	↓	↓	↓	40	↓	↓	↓	
93	↓	↓	7.98	425	840	30	2.00	↓	↓	
94	↓	↓	↓	↓	↓	40	↓	↓	↓	
95	↓	↓	↓	↓	↓	40	↓	↓	↓	
96	↓	IR	7.90	105	800	30	0.50	↓	↓	
97	↓	IR	7.90	105	800	40	0.50	↓	↓	
98	↓	PAINT	7.99	555	860	30	2.50	↓	↓	
99	↓	PAINT	7.99	555	860	30	2.50	↓	↓	System check - No data
100	↓	PAINT	7.99	555	860	40	2.50	↓	↓	

TABLE II. RUN NUMBER COLLATION SUMMARY (Continued)

Part 2 OH90A Run Log (Continued)

March 3, 1978

DATA GROUP	CONFIGURATION	DATA TYPE	M_∞	P_o PSIA	T_o °F	ALPHA MODEL, DEG.	Re/ft x 10^{-6}	TILE GAP, INCHES	TILE HEIGHT, INCHES	COMMENTS
101	RSI Aft	PAINT	7.99	555	860	40	2.50	0.01	0.00	System check - No data
102			7.99	555	860	40	2.50		0.00	
103			7.99	670	870	30	3.00		0.00	
104			7.94	210	815	30	1.00	0.02	0.01	
105			7.94	210	815	40	1.00			
106			7.93	155	810	30	0.75			
107			7.93	155	810	40	0.75			
108			7.96	320	830	30	1.50			
109						40				
110		IR				40				Frame size error - No data
111		IR				40				
112		IR				30				
113		PAINT	7.98	425	840		2.00			Camera started late
114		IR	7.98	425	840		2.00			
115		PAINT	7.99	555	860		2.50			
116		IR	7.99	555	860		2.50			
117		PAINT	7.98	425	840		2.00		0.015	
118		PAINT	7.96	320	830		1.50			
119		IR	7.96	320	830		1.50			
120		PAINT	7.94	210	815		1.00			

TABLE II. RUN NUMBER COLLATION SUMMARY (Concluded)

Part 2 OH90A Run Log (Concluded)

March 3, 1978

DATA GROUP	CONFIGURATION	DATA TYPE	M_∞	P_o PSIA	T_o °F	ALPHA MODEL, DEG.	Re/ft x 10^{-6}	TILE GAP, INCHES	TILE HEIGHT, INCHES	COMMENTS
121	RSI Aft	PAINT	7.94	210	815	40	1.00	0.02	0.015	
122	↓	IR	7.94	210	815	30	1.00	↓	↓	
123		PAINT	7.93	155	810	30	0.75			
124		↓	7.93	155	810	40	0.75			
125			7.90	105	800	30	0.50			
126			↓	↓	↓	40	↓			
127		↓				40				
128	↓	IR				30				

TABLE III. MODEL DIMENSIONAL DATA

MODEL COMPONENT: WING - W_{116}

GENERAL DESCRIPTION: Configuration 5. NOTE: Identical to W_{114} except airfoil thickness. Dihedral angle is along trailing edge of wing. Geometric twist = 0.

MODEL SCALE: 0.0175 DRAWING NO.: VL70-000140A, -000200

DIMENSIONS:	FULL SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo.), ft^2		
Planform	2690.0	0.824
Span (Theo.), in.	936.68	16.392
Aspect Ratio	2.265	2.265
Rate of Taper	1.177	1.177
Taper Ratio	0.200	0.200
Dihedral Angle, degrees	3.500	3.500
Incidence Angle, degrees	0.500	0.500
Aerodynamic Twist, degrees		
Sweep Back Angles, degrees		
Leading Edge	45.000	45.000
Trailing Edge	- 10.056	- 10.056
0.25 Element Line	35.209	35.209
Chords:		
Root (Theo.) B.P.0.0.	689.24	12.062
Tip, (Theo.) B.P.	137.85	2.412
MAC	474.81	8.309
Fus. Sta. of .25 MAC	1136.83	19.895
W.P. of .25 MAC	290.58	5.085
B.L. of .25 MAC	182.13	3.187
EXPOSED DATA		
Area (Theo.), ft^2	1751.50	0.536
Span, (Theo.), in. BP108	720.68	12.612
Aspect Ratio	2.059	2.059
Taper Ratio	0.245	0.245
Chords		
Root BP108	562.09	9.837
Tip 1.00 b/2	137.85	2.412
MAC	392.83	6.875
Fus. Sta. of .25 MAC	1185.98	20.755
W.P. of .25 MAC	294.30	5.150
B.L. of .25 MAC	251.77	4.406
Airfoil Section (Rockwell Mod NASA) XXXX-64		
Root b/2 =	0.113	0.113
Tip b/2 =	0.120	0.120
Data for (1) of (2) Sides		
Leading Edge Cuff		
Planform Area, ft^2	113.18	0.035
Leading Edge Intersects Fus M.L. @ Sta	500.00	8.750
Leading Edge Intersects Wing @ Sta	1024.00	17.920

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TABLE IV. MA29 PHOTOGRAPHIC TEST LOG

FILE NO. 1138

DATE 10, 76 TUNNEL B CLASSIFICATION Unclassified

PROJECT V41B-K7A REQUESTER D. Stallings PHOTOGRAPHER McBee

TEST DATA				NO. 1 CAMERA Varitron (stills) PORT: TOP ___ SIDE X (OS. X NOS. ___) FWD X CTR ___ AFT ___ 45° ___ DATA: SCH. ___ SHA. X DIRECT ___				NO. 2 CAMERA Varitron (stills) PORT: TOP ___ SIDE X OS. X NOS. ___) FWD ___ CTR ___ AFT X 45° ___ DATA: SCH. ___ SHA. X DIRECT ___				NOMENCLATURE CS = CONT. SWEEP PP = PITCH PAUSE APU = AUTO PHOTO UNIT SPT = SET POINT NDR = NO DATA REQ. RGP = REPEAT GROUP
GROUP NO.	MODE OPER.			~~RUN~~ / PIC	ROLL NO.	MAG. NO.		RUN / PIC	ROLL NO.	MAG. NO.		REMARKS
1				1	0929	1		1	0930	28		Model angles showing on film.
2				1				1				
3				1				1				
4				1				1				
5				1				1				
6				1				1				
7				2				2				Second exposure on Group 7 no good.
8				1				1				
9				1				1				
10				1				1				
11				1				1				
12				1				1				
13				1				1				
14				ND				1				
15								1				
16								1				
17								1				
18								1				
19								1				
20								1				First frame on Group 20 should be Group 19.
							End of Test					

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TABLE V. CH90A PHOTOGRAPHIC TEST LOG

FILE NO. 1212

DATE 3/3/70 TUNNEL B CLASSIFICATION Unclass.. .d

PROJECT V41B-P4A REQUESTER D. Stallings PHOTOGRAPHER McBee

TEST DATA

NO. 1 CAMERA Varitron (Stills)
PORT: TOP ___ SIDE X OS. X NOS. ___
FWD ___ CTR ___ AFT X 45° ___
DATA: SCH. ___ SHA. X DIRECT ___

NO. 2 CAMERA Varitron (Stills)
PORT: TOP X SIDE ___ OS. ___ NOS. ___
FWD X CTR ___ AFT ___ 45° ___
DATA: SCH. ___ SHA. ___ DIRECT X

NOMENCLATURE
CS = CONT. SWEEP
PP = PITCH PAUSE
APU = AUTO PHOTO UNIT
SPT = SET POINT
NDR = NO DATA REQ.
RGP = REPEAT GROUP

GROUP NO.	MODE OPER.			RUN / PIC	ROLL NO.	MAG. NO.		RUN / PIC	ROLL NO.	MAG. NO.		REMARKS
1				ND	1866	15		NDR	1885	8		
2				ND								
3				1				38				
4				1				NDR				
5				1				30				
6				1				30				
7				1				NDR				
8				1								
9				1								
10				1								
11				1				22				
12				1				26				
13				1				NDR				
15				1								
16				1				43				
17				1				40				
18				1				35				GP 18 - Discard pics Camera #2
19				1				NDR				
20				1				46				
21				1				44				
22				1				38	1890	5		
23				1				38				

No GP 14 End of Shift

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TABLE V. CH90A PHOTOGRAPHIC TEST LOG (Continued)

FILE NO. 1212

DATE _____ TUNNEL _____ CLASSIFICATION _____

PROJECT _____ REQUESTER _____ PHOTOGRAPHER _____

TEST DATA

NO. 3 CAMERA Hasselblad (Stills)

PORT: TOP ____ SIDE ____ (OS. ____ NOS. ____)

FWD ____ CTR ____ AFT ____ 45° ____

DATA: SCH. ____ SHA. ____ DIRECT Color

NO. 4 CAMERA Hasselblad (Stills)

PORT: TOP ____ SIDE ____ OS. ____ NOS. ____)

FWD ____ CTR ____ AFT ____ 45° ____

DATA: SCH. ____ SHA. ____ DIRECT Polaroid

NOMENCLATURE
CS = CONT. SWEEP
PP = PITCH PAUSE
APU = AUTO PHOTO UNIT
SPT = SET POINT
NDR = NO DATA REQ.
RGP = REPEAT GROUP

GROUP NO.	MODE OPER.			RUN / PIC	ROLL NO.	MAG. NO.		RUN / PIC	ROLL NO.	MAG. NO.		REMARKS
1				1	1			1				
2				1				1				
3				NDR				NDR				
4				1				1				
5				NDR				NDR				
7				1				1				
8				1				1				
9				1				1				
10				1				1				
11				NDR				NDR				
13				1				1				
15				1				1				
18				1				1				
19				1				1				GPS 1-19 -- camera may be cutting off GP and Pic No.
					End of Shift							

No GP 14

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TABLE V. CH90A PHOTOGRAPHIC TEST LOG (Continued)

FILE NO. 1212

DATE _____ TUNNEL _____ CLASSIFICATION _____

PROJECT _____ REQUESTER _____ PHOTOGRAPHER _____

TEST DATA

NO. CAMERA Video
PORT: TOP X SIDE ____ (OS. ____ NOS. ____)
FWD ____ CTR X AFT ____ 45° ____
DATA: SCH. ____ SHA. ____ DIRECT X

NO. CAMERA ____
PORT: TOP ____ SIDE ____ OS. ____ NOS. ____)
FWD ____ CTR ____ AFT ____ 45° ____
DATA: SCH. ____ SHA. ____ DIRECT ____

NOMENCLATURE
CS = CONT. SWEEP
PP = PITCH PAUSE
APU = AUTO PHOTO UNIT
SPT = SET POINT
NDR = NO DATA REQ.
RGP = REPEAT GROUP

GROUP NO.	MODE OPER.			RUN / PIC	ROLL NO.	MAG. NO.	COUNTER NO.	RUN / PIC	ROLL NO.	MAG. NO.		REMARKS
3					VKF-48		000					
4							017					
5							032					
6							051					
7							070					
8							082					
9							095					
10							108					
11							120					
12							132					
13							145					
15							156					
16							164					
17							200					
18							218					
19							233					
20							250					
21							268					
22							286					
23							301					
							316					
					End of Shift							

No GP 14

TABLE V. OH90A PHOTOGRAPHIC TEST LOG (Continued)

PAGE 4 19 FILE NO. 1212

DATE 3/6/78 TUNNEL CLASSIFICATION

PROJECT REQUESTER PHOTOGRAPHER

TEST DATA

NO. 1 CAMERA Varitron (Stills)

PORT: TOP SIDE X (OS. X NOS.)

FWD CTR AFT X 45°

DATA: SCH. SHA. X DIRECT

NO. 2 CAMERA Varitron (Stills)

PORT: TOP X SIDE OS. NOS.)

FWD X CTR AFT 45°

DATA: SCH. SHA. DIRECT X

NOMENCLATURE
CS = CONT. SWEEP
PP = PITCH PAUSE
APU = AUTO PHOTO UNIT
SPT = SET POINT
NDR = NO DATA REQ.
RGP = REPEAT GROUP

GROUP NO.	MODE OPER.			RUN / PIC	ROLL NO.	MAG. NO.		RUN / PIC	ROLL NO.	MAG. NO.		REMARKS
24				1	1845	15		NDR	1843	2		
25				1								
26				1				22				
27				1				31				
28				1				19				
29				1				23				
30				1				29				
31				1				30				
32				1				34				
33				1				27				
34				1				23				
35				1				29				
36				1				24				
37				1				40				
38				1				33				
39				1				35				
40				1				23				GP 40 - Cam No. 2 Mag ran out of film.
41				1				27	1898	5		
42				1				30				
43				1				NDR				
44				1								
45				1								

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TABLE V. CH90A PHOTOGRAPHIC TEST LOG (Continued)

FILE NO. 2

DATE _____ TUNNEL _____ CLASSIFICATION _____

PROJECT _____ REQUESTER _____ PHOTOGRAPHER _____

TEST DATA

NO. 3 CAMERA Hasselblad (Stills)

PORT: TOP ____ SIDE ____ (OS. ____ NOS. ____)

FWD ____ CTR ____ AFT ____ 45° ____

DATA: SCH. ____ SHA. ____ DIRECT Color

NO. 4 CAMERA 4x5

PORT: TOP ____ SIDE ____ OS. ____ NOS. ____)

FWD ____ CTR ____ AFT ____ 45° ____

DATA: SCH. ____ SHA. ____ DIRECT Polaroid

NOMENCLATURE
CS = CONT. SWEEP
PP = PITCH PAUSE
APU = AUTO PHOTO UNIT
SPT = SET POINT
NDR = NO DATA REQ.
RGP = REPEAT GROUP

GROUP NO.	MODE OPER.			RUN / PIC	ROLL NO.	MAG. NO.		RUN / PIC	ROLL NO.	MAG. NO.		REMARKS
24				1	2			1				
25				1				1				
26				NDR				NDR				
28				1				1				
29				1				1				
30				1				1				
31				1				1				
32				1				1				
33				1				1				
34				1				1				
35				1				1				
36				1				1				
37				1				1				
38				1				1				
39				1				1				
40				1				1				
41				1				1				
42				1				1				
43				1				1				
44				1				1				
45				1				1				
46				1				1				

TABLE V. CH90A PHOTOGRAPHIC TEST LOG (Continued)

PAGE 6 19 FILE NO. 1212

DATE ____ TUNNEL ____ CLASSIFICATION ____

PROJECT ____ REQUESTER ____ PHOTOGRAPHER ____

TEST DATA				NO. 5 CAMERA Video PORT: TOP X SIDE ____ (OS. ____ NOS. ____) FWD ____ CTR X AFT ____ 45° ____ DATA: SCH. ____ SHA. ____ DIRECT X				NO. ____ CAMERA ____ PORT: TOP ____ SIDE ____ OS. ____ NOS. ____) FWD ____ CTR ____ AFT ____ 45° ____ DATA: SCH. ____ SHA. ____ DIRECT ____				NOMENCLATURE CS = CONT. SWEEP PP = PITCH PAUSE APU = AUTO PHOTO UNIT SPT = SET POINT NDR = NO DATA REQ. RGP = REPEAT GROUP
GROUP NO.	MODE OPER.			RUN / PIC	ROLL NO.	MAG. NO.	COUNTER NO.	RUN / PIC	ROLL NO.	MAG. NO.		REMARKS
24					VKF-48		313					
25							323					
26							332					
27							342					
28							355					
29							364					
30							375					
31							388					
32							402					
33							416					
34							428					
35							440					
36							450					
37							459					
38							472					
39							484					
40							496					
41							504					
42							516					
43							527					
44							533					
45							547					

TABLE V. CH90A PHOTOGRAPHIC TEST LOG (Continued)

PAGE 7 19 FILE NO. 1212

DATE ____ TUNNEL ____ CLASSIFICATION ____

PROJECT ____ REQUESTER ____ PHOTOGRAPHER Lunsford

NOMENCLATURE
CS = CONT. SWEEP
PP = PITCH PAUSE
APU = AUTO PHOTO UNIT
SPT = SET POINT
NDR = NO DATA REQ.
RGP = REPEAT GROUP

TEST DATA				NO. 1 CAMERA Varitron (Stills) PORT: TOP ____ SIDE X (OS. X NOS. ____) FWD ____ CTR ____ AFT X 45° ____ DATA: SCH. ____ SHA. X DIRECT ____				NO. 2 CAMERA Varitron (Stills) PORT: TOP X SIDE ____ OS. ____ NOS. ____) FWD X CTR ____ AFT ____ 45° ____ DATA: SCH. ____ SHA. ____ DIRECT X				
GROUP NO.	MODE OPER.			RUN / PIC	ROLL NO.	MAG. NO.		RUN / PIC	ROLL NO.	MAG. NO.		REMARKS
46				1	1845	15		NDR	1898	5		
47				1				37				
48				1				34				
49				1				35				
50				1				41				
51				1				31				
52				1				43				
53				1				27				
54				1				34				
55				1				35				
					End of	Shift						

TABLE V. CH90A PHOTOGRAPHIC TEST LOG (Continued)

PAGE 8 19 FILE NO. 1212

DATE ____ TUNNEL ____ CLASSIFICATION ____

PROJECT ____ REQUESTER ____ PHOTOGRAPHER ____

NOMENCLATURE
CS = CONT. SWEEP
PP = PITCH PAUSE
APU = AUTO PHOTO UNIT
SPT = SET POINT
NDR = NO DATA REQ.
RGP = REPEAT GROUP

TEST DATA				NO. 3 CAMERA Hasselblad (Stills) PORT: TOP ____ SIDE ____ (OS. ____ NOS. ____) FWD ____ CTR ____ AFT ____ 45° ____ DATA: SCH. ____ SHA. ____ DIRECT X				NO. 4 CAMERA 4x5 View PORT: TOP ____ SIDE ____ OS. ____ NOS. ____ FWD ____ CTR ____ AFT ____ 45° ____ DATA: SCH. ____ SHA. ____ DIRECT Polaroid				REMARKS
GROUP NO.	MODE OPER.			RUN / PIC	ROLL NO.	MAG. NO.		RUN / PIC	ROLL NO.	MAG. NO.	
47				1	2			1			
48				1				1			
49				1				1			
50				1				1			
51				1				1			
52				1				1			
53				1				1			
54				1				1			
					End of Shift						

TABLE V. CH90A PHOTOGRAPHIC TEST LOG (Continued)

PAGE 9 19 FILE NO. 1212

DATE _____ TUNNEL _____ CLASSIFICATION _____

PROJECT _____ REQUESTER _____ PHOTOGRAPHER _____

TEST DATA

NO. 5 CAMERA Video

PORT: TOP X SIDE ____ (OS. ____ NOS. ____)

FWD ____ CTR X AFT ____ 45° ____

DATA: SCH. ____ SHA. ____ DIRECT X

NO. ____ CAMERA ____

PORT: TOP ____ SIDE ____ OS. ____ NOS. ____)

FWD ____ CTR ____ AFT ____ 45° ____

DATA: SCH. ____ SHA. ____ DIRECT ____

NOMENCLATURE
CS = CONT. SWEEP
PP = PITCH PAUSE
APU = AUTO PHOTO UNIT
SPT = SET POINT
NDR = NO DATA REQ.
RGP = REPEAT GROUP

GROUP NO.	MODE OPER.			RUN / PIC	ROLL NO.	MAG. NO.	COUNTER NO.	RUN / PIC	ROLL NO.	MAG. NO.		REMARKS
46					VKF-48		556					
47							566					
48							476					
49							588					
50							599					
51							611					
52							621					
53							633					
54							643					
55							653					
							663					
					End of	Shift						

TABLE V. CH90A PHOTOGRAPHIC TEST LOG (Continued)

FILE NO. 1212

PAGE 10 19

DATE 3/7/78 TUNNEL CLASSIFICATION PHOTOGRAPHER McBee

PROJECT REQUESTER

NOMENCLATURE
CS = CONT. SWEEP
PP = PITCH PAUSE
APU = AUTO PHOTO UNIT
SPT = SET POINT
NDR = NO DATA REQ.
RGP = REPEAT GROUP

REMARKS

No Data on GP 56 - Ma[illegible] on paint data failed to run - changed out Mag - No. 5.

TEST DATA				NO. 1 CAMERA Varitron (Stills) PORT: TOP — SIDE X OS. X NOS. — FWD — CTR — AFT X 45° — DATA: SCH. — SHA. X DIRECT —				NO. 2 CAMERA Varitron (Stills) PORT: TOP X SIDE — OS. — NOS. — FWD X CTR — AFT — 45° — DATA: SCH. — SHA. — DIRECT X			
GROUP NO.	MODE OPER.			RUN / PIC	ROLL NO.	MAG. NO.		RUN / PIC	ROLL NO.	MAG. NO.	
56				1	1855	1		ND	1857	5	
57				1				35	1891	2	
58				1				31			
59				1				19			
60				1				26			
61				1				22			
62				1				19			
63				1				23			
64				1				23			
65				1				22			
66				1				NDR			
67				1				26			
68				1				26			
69				1				NDR			
70				1				29			
71				1				38			
72				1				23	1842	8	
73				1				29			
74				1				27			
75				1				26			
76				1				20			
77				1				36			

TABLE V. OH90A PHOTOGRAPHIC TEST LOG (Continued)

PAGE 11 19 FILE NO. 1212

DATE _____ TUNNEL _____ CLASSIFICATION _____

PROJECT _____ REQUESTER _____ PHOTOGRAPHER _____

TEST DATA				NO. 3 CAMERA Hasselblad (Stills) PORT: TOP ___ SIDE ___ (OS. ___ NOS. ___) FWD ___ CTR ___ AFT ___ 45° ___ DATA: SCH. ___ SHA. ___ DIRECT X				NO. 4 CAMERA 4x5 PORT: TOP ___ SIDE ___ OS. ___ NOS. ___ FWD ___ CTR ___ AFT ___ 45° ___ DATA: SCH. ___ SHA. ___ DIRECT Polaroid				NOMENCLATURE CS = CONT. SWEEP PP = PITCH PAUSE APU = AUTO PHOTO UNIT SPT = SET POINT NDR = NO DATA REQ. RGP = REPEAT GROUP
GROUP NO.	MODE OPER.			RUN / PIC	ROLL NO.	MAG. NO.		RUN / PIC	ROLL NO.	MAG. NO.		REMARKS
56				1	3			1				
57				1				1				
58				1				1				
59				NDR				NDR				
66				1				1				
67				NDR				NDR				
69				1				1				
59				ND				1				RGP
60				1				1				
61				1				1				
62				1				1				
63				1				1				
64				1				1				
65				1				1				
67				1				1				
68				1				1				

TABLE V. CH90A PHOTOGRAPHIC TEST LOG (Continued)

PAGE 12 19 FILE NO. 1212

DATE _____ TUNNEL _____ CLASSIFICATION _____

PROJECT _____ REQUESTER _____ PHOTOGRAPHER _____

TEST DATA				NO. 5 CAMERA Video PORT: TOP X SIDE _____ OS. _____ NOS. _____ FWD _____ CTR X AFT _____ 45° _____ DATA: SCH. _____ SHA. _____ DIRECT X			NO. _____ CAMERA _____ PORT: TOP _____ SIDE _____ OS. _____ NOS. _____ FWD _____ CTR _____ AFT _____ 45° _____ DATA: SCH. _____ SHA. _____ DIRECT _____			NOMENCLATURE CS = CONT. SWEEP PP = PITCH PAUSE APU = AUTO PHOTO UNIT SPT = SET POINT NDR = NO DATA REQ. RGP = REPEAT GROUP
GROUP NO.	MODE OPER.			RUN / PIC	ROLL NO.	MAG. NO.	COUNTER NO.	RUN / PIC	ROLL NO.	MAG. NO.	REMARKS
56					VKF=48		663				
57							672				
58							683				
59							692				
60							699				
61							709				
62							717				
63							725				
64							733				
65							741				
66							749				
67							756				
68							764				
69							773				
70							779				
71							787				
72							797				
73							805				
74							812				
75							819				
76							826				
77							832				

TABLE V. CH90A PHOTOGRAPHIC TEST LOG (Continued)

PAGE 13 19 FILE NO. 1212

DATE _____ TUNNEL _____ CLASSIFICATION _____

PROJECT _____ REQUESTER _____ PHOTOGRAPHER Bennett

TEST DATA

NO. 1 CAMERA Varitron (Stills)
PORT: TOP ____ SIDE X IOS. X NOS. ____
FWD ____ CTR ____ AFT X 45° ____
DATA: SCH. ____ SHA. X DIRECT ____

NO. ____ CAMERA Varitron (Stills)
PORT: TOP X SIDE ____ OS. ____ NOS. ____
FWD X CTR ____ AFT ____ 45° ____
DATA: SCH. ____ SHA. ____ DIRECT X

NOMENCLATURE
CS = CONT. SWEEP
PP = PITCH PAUSE
APU = AUTO PHOTO UNIT
SPT = SET POINT
NDR = NO DATA REQ.
RGP = REPEAT GROUP

GROUP NO.	MODE OPER.			RUN / PIC	ROLL NO.	MAG. NO.		RUN / PIC	ROLL NO.	MAG. NO.		REMARKS
78				1	1855	1		25	1842	8		
79				1				31				
80				1				26				
81				1				23				
82				1				35				
83				1				34				
84				1				28				
					End of	Shift						

TABLE V. CH90A PHOTOGRAPHIC TEST LOG (Continued)

PAGE 14 19 FILE NO. 1212

DATE _____ TUNNEL _____ CLASSIFICATION _____

PROJECT _____ REQUESTER _____ PHOTOGRAPHER _____

TEST DATA				NO. 5 CAMERA Video PORT: TOP X SIDE ____ (OS. ____ NOS. ____) FWD ____ CTR X AFT ____ 45° ____ DATA: SCH. ____ SHA. ____ DIRECT X				NO. ____ CAMERA ____ PORT: TOP ____ SIDE ____ OS. ____ NOS. ____) FWD ____ CTR ____ AFT ____ 45° ____ DATA: SCH. ____ SHA. ____ DIRECT ____				NOMENCLATURE CS = CONT. SWEEP PP = PITCH PAUSE APU = AUTO PHOTO UNIT SPT = SET POINT NDR = NO DATA REQ. RGP = REPEAT GROUP
GROUP NO.	MODE OPER.			RUN / PIC	ROLL NO.	MAG. NO.	COUNTER NO.	RUN / PIC	ROLL NO.	MAG. NO.		REMARKS
78							842					
79							849					
80							857					
81							865					
82							872					
83							881					
84							890					
85							897					
					End of	Shift						

TABLE V. OH90A PHOTOGRAPHIC TEST LOG (Continued)

PAGE 15 19 FILE NO. 1212

DATE 3/9/18 TUNNEL CLASSIFICATION

PROJECT REQUESTER PHOTOGRAPHER McBee

NOMENCLATURE
CS = CONT. SWEEP
PP = PITCH PAUSE
APU = AUTO PHOTO UNIT
SPT = SET POINT
NDR = NO DATA REQ.
RGP = REPEAT GROUP

TEST DATA				NO. 1 CAMERA Varitron (Stills) PORT: TOP ___ SIDE X (OS. X NOS. ___) FWD ___ CTR ___ AFT X 45° ___ DATA: SCH. ___ SHA. X DIRECT ___				NO. 2 CAMERA Varitron (Stills) PORT: TOP X SIDE ___ OS. ___ NOS. ___) FWD X CTR ___ AFT ___ 45° ___ DATA: SCH. ___ SHA. ___ DIRECT X				
GROUP NO.	MODE OPER.			RUN / PIC	ROLL NO.	MAG. NO.		RUN / PIC	ROLL NO.	MAG. NO.		REMARKS
85				1	1861	1		22	1840			
86				1				28				
87				1				24				
88				1				30				
89				1				NDR				
90				1								
91				1								
92				1				2				
93				1				27				
94				1				21				
95				1				27				
96				1				NDR				
97				1				NDR				
98				1				21				
99				NDR				NDR				
100				1				23				
102				1				18				GP 101 - NDR. Take GP Change Mag on GP 10 Forgot Roll No. for 1 GP.
103				1				19	1838	—		
104				1				43				
105				1				20				
106				1				28				
107				1				29				

TABLE V. CH90A PHOTOGRAPHIC TEST LOG (Continued)

PAGE 16 19 FILE NO. 1212

DATE ____ TUNNEL ____ CLASSIFICATION ____

PROJECT ____ REQUESTER ____ PHOTOGRAPHER ____

NOMENCLATURE
CS = CONT. SWEEP
PP = PITCH PAUSE
APU = AUTO PHOTO UNIT
SPT = SET POINT
NDR = NO DATA REQ.
RGP = REPEAT GROUP

TEST DATA				NO. 3 CAMERA Hasselblad (Stills) PORT: TOP ____ SIDE ____ (OS. ____ NOS. ____) FWD ____ CTR ____ AFT ____ 45° ____ DATA: SCH. ____ SHA. ____ DIRECT X			NO. 4 CAMERA 4x5 Polaroid PORT: TOP ____ SIDE ____ OS. ____ NOS. ____ FWD ____ CTR ____ AFT ____ 45° ____ DATA: SCH. ____ SHA. ____ DIRECT X			
GROUP NO.	MODE OPER.			RUN / PIC	ROLL NO.	MAG. NO.	RUN / PIC	ROLL NO.	MAG. NO.	REMARKS
85				NDR	4		NDR			
89				1			1			
90				1			1			
91				1			1			
92				NDR			NDR			
96				1			1			
97				1			1			
98				NDR			NDR			
110				1			1			
111				1			1			
112				1			1			
113				1			1			
114				1			1			
115				1			1			
116				1			1			
117				NDR			NDR			
119				1			1			
122				1			1			
123				NDR			NDR			
128				1			1			

TABLE V. CH90A PHOTOGRAPHIC TEST LOG (Continued)

PAGE 17 19 FILE NO. 1212

DATE _____ TUNNEL _____ CLASSIFICATION _____

PROJECT _____ REQUESTER _____ PHOTOGRAPHER _____

TEST DATA				NO. 5 CAMERA Video PORT: TOP X SIDE ____ (OS. ____ NOS. ____) FWD ____ CTR X AFT ____ 45° ____ DATA: SCH. ____ SHA. ____ DIRECT X				NO. ____ CAMERA ____ PORT: TOP ____ SIDE ____ OS. ____ NOS. ____) FWD ____ CTR ____ AFT ____ 45° ____ DATA: SCH. ____ SHA. ____ DIRECT ____				NOMENCLATURE CS = CONT. SWEEP PP = PITCH PAUSE APU = AUTO PHOTO UNIT SPT = SET POINT NDR = NO DATA REQ. RGP = REPEAT GROUP
GROUP NO.	MODE OPER.			RUN / PIC	ROLL NO.	MAG. NO.	COUNTER NO.	RUN / PIC	ROLL NO.	MAG. NO.		REMARKS
85					VKF-28		052					
86							065					
87							082					
88							097					
89							114					
90							129					
91							146					
92							162					
93							181					
94							196					
95							207					
96							221					
97							236					GP 98 - Take GP.
98							258					GP 99 was check group so counter starts with 100.
99							269					
102							280					GP 101 NDR. Take GP
103							290					
104							300					
105							310					
106							320					
107							332					
108							343					

TABLE V. CH90A PHOTOGRAPHIC TEST LOG (Continued)

FILE NO. 1212

DATE _____ TUNNEL _____ CLASSIFICATION _____

PROJECT _____ REQUESTER _____ PHOTOGRAPHER Bennett

TEST DATA				NO. 1 CAMERA Varitron (Stills) PORT: TOP ___ SIDE X (OS. X NOS. ___) FWD ___ CTR ___ AFT X 45° ___ DATA: SCH. ___ SHA. X DIRECT ___				NO. 2 CAMERA Varitron (Stills) PORT: TOP X SIDE ___ OS. ___ NOS. ___) FWD X CTR ___ AFT ___ 45° ___ DATA: SCH. ___ SHA. ___ DIRECT X			
GROUP NO.	MODE OPER.			RUN / PIC	ROLL NO.	MAG. NO.		RUN / PIC	ROLL NO.	MAG. NO.	
108				1	1861	1		22	1838		
109				1				15			
110				1				NDR			
111				1				NDR			
112				1				NDR			
113				1				20			
114				1				NDR			
115				1				16			
116				1				NDR			
117				1				23			
118				1				13			
119				1				NDR			
120				1				23			
121				1				24			
122				1				NDR			
123				1				32			
124				1				23			
125				1				23			
126				1				22	1893	2	
127				1				24			
128				1				NDR			
					End of Shift						

NOMENCLATURE
CS = CONT. SWEEP
PP = PITCH PAUSE
APU = AUTO PHOTO UNIT
SPT = SET POINT
NDR = NO DATA REQ.
RGP = REPEAT GROUP

REMARKS

VB-6 (6-74)

TABLE V. CH90A PHOTOGRAPHIC TEST LOG (Concluded)

PAGE 19 . 19 FILE NO. 1212

DATE ____ TUNNEL ____ CLASSIFICATION ____

PROJECT ____ REQUESTER ____ PHOTOGRAPHER ____

TEST DATA

NO. 5 CAMERA Video

PORT: TOP X SIDE ____ (OS. ____ NOS. ____)

FWD ____ CTR X AFT ____ 45° ____

DATA: SCH. ____ SHA. ____ DIRECT X

NO. ____ CAMERA ____

PORT: TOP ____ SIDE ____ OS. ____ NOS. ____)

FWD ____ CTR ____ AFT ____ 45° ____

DATA: SCH. ____ SHA. ____ DIRECT ____

NOMENCLATURE
CS = CONT. SWEEP
PP = PITCH PAUSE
APU = AUTO PHOTO UNIT
SPT = SET POINT
NDR = NO DATA REQ.
RGP = REPEAT GROUP

GROUP NO.	MODE OPER.			RUN / PIC	ROLL NO.	MAG. NO.	COUNTER NO.	RUN / PIC	ROLL NO.	MAG. NO.		REMARKS
109					VKF-28		353					
110							361					
111							370					
112							381					
113							392					
114							401					
115							410					
116							417					
117							425					
118							434					
119							442					
120							449					
121							459					
122							469					
123							478					
124							490					
125							499					
126							508					
127							517					
128							525					
							536					
					End of	Shift						

TABLE VI. COLOR INTERFACE TEMPERATURES

	Temperature, °R				
f-stop	1.8			2.5	
sensitivity	200	500	1000	500	1000
Blue-Light Blue	558	600	640	646	694
Light Blue-Green	589	642	692	697	756
Green-Light Green	611	672	728	732	799
Light Green-Violet	629	695	756	760	833
Violet-Magenta	644	715	779	783	861
Magenta-Red	657	732	800	803	885
Red-Orange	668	746	818	821	908
Orange-Yellow	678	760	834	838	928
Yellow-White	689	772	849	852	947

TABLE VII. BLOCKAGE DATA SUMMARY

CONFIGURATION	ALPHA-MODEL	Re x 10^{-6}/ft	BLOCKAGE
0.025 scale	40	0.5	No
↓	45	↓	↓
	30		
	45	2.5	
	45	3.8	
0.025 scale w/ T.E. extension	40	0.5	
↓	45	↓	Yes
	40		No
	43		Yes
	42		Yes
	42	1.0	No
	45	1.25	Yes
	↓	1.5	Yes
		2.0	Yes
		2.5	Yes
	42	↓	No
	40		No
	↓		Yes
		3.8	No
↓	42	3.8	No

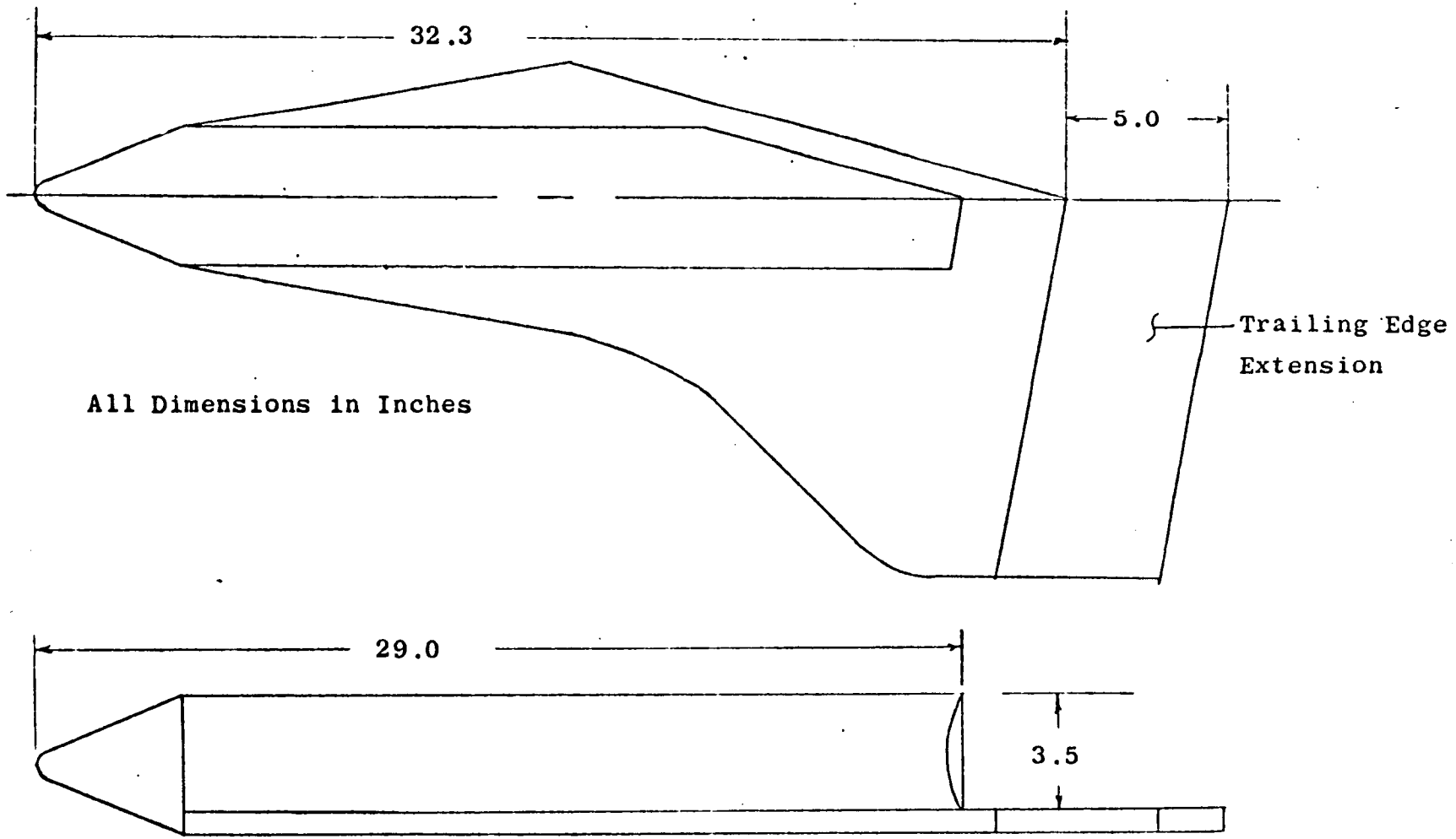
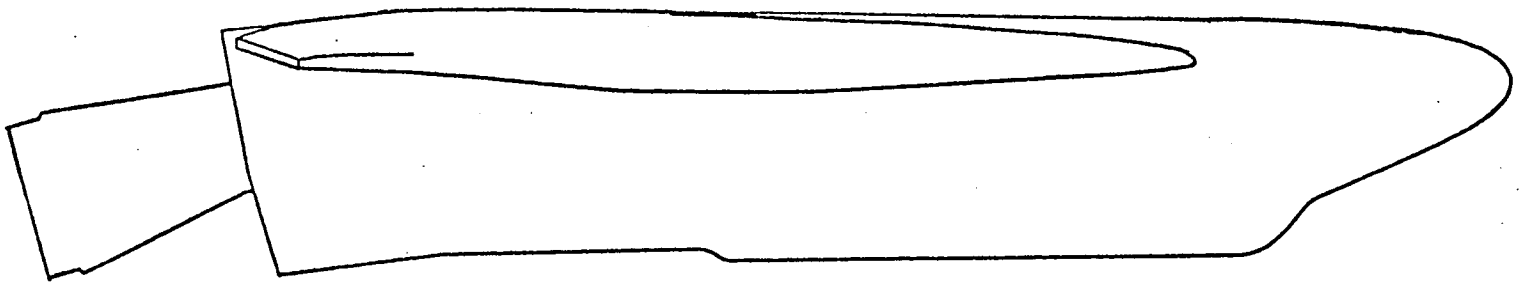


Figure 1. MA29 blockage model.



All Dimensions in Inches

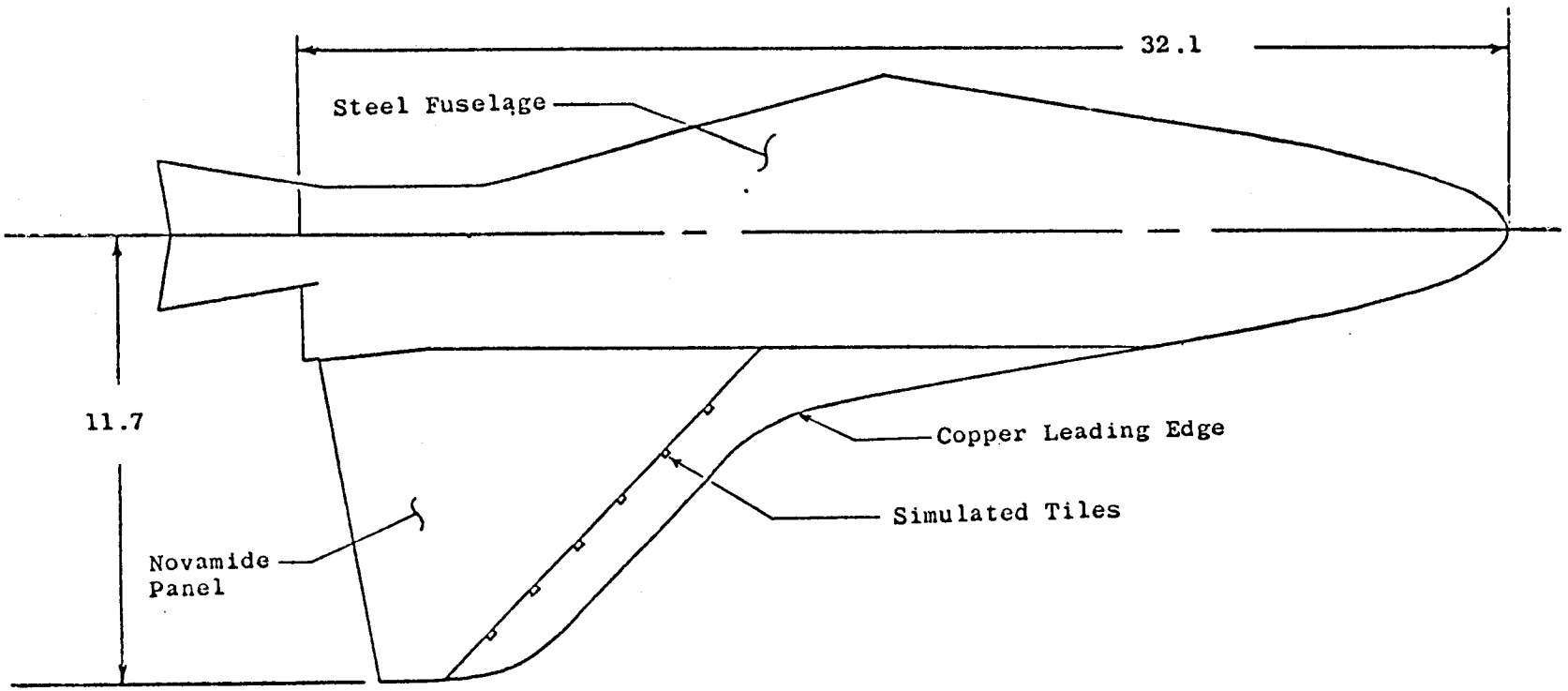
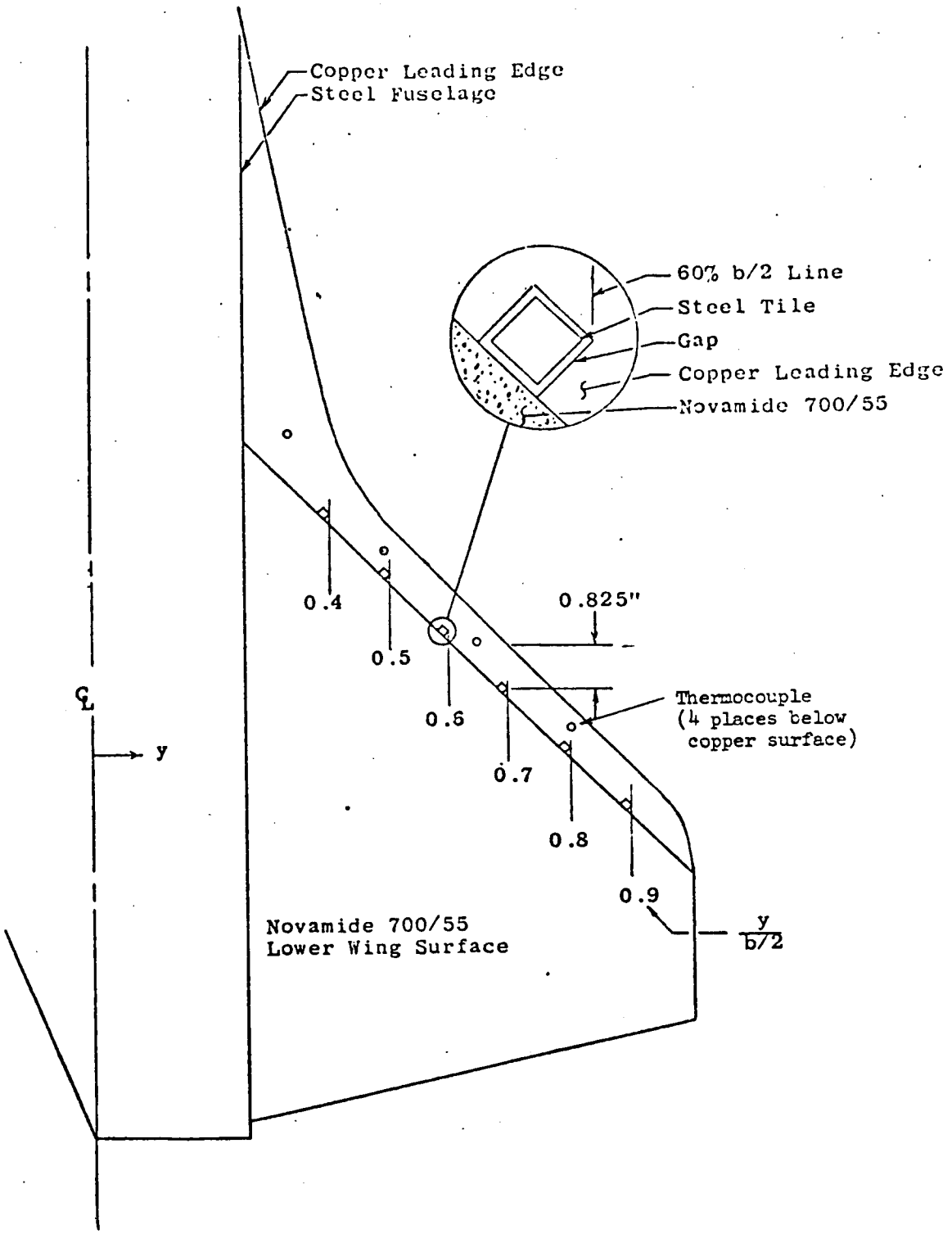
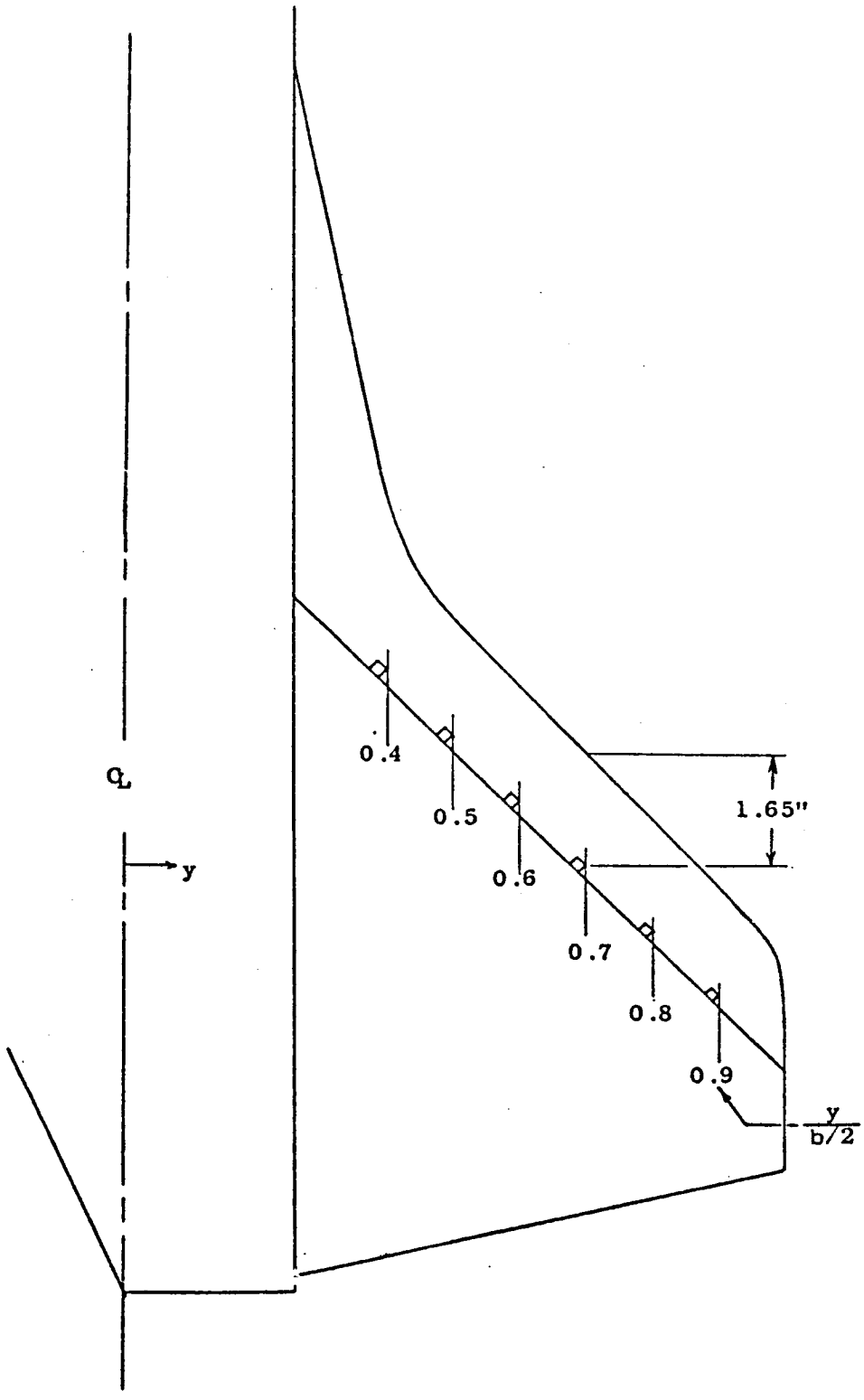


Figure 2. OH90A shuttle orbiter model 94-0.

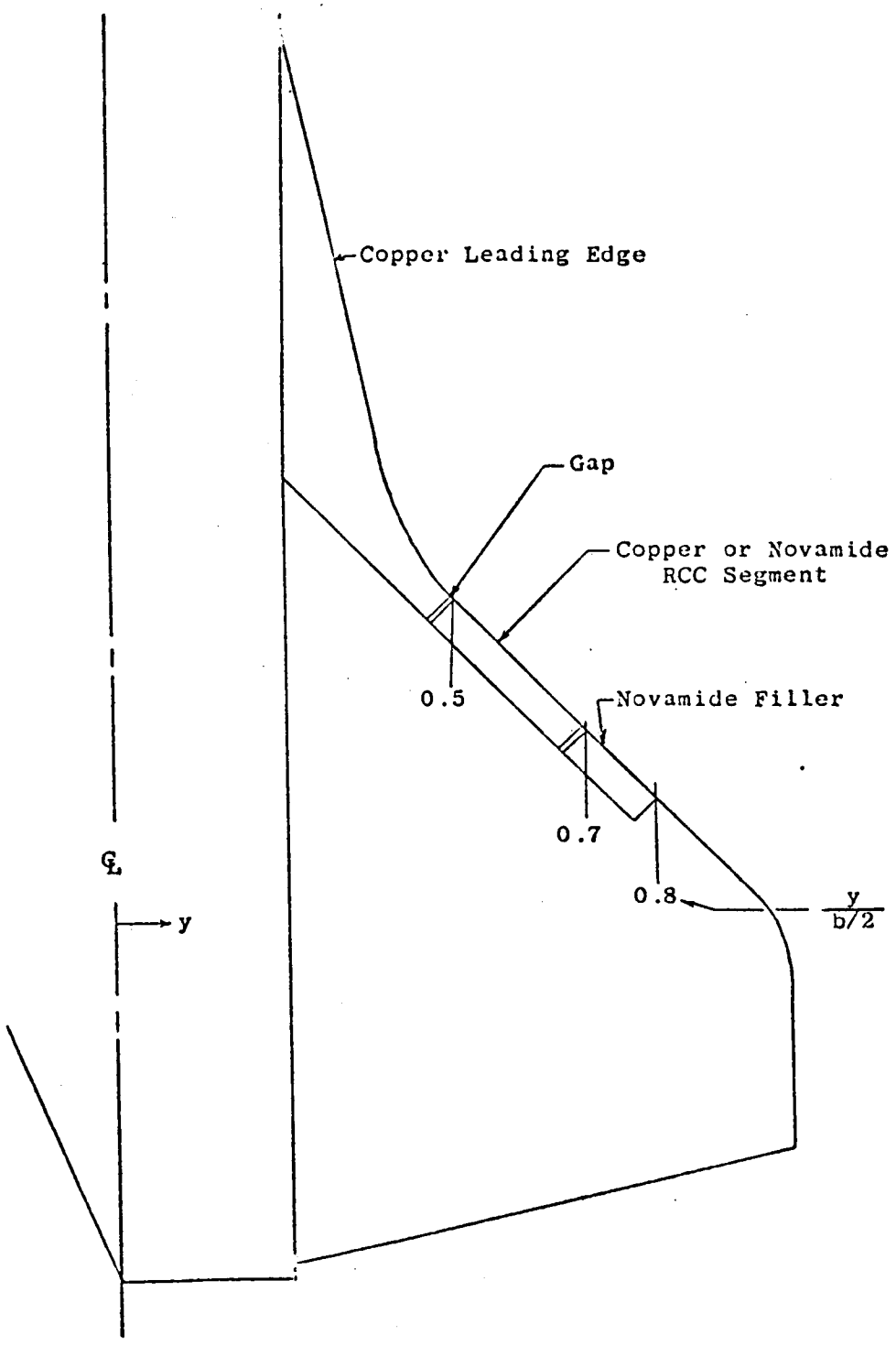


a. RSI Tile - Forward Location

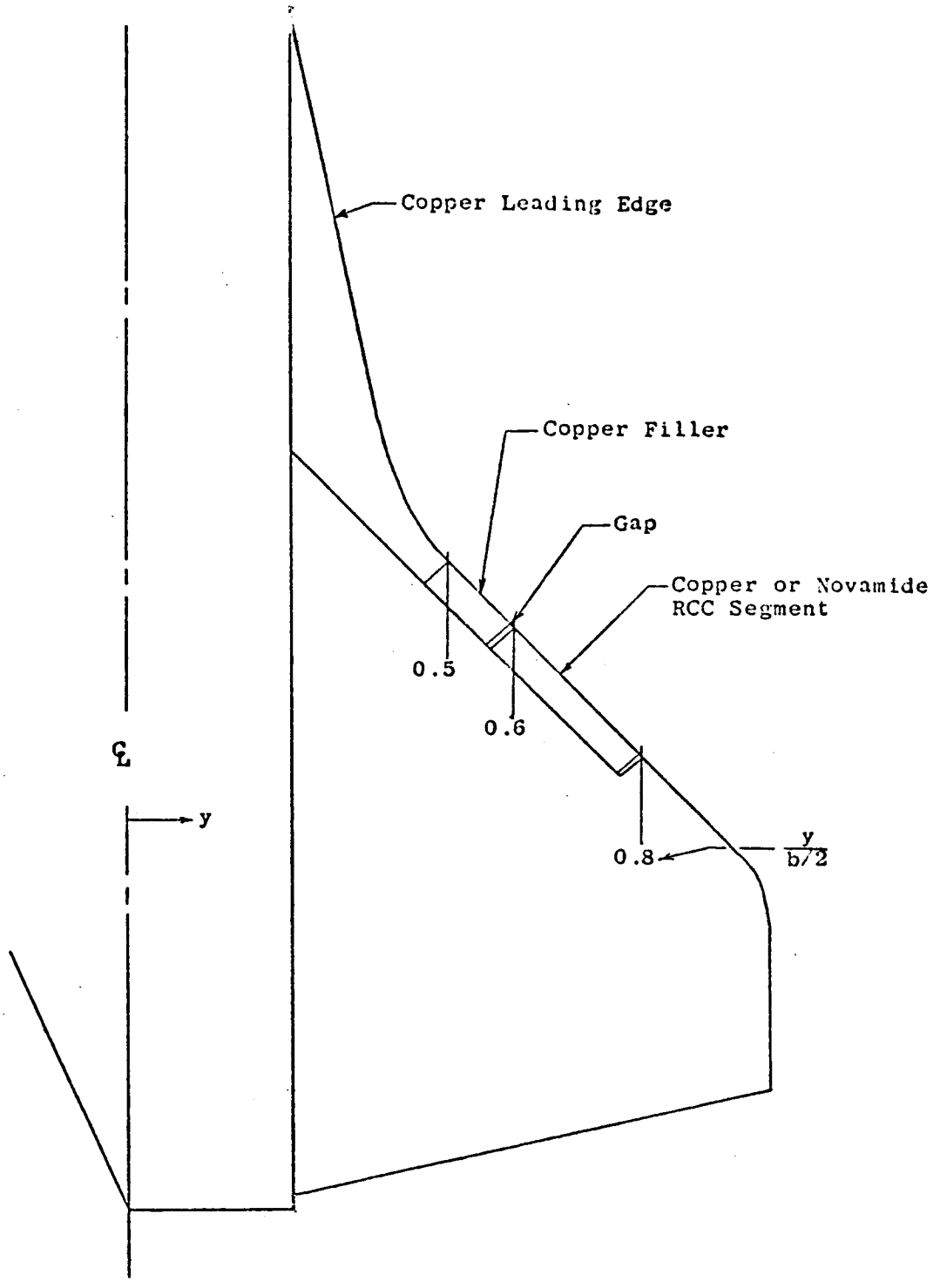
Figure 3. Wing insulation simulation details.



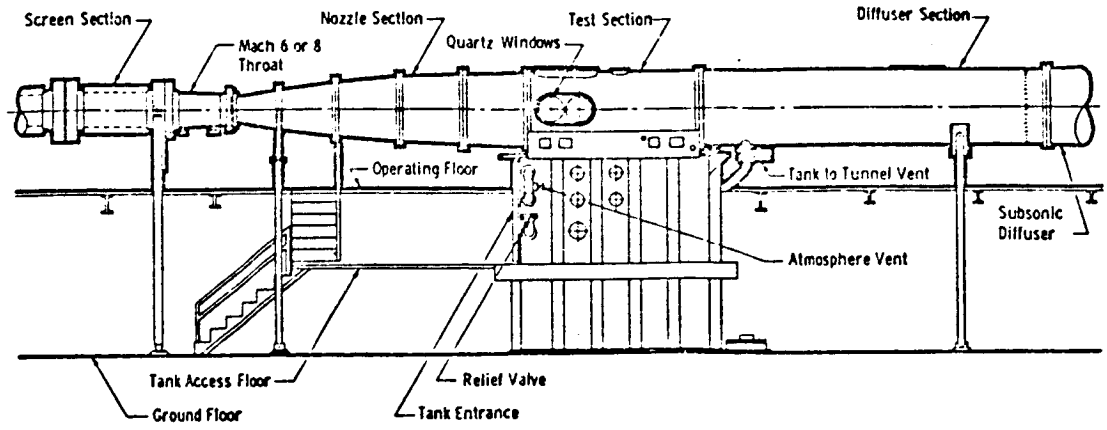
b. RSI Tile - Aft Location
Figure 3. Continued.



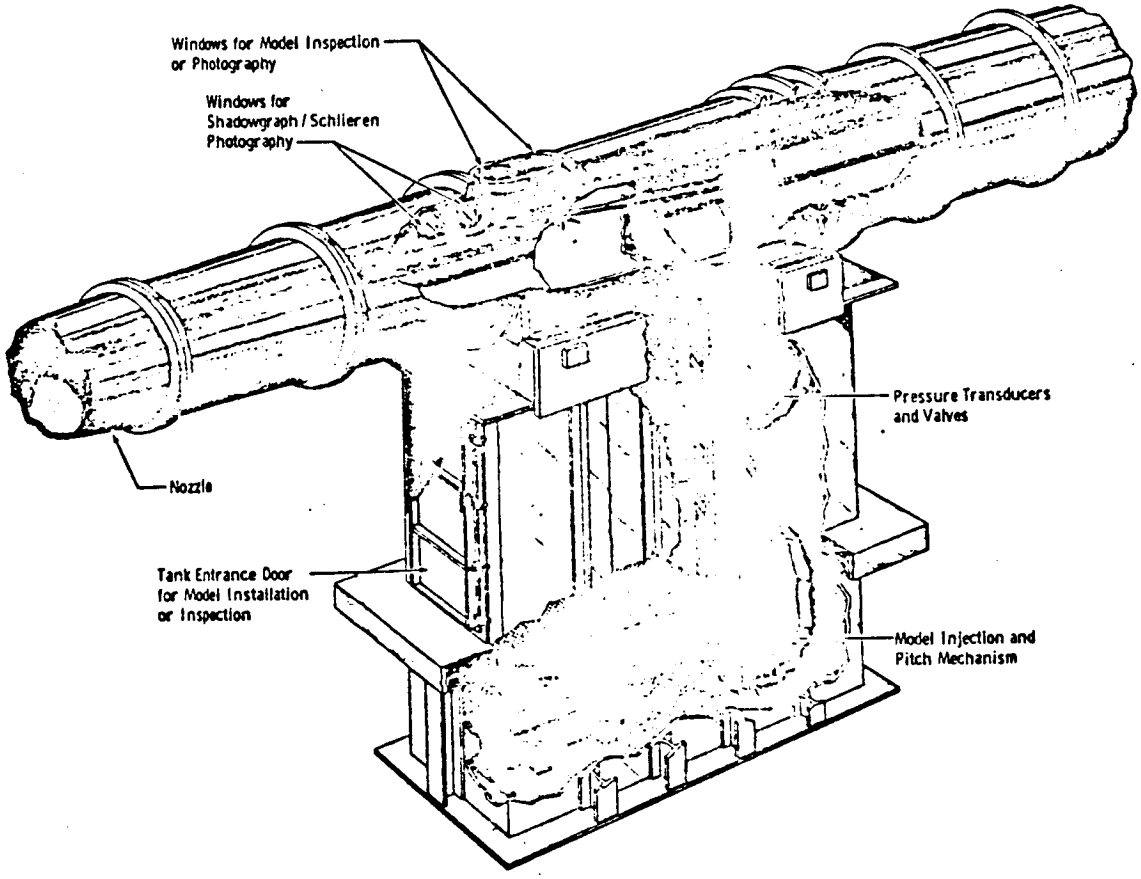
c. RCC Roughness - Inboard Location
Figure 3. Continued.



d. RCC Roughness - Outboard Location
Figure 3. Concluded.

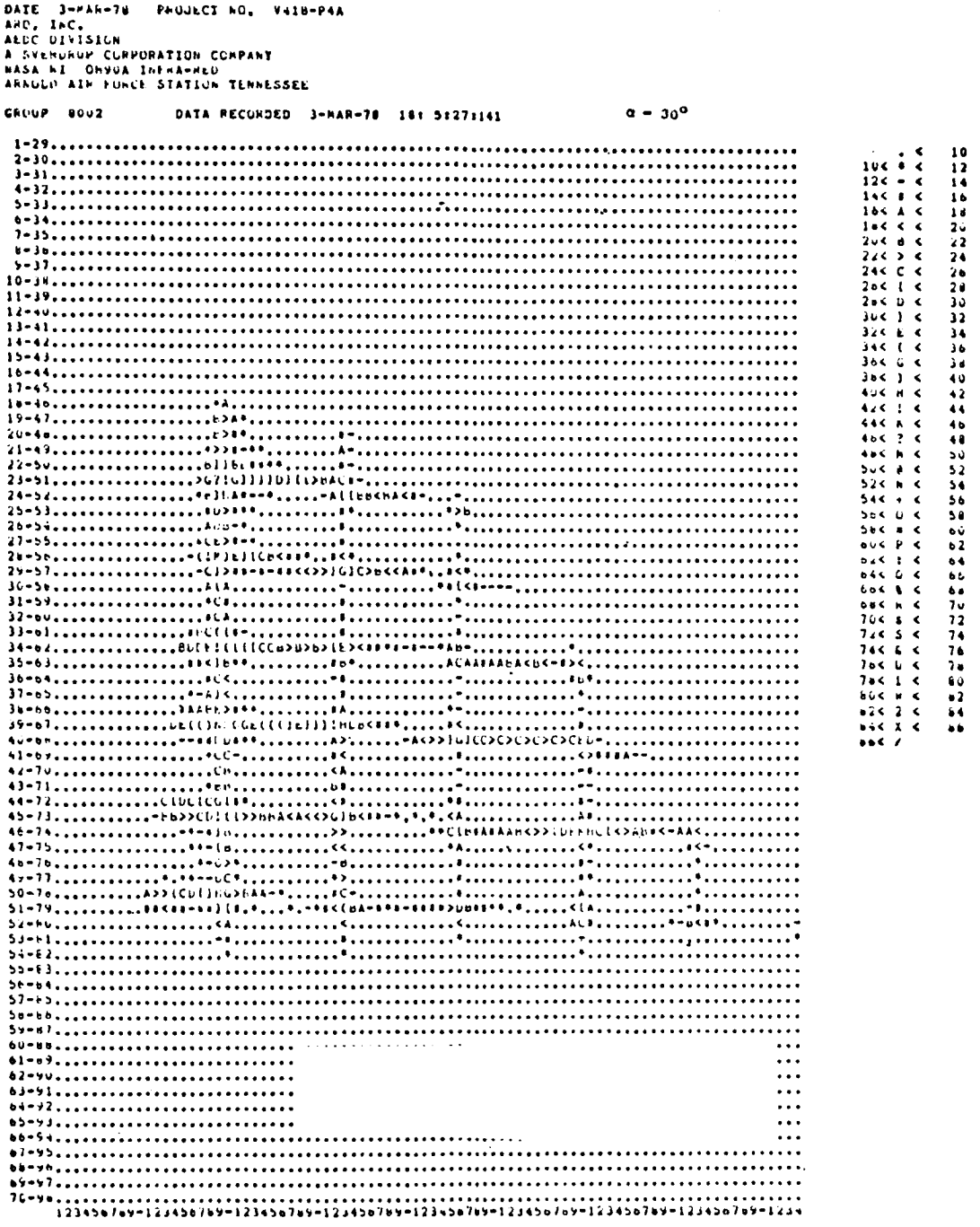


a. Tunnel assembly



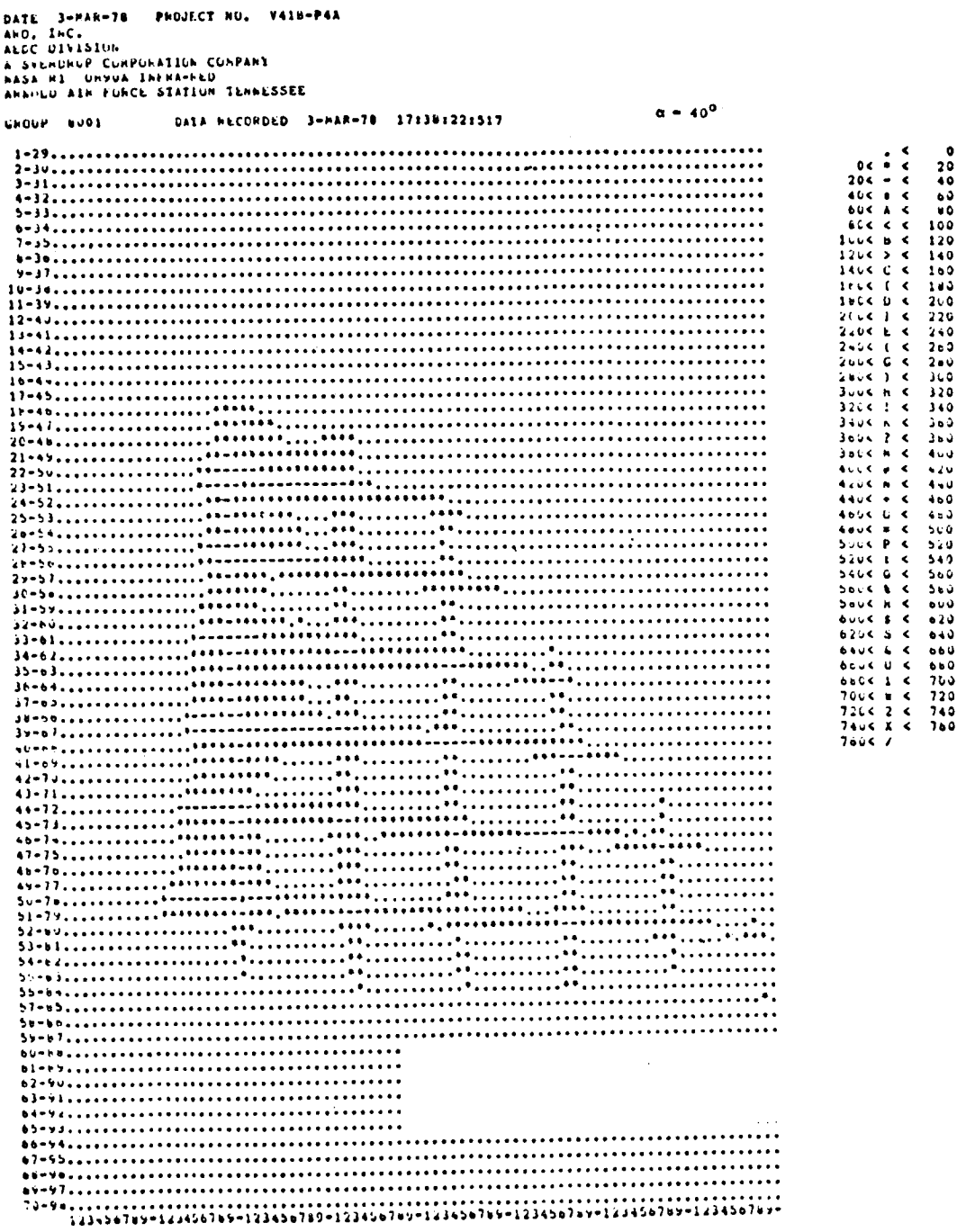
b. Tunnel Test Section

Figure 4. Tunnel B.

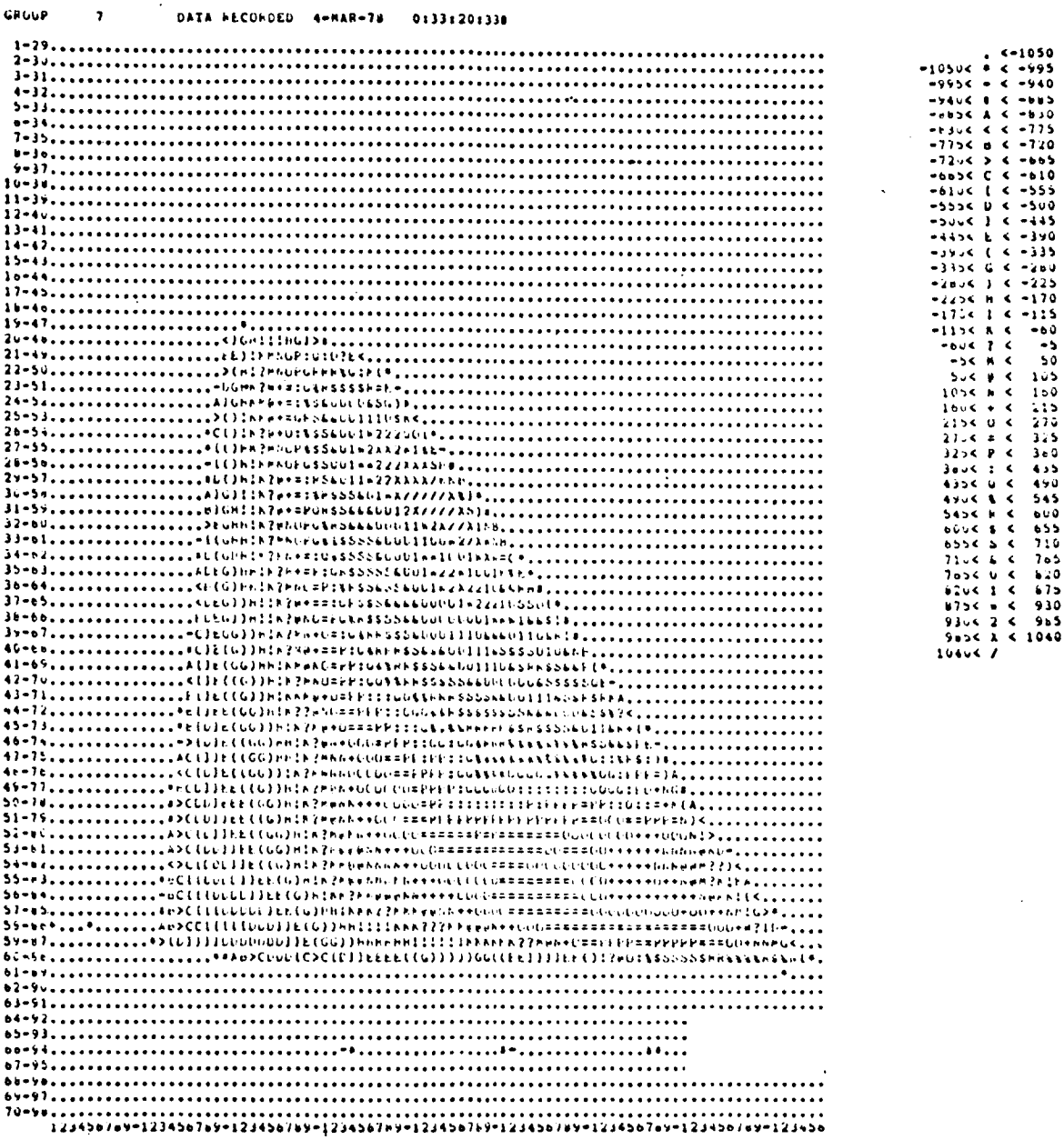


a. Gridlines for $\alpha = 30^{\circ}$

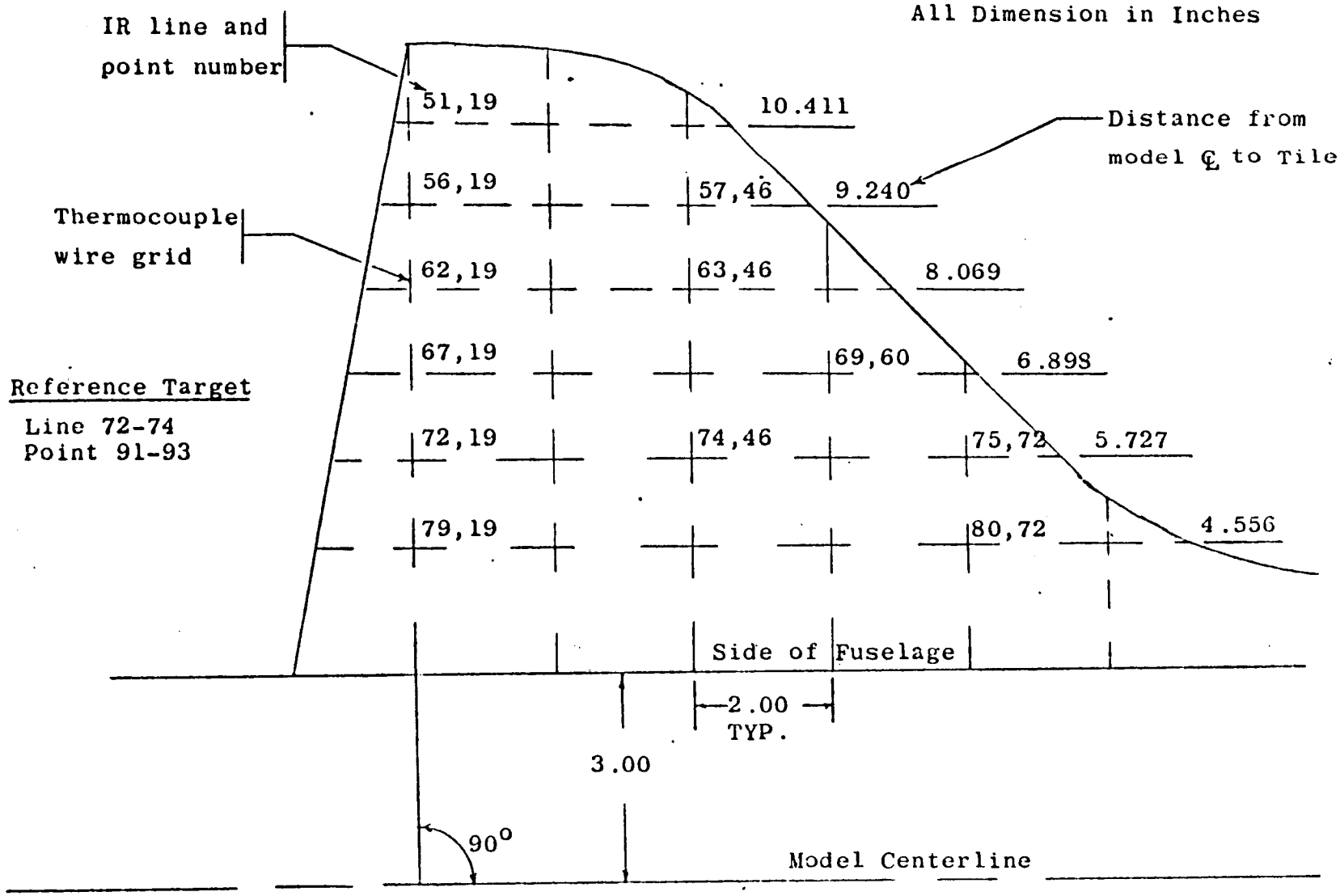
Figure 5. Infrared contour map.



b. Gridlines for $\alpha = 40^{\circ}$
Figure 5. Continued.

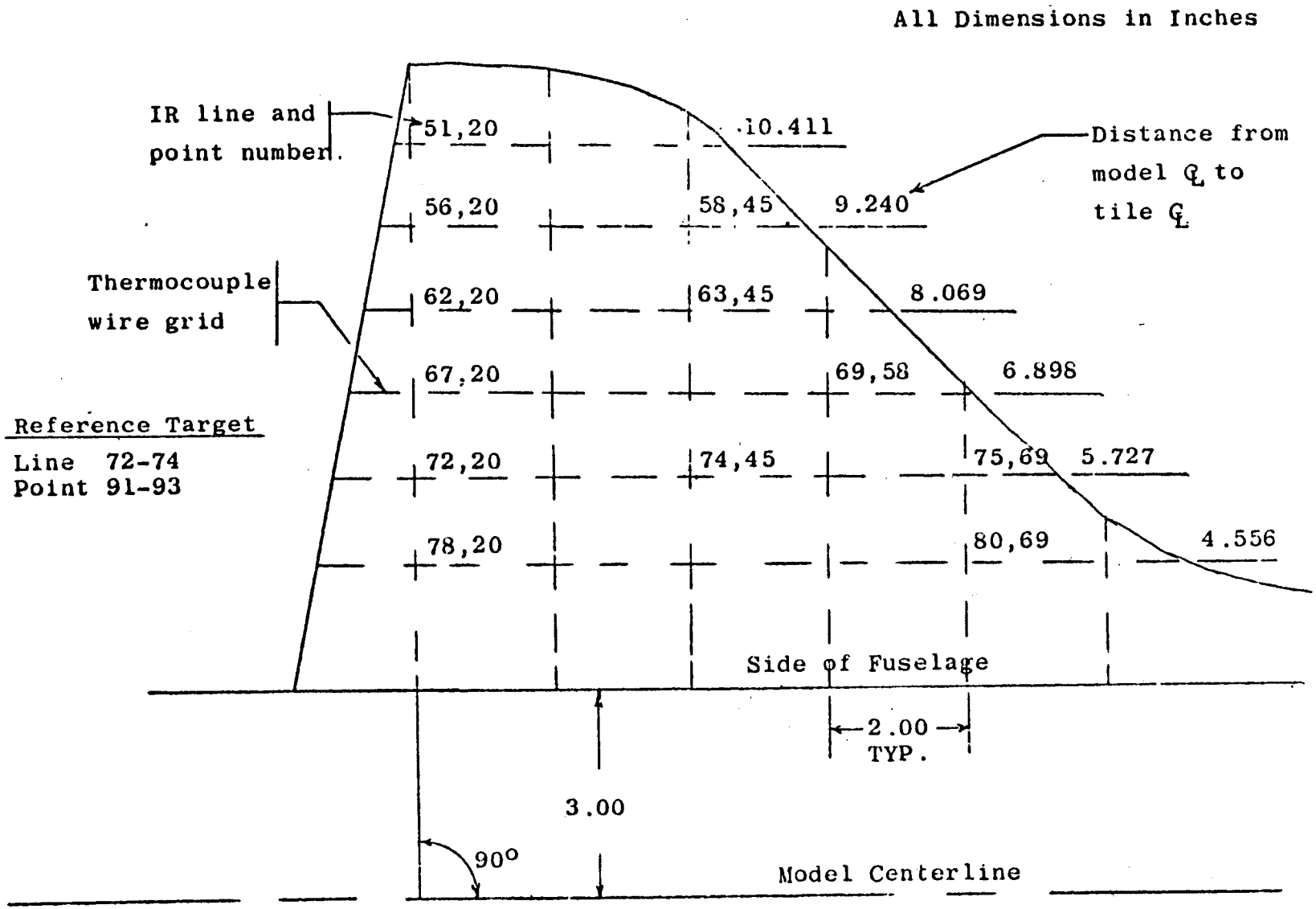


c. Typical Data Map
Figure 5. Concluded.



a. Tare Number 8002, ALPHA MODEL = 30°

Figure 6. Gridline layout for OH90A tare photographs.



b. Tare Number 8001, ALPHA MODEL = 40°
Figure 6. Concluded.

APPENDIX A

SOURCE DATA: PAINT DATA TABULATIONS

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
3	RSI FORWARD	0.01	0.000	0.01	29.99	0.0532	22 29 19

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	554.66	1318.67	95.78	0.0573	3833.	5.017E-05	7.707E-08	2.495E+06	3.295E-02	529.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1885	400.	4.183E-01	5.694E-01	5.022E-01	7.752E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HREF	H(.9TO)	H(.9TO)/ HREF
TOP 1(400)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(400)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(400)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	2.32					
TOP 4(400)	3.17	1.50	2.477E-02	0.7518	3.373E-02	1.0234
TOP 5(400)	4.17	2.49	1.920E-02	0.5825	2.613E-02	0.7930
TOP 6(400)	5.16	3.49	1.623E-02	0.4924	2.209E-02	0.6703
TOP 7(400)	6.16	4.48	1.431E-02	0.4343	1.948E-02	0.5912
TOP 8(400)	7.15	5.48	1.295E-02	0.3929	1.762E-02	0.5348
TOP 9(400)	8.15	6.47	1.191E-02	0.3614	1.621E-02	0.4920
TOP 10(400)	9.14	7.47	1.109E-02	0.3364	1.509E-02	0.4580
TOP 11(400)	10.14	8.46	1.042E-02	0.3160	1.418E-02	0.4302
TOP 12(400)	11.13	9.46	9.852E-03	0.2989	1.341E-02	0.4070
TOP 13(400)	12.13	10.45	9.371E-03	0.2844	1.276E-02	0.3871
TOP 14(400)	13.12	11.45	8.954E-03	0.2717	1.219E-02	0.3699
TOP 15(400)	14.12	12.44	8.589E-03	0.2606	1.169E-02	0.3548
TOP 16(400)	15.11	13.44	8.265E-03	0.2508	1.125E-02	0.3414
TOP 17(400)	16.11	14.43	7.975E-03	0.2420	1.086E-02	0.3294
TOP 18(400)	17.10	15.43	7.713E-03	0.2341	1.050E-02	0.3186
TOP 19(400)	18.10	16.42	7.476E-03	0.2269	1.018E-02	0.3088
TOP 20(400)	19.09	17.42	7.259E-03	0.2203	9.882E-03	0.2999
TOP 21(400)	20.09	18.41	7.060E-03	0.2142	9.612E-03	0.2917
TOP 22(400)	21.08	19.41	6.877E-03	0.2087	9.362E-03	0.2841
TOP 23(400)	22.08	20.40	6.707E-03	0.2035	9.131E-03	0.2771
TOP 24(400)	23.07	21.40	6.549E-03	0.1987	8.916E-03	0.2705
TOP 25(400)	24.07	22.39	6.402E-03	0.1943	8.716E-03	0.2645
TOP 26(400)	25.06	23.39	6.264E-03	0.1901	8.528E-03	0.2588
TOP 27(400)	26.06	24.38	6.135E-03	0.1862	8.352E-03	0.2534
TOP 28(400)	27.05	25.38	6.014E-03	0.1825	8.187E-03	0.2484
TOP 29(400)	28.05	26.37	5.899E-03	0.1790	8.031E-03	0.2437
TOP 30(400)	29.04	27.37	5.791E-03	0.1757	7.884E-03	0.2392
TOP 31(400)	30.04	28.36	5.688E-03	0.1726	7.744E-03	0.2350
TOP 32(400)	31.03	29.36	5.591E-03	0.1697	7.612E-03	0.2310
TOP 33(400)	32.03	30.35	5.499E-03	0.1669	7.486E-03	0.2272

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
3	RSI FORWARD	0.01	0.000	0.01	29.99	0.0532	22 29 19

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	554.66	1318.67	95.78	0.0573	3833.	5.017E-05	7.707E-08	2.495E+06	3.295E-02	529.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	509.67	510.67	509.67	510.67	510.67	510.67
2.18	511.67	514.67	515.67	516.67	510.67	513.67
3.17	512.67	518.67	518.67	520.67	510.67	520.67
4.17	514.67	522.67	525.67	525.67	510.67	527.67
5.16	515.67	523.67	527.67	528.67	510.67	529.67
6.16	516.67	525.67	531.67	530.67	510.67	532.67
7.15	517.67	527.67	534.67	532.67	510.67	534.67
8.15	518.67	529.67	535.67	534.67	510.67	536.67
9.14	519.67	530.67	537.67	537.67	510.67	538.67
10.14	519.67	530.67	537.67	537.67	510.67	538.67
11.13	520.67	532.67	539.67	538.67	510.67	539.67
12.13	521.67	533.67	540.67	539.67	510.67	541.67
13.12	521.67	534.67	542.67	541.67	510.67	542.67
14.12	522.67	535.67	543.67	542.67	510.67	543.67
15.11	523.67	536.67	544.67	543.67	510.67	543.67
16.11	524.67	536.67	545.67	544.67	510.67	544.67
17.10	524.67	538.67	546.67	545.67	510.67	545.67
18.10	525.67	538.67	547.67	546.67	510.67	546.67
19.09	525.67	539.67	548.67	546.67	510.67	546.67
20.09	526.67	540.67	548.67	547.67	510.67	547.67
21.08	527.67	540.67	549.67	547.67	510.67	547.67
22.08	527.67	541.67	550.67	548.67	510.67	548.67
23.07	528.67	541.67	550.67	549.67	510.67	548.67
24.07	528.67	542.67	551.67	549.67	510.67	548.67
25.06	529.67	543.67	552.67	550.67	510.67	549.67
26.06	529.67	543.67	552.67	550.67	510.67	549.67
27.05	529.67	544.67	553.67	550.67	510.67	550.67
28.05	530.67	544.67	553.67	551.67	510.67	550.67
29.04	530.67	545.67	553.67	551.67	510.67	550.67
30.04	531.67	545.67	554.67	551.67	510.67	550.67
31.03	531.67	545.67	554.67	552.67	510.67	551.67
32.03	531.67	546.67	555.67	552.67	510.67	551.67

V418-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
6	RSI FORWARD	0.01	0.000	-10.10	40.10	0.0532	0 11 15

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	553.86	1325.67	96.29	0.0572	3843.	4.983E-05	7.748E-08	2.472E+06	3.296E-02	530.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1885	450.	4.767E-01	7.068E-01	5.721E-01	9.990E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(450)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(450)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(450)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	2.18					
TOP 4(450)	3.17	2.05	2.624E-02	0.7960	3.708E-02	1.1251
TOP 5(450)	4.17	3.05	2.154E-02	0.6534	3.044E-02	0.9234
TOP 6(450)	5.16	4.04	1.870E-02	0.5673	2.643E-02	0.8018
TOP 7(450)	6.16	5.04	1.675E-02	0.5082	2.368E-02	0.7183
TOP 8(450)	7.15	6.03	1.531E-02	0.4644	2.164E-02	0.6564
TOP 9(450)	8.15	7.03	1.418E-02	0.4303	2.005E-02	0.6082
TOP 10(450)	9.14	8.02	1.327E-02	0.4027	1.876E-02	0.5692
TOP 11(450)	10.14	9.02	1.252E-02	0.3799	1.770E-02	0.5369
TOP 12(450)	11.13	10.01	1.186E-02	0.3605	1.679E-02	0.5095
TOP 13(450)	12.13	11.01	1.133E-02	0.3438	1.602E-02	0.4860
TOP 14(450)	13.12	12.00	1.085E-02	0.3293	1.534E-02	0.4654
TOP 15(450)	14.12	13.00	1.043E-02	0.3164	1.474E-02	0.4472
TOP 16(450)	15.11	13.99	1.005E-02	0.3050	1.421E-02	0.4310
TOP 17(450)	16.11	14.99	9.713E-03	0.2947	1.373E-02	0.4165
TOP 18(450)	17.10	15.98	9.405E-03	0.2853	1.329E-02	0.4033
TOP 19(450)	18.10	16.98	9.126E-03	0.2769	1.290E-02	0.3913
TOP 20(450)	19.09	17.97	8.869E-03	0.2691	1.254E-02	0.3803
TOP 21(450)	20.09	18.97	8.634E-03	0.2619	1.220E-02	0.3702
TOP 22(450)	21.08	19.96	8.416E-03	0.2553	1.189E-02	0.3609
TOP 23(450)	22.08	20.96	8.214E-03	0.2492	1.161E-02	0.3522
TOP 24(450)	23.07	21.95	8.025E-03	0.2435	1.134E-02	0.3441
TOP 25(450)	24.07	22.95	7.849E-03	0.2381	1.109E-02	0.3366
TOP 26(450)	25.06	23.94	7.685E-03	0.2331	1.086E-02	0.3295
TOP 27(450)	26.06	24.94	7.530E-03	0.2284	1.064E-02	0.3229
TOP 28(450)	27.05	25.93	7.384E-03	0.2240	1.044E-02	0.3166
TOP 29(450)	28.05	26.93	7.246E-03	0.2198	1.024E-02	0.3107
TOP 30(450)	29.04	27.92	7.116E-03	0.2159	1.006E-02	0.3051
TOP 31(450)	30.04	28.92	6.992E-03	0.2121	9.883E-03	0.2998
TOP 32(450)	31.03	29.91	6.875E-03	0.2086	9.717E-03	0.2948

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
6	RSI FORWARD	0.01	0.000	-10.10	40.10	0.0532	0 11 15

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	553.86	1325.67	96.29	0.0572	3843.	4.983E-05	7.748E-08	2.472E+06	3.296E-02	530.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	510.67	510.67	510.67	511.67	511.67	511.67
2.18	512.67	515.67	513.67	518.67	511.67	515.67
3.17	515.67	520.67	521.67	523.67	511.67	521.67
4.17	516.67	522.67	526.67	527.67	511.67	526.67
5.16	516.67	523.67	526.67	529.67	511.67	527.67
6.16	517.67	525.67	528.67	532.67	511.67	529.67
7.15	518.67	525.67	530.67	532.67	511.67	531.67
8.15	519.67	526.67	532.67	535.67	511.67	532.67
9.14	519.67	528.67	534.67	535.67	511.67	532.67
10.14	520.67	529.67	536.67	539.67	511.67	534.67
11.13	521.67	531.67	538.67	541.67	511.67	536.67
12.13	522.67	532.67	539.67	542.67	511.67	538.67
13.12	523.67	534.67	541.67	544.67	511.67	539.67
14.12	524.67	534.67	543.67	545.67	511.67	541.67
15.11	525.67	536.67	544.67	546.67	511.67	542.67
16.11	526.67	537.67	546.67	548.67	511.67	542.67
17.10	527.67	538.67	547.67	549.67	511.67	543.67
18.10	528.67	538.67	548.67	550.67	511.67	544.67
19.09	528.67	540.67	549.67	551.67	511.67	544.67
20.09	529.67	540.67	550.67	551.67	511.67	545.67
21.08	530.67	541.67	551.67	552.67	511.67	545.67
22.08	531.67	542.67	551.67	552.67	511.67	546.67
23.07	531.67	543.67	552.67	553.67	511.67	546.67
24.07	532.67	544.67	553.67	554.67	511.67	547.67
25.06	532.67	544.67	553.67	554.67	511.67	547.67
26.06	533.67	545.67	554.67	554.67	511.67	547.67
27.05	534.67	545.67	554.67	555.67	511.67	548.67
28.05	534.67	546.67	555.67	555.67	511.67	548.67
29.04	534.67	546.67	555.67	556.67	511.67	548.67
30.04	535.67	547.67	556.67	556.67	511.67	548.67
31.03	536.67	547.67	556.67	556.67	511.67	549.67

NASA/PI 0H90 TRANSITION TEST PAGE 1 3/ 4/78
V41H-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
11	PSI FORWARD	0.01	0.000	-10.11	40.11	0.0532	1 56 44

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
8.00	798.99	1341.67	97.22	0.0818	3867.	7.062E-05	7.823E-08	3.490E+06	3.956E-02	535.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1885	450.	4.640E-01	6.748E-01	5.567E-01	9.442E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(450)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(450)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(450)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	2.32					
TOP 4(450)	3.17	1.50	2.936E-02	0.7421	4.108E-02	1.0384
TOP 5(450)	4.17	2.49	2.276E-02	0.5750	3.183E-02	0.8046
TOP 6(450)	5.16	3.49	1.923E-02	0.4861	2.691E-02	0.6802
TOP 7(450)	6.16	4.48	1.696E-02	0.4287	2.373E-02	0.5999
TOP 8(450)	7.15	5.48	1.534E-02	0.3878	2.147E-02	0.5427
TOP 9(450)	8.15	6.47	1.411E-02	0.3567	1.975E-02	0.4992
TOP 10(450)	9.14	7.47	1.314E-02	0.3321	1.839E-02	0.4647
TOP 11(450)	10.14	8.46	1.234E-02	0.3120	1.727E-02	0.4365
TOP 12(450)	11.13	9.46	1.167E-02	0.2951	1.634E-02	0.4129
TOP 13(450)	12.13	10.45	1.110E-02	0.2807	1.554E-02	0.3928
TOP 14(450)	13.12	11.45	1.061E-02	0.2682	1.485E-02	0.3753
TOP 15(450)	14.12	12.44	1.018E-02	0.2573	1.424E-02	0.3600
TOP 16(450)	15.11	13.44	9.794E-03	0.2476	1.370E-02	0.3464
TOP 17(450)	16.11	14.43	9.450E-03	0.2389	1.322E-02	0.3343
TOP 18(450)	17.10	15.43	9.140E-03	0.2310	1.279E-02	0.3233
TOP 19(450)	18.10	16.42	8.859E-03	0.2239	1.240E-02	0.3134
TOP 20(450)	19.09	17.42	8.602E-03	0.2174	1.204E-02	0.3043
TOP 21(450)	20.09	18.41	8.366E-03	0.2115	1.171E-02	0.2959
TOP 22(450)	21.08	19.41	8.149E-03	0.2060	1.140E-02	0.2882

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
11	PSI FORWARD	0.01	0.000	-10.11	40.11	0.0532	1 56 44

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
8.00	796.99	1341.67	97.22	0.0818	3867.	7.062E-05	7.823E-08	3.490E+06	3.956E-02	535.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	511.67	512.67	511.67	512.67	512.67	512.67
2.18	511.67	512.67	511.67	512.67	512.67	512.67
3.17	514.67	520.67	520.67	525.67	512.67	522.67
4.17	520.67	529.67	531.67	534.67	512.67	532.67
5.16	524.67	532.67	540.67	544.67	512.67	540.67
6.16	526.67	538.67	543.67	547.67	512.67	543.67
7.15	527.67	538.67	543.67	550.67	512.67	546.67
8.15	529.67	541.67	550.67	552.67	512.67	548.67
9.14	530.67	543.67	550.67	555.67	512.67	550.67
10.14	531.67	545.67	553.67	559.67	512.67	552.67
11.13	531.67	545.67	555.67	559.67	512.67	554.67
12.13	534.67	547.67	557.67	562.67	512.67	556.67
13.12	534.67	549.67	559.67	562.67	512.67	557.67
14.12	535.67	550.67	561.67	565.67	512.67	558.67
15.11	536.67	550.67	561.67	566.67	512.67	560.67
16.11	538.67	553.67	564.67	568.67	512.67	561.67
17.10	539.67	555.67	567.67	570.67	512.67	563.67
18.10	541.67	557.67	568.67	572.67	512.67	564.67
19.09	543.67	558.67	571.67	574.67	512.67	566.67
20.09	544.67	561.67	572.67	576.67	512.67	567.67
21.08	546.67	562.67	574.67	577.67	512.67	569.67

V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
12	RSI FORWARD	0.01	0.000	-0.01	30.01	0.0532	2 15 20

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
8.00	798.99	1342.67	97.29	0.0818	3868.	7.056E-05	7.829E-08	3.486E+06	3.957E-02	531.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1885	450.	4.661E-01	6.799E-01	5.586E-01	9.507E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(450)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(450)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(450)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	2.32					
TOP 4(450)	3.17	1.50	2.958E-02	0.7477	4.136E-02	1.0454
TOP 5(450)	4.17	2.49	2.292E-02	0.5793	3.205E-02	0.8100
TOP 6(450)	5.16	3.49	1.938E-02	0.4897	2.709E-02	0.6847
TOP 7(450)	6.16	4.48	1.709E-02	0.4319	2.389E-02	0.6039
TOP 8(450)	7.15	5.48	1.546E-02	0.3907	2.161E-02	0.5463
TOP 9(450)	8.15	6.47	1.422E-02	0.3594	1.988E-02	0.5025
TOP 10(450)	9.14	7.47	1.324E-02	0.3346	1.851E-02	0.4679
TOP 11(450)	10.14	8.46	1.244E-02	0.3143	1.739E-02	0.4395
TOP 12(450)	11.13	9.46	1.176E-02	0.2973	1.645E-02	0.4157
TOP 13(450)	12.13	10.45	1.119E-02	0.2828	1.565E-02	0.3954
TOP 14(450)	13.12	11.45	1.069E-02	0.2702	1.495E-02	0.3778
TOP 15(450)	14.12	12.44	1.026E-02	0.2592	1.434E-02	0.3624
TOP 16(450)	15.11	13.44	9.868E-03	0.2494	1.380E-02	0.3487
TOP 17(450)	16.11	14.43	9.522E-03	0.2407	1.331E-02	0.3365
TOP 18(450)	17.10	15.43	9.210E-03	0.2328	1.288E-02	0.3255
TOP 19(450)	18.10	16.42	8.927E-03	0.2256	1.248E-02	0.3155
TOP 20(450)	19.09	17.42	8.668E-03	0.2191	1.212E-02	0.3063
TOP 21(450)	20.09	18.41	8.430E-03	0.2131	1.179E-02	0.2979

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
12	RSI FORWARD	0.01	0.000	-0.01	30.01	0.0532	2 15 20

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
8.00	798.99	1342.67	97.29	0.0818	3868.	7.056E-05	7.829E-08	3.486E+06	3.957E-02	531.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	511.67	512.67	511.67	512.67	512.67	512.67
2.18	512.67	514.67	520.67	517.67	512.67	516.67
3.17	516.67	523.67	525.67	528.67	512.67	526.67
4.17	518.67	528.67	532.67	532.67	512.67	534.67
5.16	519.67	528.67	532.67	535.67	512.67	537.67
6.16	520.67	532.67	537.67	538.67	512.67	542.67
7.15	522.67	534.67	542.67	542.67	512.67	544.67
8.15	524.67	537.67	546.67	545.67	512.67	548.67
9.14	525.67	539.67	548.67	547.67	512.67	551.67
10.14	526.67	540.67	551.67	550.67	512.67	553.67
11.13	528.67	543.67	552.67	552.67	512.67	555.67
12.13	528.67	545.67	554.67	554.67	512.67	557.67
13.12	530.67	546.67	556.67	556.67	512.67	558.67
14.12	531.67	547.67	557.67	557.67	512.67	559.67
15.11	532.67	548.67	559.67	559.67	512.67	561.67
16.11	533.67	550.67	561.67	560.67	512.67	561.67
17.10	534.67	551.67	562.67	561.67	512.67	562.67
18.10	535.67	552.67	563.67	562.67	512.67	563.67
19.09	536.67	553.67	564.67	563.67	512.67	564.67
20.09	536.67	554.67	565.67	564.67	512.67	565.67

V418-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
16	RSI FORWARD	0.01	0.000	-10.11	40.11	0.0532	3 33 1

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	211.73	1284.67	94.40	0.0228	3782.	2.024E-05	7.596E-08	1.008E+06	2.056E-02	534.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1885	250.	2.333E-01	2.549E-01	2.816E-01	3.240E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HREF	H(.9TO)	H(.9TO)/ HREF
TOP 1(250)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(250)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(250)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(250)	3.17	1.50	1.109E-02	0.5396	1.409E-02	0.6856
TOP 5(250)	4.17	2.49	8.595E-03	0.4181	1.092E-02	0.5313
TOP 6(250)	5.16	3.49	7.265E-03	0.3534	9.232E-03	0.4491
TOP 7(250)	6.16	4.48	6.408E-03	0.3117	8.142E-03	0.3961
TOP 8(250)	7.15	5.48	5.796E-03	0.2820	7.365E-03	0.3583
TOP 9(250)	8.15	6.47	5.332E-03	0.2594	6.775E-03	0.3296
TOP 10(250)	9.14	7.47	4.964E-03	0.2415	6.308E-03	0.3068
TOP 11(250)	10.14	8.46	4.663E-03	0.2268	5.925E-03	0.2882
TOP 12(250)	11.13	9.46	4.411E-03	0.2146	5.605E-03	0.2727
TOP 13(250)	12.13	10.45	4.196E-03	0.2041	5.331E-03	0.2593
TOP 14(250)	13.12	11.45	4.009E-03	0.1950	5.094E-03	0.2478
TOP 15(250)	14.12	12.44	3.845E-03	0.1871	4.886E-03	0.2377
TOP 16(250)	15.11	13.44	3.700E-03	0.1800	4.702E-03	0.2287
TOP 17(250)	16.11	14.43	3.570E-03	0.1737	4.537E-03	0.2207
TOP 18(250)	17.10	15.43	3.453E-03	0.1680	4.388E-03	0.2135
TOP 19(250)	18.10	16.42	3.347E-03	0.1628	4.253E-03	0.2069
TOP 20(250)	19.09	17.42	3.250E-03	0.1581	4.130E-03	0.2009
TOP 21(250)	20.09	18.41	3.161E-03	0.1538	4.017E-03	0.1954
TOP 22(250)	21.08	19.41	3.079E-03	0.1498	3.912E-03	0.1903
TOP 23(250)	22.08	20.40	3.003E-03	0.1461	3.816E-03	0.1856
TOP 24(250)	23.07	21.40	2.932E-03	0.1426	3.726E-03	0.1813
TOP 25(250)	24.07	22.39	2.866E-03	0.1394	3.642E-03	0.1772
TOP 26(250)	25.06	23.39	2.805E-03	0.1364	3.564E-03	0.1734
TOP 27(250)	26.06	24.38	2.747E-03	0.1336	3.490E-03	0.1698
TOP 28(250)	27.05	25.38	2.692E-03	0.1310	3.421E-03	0.1664
TOP 29(250)	28.05	26.37	2.641E-03	0.1285	3.356E-03	0.1633
TOP 30(250)	29.04	27.37	2.593E-03	0.1261	3.295E-03	0.1603
TOP 31(250)	30.04	28.36	2.547E-03	0.1239	3.236E-03	0.1574
TOP 32(250)	31.03	29.36	2.503E-03	0.1218	3.181E-03	0.1547
TOP 33(250)	32.03	30.35	2.462E-03	0.1198	3.128E-03	0.1522

NASA/RT OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
16	RSI FORWARD	0.01	0.000	-10.11	40.11	0.0532	3	33	1

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	211.73	1284.67	94.40	0.0228	3782.	2.024E-05	7.596E-08	1.008E+06	2.056E-02	534.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1885	250.	2.333E-01	2.549E-01	2.816E-01	3.240E-01

PIC NO		TIME	DELTIME	H(TO)	H(TO)/ HREF	H(.9TO)	H(.9TO)/ HREF
TOP	34(250)	33.02	31.35	2.423E-03	0.1178	3.078E-03	0.1497
TOP	35(250)	34.02	32.34	2.385E-03	0.1160	3.031E-03	0.1474
TOP	36(250)	35.01	33.34	2.349E-03	0.1143	2.985E-03	0.1452
TOP	37(250)	36.01	34.33	2.315E-03	0.1126	2.941E-03	0.1431
TOP	38(250)	37.00	35.33	2.282E-03	0.1110	2.900E-03	0.1411

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
16	RSI FORWARD	0.01	0.000	-10.11	40.11	0.0532	3 33 1

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	211.73	1284.67	94.40	0.0228	3782.	2.024E-05	7.596E-08	1.008E+06	2.056E-02	534.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	510.67	511.67	510.67	511.67	511.67	511.67
2.19	512.67	512.67	512.67	514.67	511.67	513.67
3.17	512.67	515.67	516.67	517.67	511.67	516.67
4.17	513.67	516.67	517.67	519.67	511.67	517.67
5.16	513.67	517.67	519.67	520.67	511.67	518.67
6.16	514.67	517.67	520.67	521.67	511.67	519.67
7.15	514.67	517.67	521.67	522.67	511.67	520.67
8.15	514.67	518.67	522.67	523.67	511.67	520.67
9.14	514.67	519.67	522.67	523.67	511.67	521.67
10.14	515.67	519.67	523.67	525.67	511.67	522.67
11.13	516.67	521.67	525.67	526.67	511.67	523.67
12.13	516.67	521.67	526.67	527.67	511.67	524.67
13.12	517.67	522.67	527.67	528.67	511.67	524.67
14.12	517.67	523.67	528.67	529.67	511.67	525.67
15.11	517.67	523.67	528.67	529.67	511.67	526.67
16.11	518.67	524.67	529.67	530.67	511.67	526.67
17.10	518.67	525.67	530.67	531.67	511.67	527.67
18.10	519.67	525.67	531.67	531.67	511.67	527.67
19.09	519.67	526.67	531.67	532.67	511.67	527.67
20.09	520.67	526.67	532.67	532.67	511.67	528.67
21.08	520.67	526.67	532.67	533.67	511.67	528.67
22.08	520.67	527.67	532.67	533.67	511.67	528.67
23.07	521.67	527.67	533.67	534.67	511.67	529.67
24.07	521.67	528.67	533.67	534.67	511.67	529.67
25.06	521.67	528.67	534.67	534.67	511.67	529.67
26.06	522.67	528.67	534.67	535.67	511.67	529.67
27.05	522.67	529.67	534.67	535.67	511.67	529.67
28.05	522.67	529.67	535.67	535.67	511.67	530.67
29.04	522.67	529.67	535.67	535.67	511.67	530.67
30.04	523.67	530.67	535.67	536.67	511.67	530.67
31.03	523.67	530.67	536.67	536.67	511.67	530.67
32.03	523.67	530.67	536.67	536.67	511.67	530.67
33.02	523.67	530.67	536.67	536.67	511.67	530.67
34.02	524.67	531.67	536.67	536.67	511.67	530.67
35.01	524.67	531.67	536.67	537.67	511.67	531.67
36.01	524.67	531.67	537.67	537.67	511.67	531.67
37.00	524.67	531.67	537.67	537.67	511.67	531.67

NASA/RI 0490 TRANSITION TEST
V41B-P48
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION *****			ALPHA-SECTOR	ALPHA-MODEL	PCK1/2	HR	MIN	SEC
	TILE TYPE	GAP	HEIGHT	DEG	DEG				
17	RSI FORWARD	0.01	0.000	-0.06	30.06	0.0532	3	50	32

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	PHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	211.33	1280.67	94.11	0.0227	3776.	2.026E-05	7.573E-08	1.010E+06	2.053E-02	533.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1885	200.	1.687E-01	1.729E-01	2.036E-01	2.159E-01

PIC	NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP	1(200)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP	2(200)	1.16		MODEL HAS NOT REACHED CENTERLINE			
TOP	3(200)	2.19		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =		2.32					
TOP	4(200)	3.17	1.50	7.522E-03	0.3665	9.392E-03	0.4576
TOP	5(200)	4.17	2.49	5.829E-03	0.2840	7.277E-03	0.3545
TOP	6(200)	5.16	3.49	4.927E-03	0.2400	6.151E-03	0.2997
TOP	7(200)	6.16	4.48	4.345E-03	0.2117	5.426E-03	0.2643
TOP	8(200)	7.15	5.48	3.931E-03	0.1915	4.908E-03	0.2391
TOP	9(200)	8.15	6.47	3.616E-03	0.1762	4.515E-03	0.2200
TOP	10(200)	9.14	7.47	3.366E-03	0.1640	4.203E-03	0.2048
TOP	11(200)	10.14	8.46	3.162E-03	0.1541	3.948E-03	0.1924
TOP	12(200)	11.13	9.46	2.991E-03	0.1457	3.735E-03	0.1820
TOP	13(200)	12.13	10.45	2.845E-03	0.1386	3.552E-03	0.1731
TOP	14(200)	13.12	11.45	2.719E-03	0.1325	3.395E-03	0.1654
TOP	15(200)	14.12	12.44	2.608E-03	0.1270	3.256E-03	0.1586
TOP	16(200)	15.11	13.44	2.509E-03	0.1223	3.133E-03	0.1526
TOP	17(200)	16.11	14.43	2.421E-03	0.1180	3.023E-03	0.1473
TOP	18(200)	17.10	15.43	2.342E-03	0.1141	2.924E-03	0.1425
TOP	19(200)	18.10	16.42	2.270E-03	0.1106	2.834E-03	0.1381

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
17	RSI FORWARD	0.01	0.000	-0.06	30.06	0.0532	3 50 32

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	211.33	1280.67	94.11	0.0227	3776.	2.026E-05	7.573E-08	1.010E+06	2.053E-02	533.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	510.67	511.67	510.67	511.67	511.67	511.67
2.18	510.67	511.67	510.67	511.67	511.67	511.67
3.17	511.67	514.67	513.67	514.67	511.67	513.67
4.17	512.67	515.67	516.67	516.67	511.67	516.67
5.16	513.67	517.67	518.67	519.67	511.67	518.67
6.16	513.67	518.67	520.67	520.67	511.67	520.67
7.15	514.67	518.67	520.67	521.67	511.67	520.67
8.15	514.67	518.67	520.67	521.67	511.67	520.67
9.14	521.67	529.67	534.67	533.67	511.67	530.67
10.14	521.67	530.67	535.67	533.67	511.67	530.67
11.13	522.67	530.67	535.67	533.67	511.67	530.67
12.13	522.67	530.67	535.67	534.67	511.67	531.67
13.12	522.67	531.67	536.67	534.67	511.67	531.67
14.12	522.67	531.67	536.67	534.67	511.67	531.67
15.11	523.67	531.67	536.67	534.67	511.67	531.67
16.11	523.67	531.67	536.67	534.67	511.67	531.67
17.10	523.67	532.67	537.67	535.67	511.67	531.67
18.10	523.67	532.67	537.67	535.67	511.67	531.67

NASA/RI OH90 TRANSITION TEST
V416-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
20	RSI FORWARD	0.01	0.005	-10.10	40.10	0.0532	5	0	33

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF Lb-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	211.93	1278.67	93.96	0.0228	3773.	2.035E-05	7.561E-08	1.016E+06	2.055E-02	536.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1885	225.	1.995E-01	2.107E-01	2.410E-01	2.654E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(225)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(225)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(225)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(225)	3.17	1.50	9.165E-03	0.4460	1.155E-02	0.5619
TOP 5(225)	4.17	2.49	7.102E-03	0.3456	8.948E-03	0.4354
TOP 6(225)	5.16	3.49	6.003E-03	0.2921	7.564E-03	0.3681
TOP 7(225)	6.16	4.48	5.295E-03	0.2577	6.671E-03	0.3246
TOP 8(225)	7.15	5.48	4.759E-03	0.2331	6.034E-03	0.2937
TOP 9(225)	8.15	6.47	4.406E-03	0.2144	5.551E-03	0.2701
TOP 10(225)	9.14	7.47	4.102E-03	0.1996	5.166E-03	0.2515
TOP 11(225)	10.14	8.46	3.853E-03	0.1875	4.855E-03	0.2362
TOP 12(225)	11.13	9.46	3.645E-03	0.1774	4.592E-03	0.2235
TOP 13(225)	12.13	10.45	3.467E-03	0.1687	4.368E-03	0.2126
TOP 14(225)	13.12	11.45	3.313E-03	0.1612	4.174E-03	0.2031
TOP 15(225)	14.12	12.44	3.177E-03	0.1546	4.003E-03	0.1948
TOP 16(225)	15.11	13.44	3.057E-03	0.1488	3.852E-03	0.1875
TOP 17(225)	16.11	14.43	2.950E-03	0.1436	3.717E-03	0.1809
TOP 18(225)	17.10	15.43	2.853E-03	0.1389	3.595E-03	0.1750
TOP 19(225)	18.10	16.42	2.766E-03	0.1346	3.485E-03	0.1696
TOP 20(225)	19.09	17.42	2.685E-03	0.1307	3.384E-03	0.1647
TOP 21(225)	20.09	18.41	2.612E-03	0.1271	3.291E-03	0.1601
TOP 22(225)	21.08	19.41	2.544E-03	0.1238	3.205E-03	0.1560
TOP 23(225)	22.08	20.40	2.481E-03	0.1207	3.126E-03	0.1521
TOP 24(225)	23.07	21.40	2.423E-03	0.1179	3.053E-03	0.1486
TOP 25(225)	24.07	22.39	2.368E-03	0.1153	2.984E-03	0.1452
TOP 26(225)	25.06	23.39	2.317E-03	0.1128	2.920E-03	0.1421
TOP 27(225)	26.06	24.38	2.270E-03	0.1105	2.860E-03	0.1392
TOP 28(225)	27.05	25.38	2.225E-03	0.1083	2.803E-03	0.1364
TOP 29(225)	28.05	26.37	2.182E-03	0.1062	2.750E-03	0.1338
TOP 30(225)	29.04	27.37	2.142E-03	0.1043	2.699E-03	0.1314
TOP 31(225)	30.04	28.36	2.104E-03	0.1024	2.651E-03	0.1290
TOP 32(225)	31.03	29.36	2.068E-03	0.1007	2.606E-03	0.1268
TOP 33(225)	32.03	30.35	2.034E-03	0.0990	2.563E-03	0.1247

V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
20	RSI FORWARD	0.01	0.005	-10.10	40.10	0.0532	5 0 33

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	211.93	1278.67	93.96	0.0228	3773.	2.035E-05	7.561E-08	1.016E+06	2.055E-02	536.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1885	225.	1.995E-01	2.107E-01	2.410E-01	2.654E-01

PIC NO		TIME	DELTIME	H(TO)	H(TO)/ HREF	H(.9TO)	H(.9TO)/ HREF
TOP	34(225)	33.02	31.35	2.002E-03	0.0974	2.522E-03	0.1227
TOP	35(225)	34.02	32.34	1.971E-03	0.0959	2.483E-03	0.1208
TOP	36(225)	35.01	33.34	1.941E-03	0.0945	2.446E-03	0.1190
TOP	37(225)	36.01	34.33	1.913E-03	0.0931	2.410E-03	0.1173
TOP	38(225)	37.00	35.33	1.886E-03	0.0918	2.376E-03	0.1156
TOP	39(225)	38.00	36.32	1.860E-03	0.0905	2.343E-03	0.1140

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
20	RSI FORWARD	0.01	0.005	-10.10	40.10	0.0532	5 0 33

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/F12	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	211.93	1278.67	93.96	0.0228	3773.	2.035E-05	7.561E-08	1.016E+06	2.055E-02	536.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	510.67	511.67	510.67	511.67	511.67	511.67
2.18	512.67	512.67	511.67	514.67	511.67	513.67
3.17	512.67	515.67	515.67	517.67	511.67	516.67
4.17	513.67	516.67	518.67	519.67	511.67	518.67
5.16	513.67	516.67	516.67	520.67	511.67	518.67
6.16	514.67	517.67	519.67	521.67	511.67	519.67
7.15	514.67	517.67	520.67	521.67	511.67	519.67
8.15	514.67	519.67	521.67	523.67	511.67	521.67
9.14	515.67	519.67	523.67	524.67	511.67	522.67
10.14	516.67	521.67	524.67	526.67	511.67	523.67
11.13	516.67	521.67	525.67	527.67	511.67	524.67
12.13	516.67	522.67	526.67	527.67	511.67	524.67
13.12	517.67	522.67	527.67	528.67	511.67	525.67
14.12	517.67	523.67	528.67	529.67	511.67	525.67
15.11	518.67	524.67	529.67	530.67	511.67	526.67
16.11	518.67	524.67	529.67	530.67	511.67	526.67
17.10	519.67	525.67	530.67	531.67	511.67	527.67
18.10	519.67	525.67	531.67	531.67	511.67	527.67
19.09	519.67	526.67	531.67	532.67	511.67	528.67
20.09	520.67	526.67	531.67	532.67	511.67	528.67
21.08	520.67	527.67	532.67	533.67	511.67	528.67
22.08	521.67	527.67	532.67	533.67	511.67	528.67
23.07	521.67	527.67	533.67	533.67	511.67	529.67
24.07	521.67	528.67	533.67	534.67	511.67	529.67
25.06	521.67	528.67	534.67	534.67	511.67	529.67
26.06	522.67	528.67	534.67	534.67	511.67	529.67
27.05	522.67	529.67	534.67	535.67	511.67	529.67
28.05	522.67	529.67	534.67	535.67	511.67	529.67
29.04	523.67	529.67	534.67	535.67	511.67	530.67
30.04	523.67	530.67	535.67	535.67	511.67	530.67
31.03	523.67	530.67	535.67	535.67	511.67	530.67
32.03	523.67	530.67	535.67	536.67	511.67	530.67
33.02	523.67	530.67	536.67	536.67	511.67	530.67
34.02	524.67	530.67	536.67	536.67	511.67	530.67
35.01	524.67	531.67	536.67	536.67	511.67	530.67
36.01	524.67	531.67	536.67	536.67	511.67	530.67
37.00	524.67	531.67	536.67	536.67	511.67	530.67
38.00	524.67	531.67	536.67	536.67	511.67	531.67

V418-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
21	RSI FORWARD	0.01	0.005	-0.06	30.06	0.0532	5 25 2

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	213.44	1283.67	94.33	0.0230	3780.	2.042E-05	7.590E-08	1.017E+06	2.064E-02	529.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1885	175.	1.393E-01	1.388E-01	1.678E-01	1.719E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HRFR	H(.9TO)	H(.9TO)/HRFR
TOP 1(175)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(175)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(175)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(175)	3.17	1.50	6.041E-03	0.2927	7.477E-03	0.3623
TOP 5(175)	4.17	2.49	4.681E-03	0.2268	5.794E-03	0.2808
TOP 6(175)	5.16	3.49	3.957E-03	0.1917	4.898E-03	0.2373
TOP 7(175)	6.16	4.48	3.490E-03	0.1691	4.320E-03	0.2093
TOP 8(175)	7.15	5.48	3.157E-03	0.1530	3.907E-03	0.1893
TOP 9(175)	8.15	6.47	2.904E-03	0.1407	3.594E-03	0.1742
TOP 10(175)	9.14	7.47	2.703E-03	0.1310	3.346E-03	0.1622
TOP 11(175)	10.14	8.46	2.540E-03	0.1231	3.143E-03	0.1523
TOP 12(175)	11.13	9.46	2.402E-03	0.1164	2.973E-03	0.1441
TOP 13(175)	12.13	10.45	2.285E-03	0.1107	2.828E-03	0.1371
TOP 14(175)	13.12	11.45	2.183E-03	0.1058	2.703E-03	0.1310
TOP 15(175)	14.12	12.44	2.094E-03	0.1015	2.592E-03	0.1256
TOP 16(175)	15.11	13.44	2.015E-03	0.0977	2.494E-03	0.1209
TOP 17(175)	16.11	14.43	1.944E-03	0.0942	2.407E-03	0.1166
TOP 18(175)	17.10	15.43	1.891E-03	0.0911	2.328E-03	0.1128
TOP 19(175)	18.10	16.42	1.823E-03	0.0883	2.256E-03	0.1093
TOP 20(175)	19.09	17.42	1.770E-03	0.0858	2.191E-03	0.1062
TOP 21(175)	20.09	18.41	1.722E-03	0.0834	2.131E-03	0.1033
TOP 22(175)	21.08	19.41	1.677E-03	0.0813	2.076E-03	0.1006
TOP 23(175)	22.08	20.40	1.635E-03	0.0792	2.024E-03	0.0981
TOP 24(175)	23.07	21.40	1.597E-03	0.0774	1.977E-03	0.0958
TOP 25(175)	24.07	22.39	1.561E-03	0.0756	1.932E-03	0.0936
TOP 26(175)	25.06	23.39	1.527E-03	0.0740	1.891E-03	0.0916
TOP 27(175)	26.06	24.38	1.496E-03	0.0725	1.852E-03	0.0897
TOP 28(175)	27.05	25.38	1.466E-03	0.0711	1.815E-03	0.0880
TOP 29(175)	28.05	26.37	1.438E-03	0.0697	1.780E-03	0.0863
TOP 30(175)	29.04	27.37	1.412E-03	0.0684	1.748E-03	0.0847
TOP 31(175)	30.04	28.36	1.387E-03	0.0672	1.717E-03	0.0832
TOP 32(175)	31.03	29.36	1.363E-03	0.0661	1.688E-03	0.0818
TOP 33(175)	32.03	30.35	1.341E-03	0.0650	1.660E-03	0.0804

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
21	RSI FORWARD	0.01	0.005	-0.06	30.06	0.0532	5 25 2

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	213.44	1283.67	94.33	0.0230	3780.	2.042E-05	7.590E-08	1.017E+06	2.064E-02	529.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1885	175.	1.393E-01	1.388E-01	1.678E-01	1.719E-01

PIC NO		TIME	DELTIME	H(TO)	H(TO)/ HREF	H(.9TO)	H(.9TO)/ HREF
TOP	34(175)	33.02	31.35	1.319E-03	0.0639	1.633E-03	0.0791
TOP	35(175)	34.02	32.34	1.299E-03	0.0629	1.608E-03	0.0779
TOP	36(175)	35.01	33.34	1.279E-03	0.0620	1.584E-03	0.0767
TOP	37(175)	36.01	34.33	1.261E-03	0.0611	1.560E-03	0.0756
TOP	38(175)	37.00	35.33	1.243E-03	0.0602	1.538E-03	0.0745
TOP	39(175)	38.00	36.32	1.226E-03	0.0594	1.517E-03	0.0735
TOP	40(175)	38.99	37.32	1.209E-03	0.0586	1.497E-03	0.0725
TOP	41(175)	39.99	38.31	1.193E-03	0.0578	1.477E-03	0.0716

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
21	RSI FORWARD	0.01	0.005	-0.06	30.06	0.0532	5 25 2

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	213.44	1283.67	94.33	0.0230	3780.	2.042E-05	7.590E-08	1.017E+06	2.064E-02	529.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	510.67	510.67	510.67	511.67	511.67	511.67
2.18	511.67	513.67	512.67	514.67	511.67	514.67
3.17	512.67	514.67	516.67	516.67	511.67	515.67
4.17	513.67	517.67	519.67	518.67	511.67	517.67
5.16	513.67	517.67	519.67	518.67	511.67	518.67
6.16	513.67	518.67	520.67	520.67	511.67	519.67
7.15	513.67	518.67	521.67	521.67	511.67	520.67
8.15	514.67	519.67	522.67	521.67	511.67	521.67
9.14	514.67	519.67	522.67	522.67	511.67	521.67
10.14	514.67	521.67	524.67	523.67	511.67	522.67
11.13	515.67	521.67	524.67	523.67	511.67	523.67
12.13	515.67	521.67	524.67	524.67	511.67	523.67
13.12	515.67	522.67	525.67	524.67	511.67	524.67
14.12	516.67	522.67	527.67	526.67	511.67	524.67
15.11	516.67	523.67	527.67	526.67	511.67	525.67
16.11	517.67	524.67	528.67	527.67	511.67	526.67
17.10	517.67	524.67	529.67	528.67	511.67	526.67
18.10	518.67	525.67	530.67	528.67	511.67	527.67
19.09	518.67	526.67	530.67	529.67	511.67	527.67
20.09	519.67	526.67	531.67	530.67	511.67	528.67
21.08	519.67	527.67	532.67	530.67	511.67	528.67
22.08	519.67	527.67	532.67	531.67	511.67	528.67
23.07	520.67	528.67	533.67	531.67	511.67	529.67
24.07	520.67	528.67	533.67	532.67	511.67	529.67
25.06	520.67	529.67	534.67	532.67	511.67	529.67
26.06	521.67	529.67	534.67	532.67	511.67	530.67
27.05	521.67	529.67	534.67	533.67	511.67	530.67
28.05	521.67	530.67	535.67	533.67	511.67	530.67
29.04	522.67	530.67	535.67	533.67	511.67	530.67
30.04	522.67	530.67	535.67	534.67	511.67	531.67
31.03	522.67	531.67	536.67	534.67	511.67	531.67
32.03	523.67	531.67	536.67	534.67	511.67	531.67
33.02	523.67	531.67	536.67	534.67	511.67	531.67
34.02	523.67	531.67	536.67	535.67	511.67	531.67
35.01	523.67	532.67	537.67	535.67	511.67	531.67
36.01	523.67	532.67	537.67	535.67	511.67	532.67
37.00	524.67	532.67	537.67	535.67	511.67	532.67
38.00	524.67	533.67	537.67	535.67	511.67	532.67
38.99	524.67	533.67	538.67	535.67	511.67	532.67
39.99	524.67	533.67	538.67	536.67	511.67	532.67

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
22	RSI FORWARD	0.01	0.005	-0.06	30.06	0.0532	5 54 6

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	556.26	1319.67	95.85	0.0574	3835.	5.027E-05	7.713E-08	2.499E+06	3.301E-02	529.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1985	400.	4.177E-01	5.683E-01	5.015E-01	7.732E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HREF	H(.9TO)	H(.9TO)/ HREF
TOP 1(400)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(400)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(400)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(400)	3.17	1.50	2.472E-02	0.7491	3.364E-02	1.0192
TOP 5(400)	4.17	2.49	1.916E-02	0.5804	2.607E-02	0.7898
TOP 6(400)	5.16	3.49	1.619E-02	0.4906	2.204E-02	0.6676
TOP 7(400)	6.16	4.48	1.428E-02	0.4327	1.943E-02	0.5888
TOP 8(400)	7.15	5.48	1.292E-02	0.3914	1.758E-02	0.5326
TOP 9(400)	8.15	6.47	1.189E-02	0.3601	1.617E-02	0.4900
TOP 10(400)	9.14	7.47	1.107E-02	0.3352	1.506E-02	0.4561
TOP 11(400)	10.14	8.46	1.039E-02	0.3149	1.414E-02	0.4285
TOP 12(400)	11.13	9.46	9.832E-03	0.2979	1.338E-02	0.4053
TOP 13(400)	12.13	10.45	9.352E-03	0.2833	1.273E-02	0.3855
TOP 14(400)	13.12	11.45	8.936E-03	0.2707	1.216E-02	0.3684
TOP 15(400)	14.12	12.44	8.572E-03	0.2597	1.166E-02	0.3534
TOP 16(400)	15.11	13.44	8.248E-03	0.2499	1.122E-02	0.3400
TOP 17(400)	16.11	14.43	7.959E-03	0.2411	1.083E-02	0.3281
TOP 18(400)	17.10	15.43	7.698E-03	0.2332	1.047E-02	0.3173
TOP 19(400)	18.10	16.42	7.461E-03	0.2260	1.015E-02	0.3076
TOP 20(400)	19.09	17.42	7.245E-03	0.2195	9.857E-03	0.2987
TOP 21(400)	20.09	18.41	7.046E-03	0.2135	9.587E-03	0.2905
TOP 22(400)	21.08	19.41	6.863E-03	0.2079	9.338E-03	0.2829
TOP 23(400)	22.08	20.40	6.694E-03	0.2028	9.108E-03	0.2759
TOP 24(400)	23.07	21.40	6.536E-03	0.1980	8.893E-03	0.2694
TOP 25(400)	24.07	22.39	6.389E-03	0.1936	8.694E-03	0.2634
TOP 26(400)	25.06	23.39	6.252E-03	0.1894	8.507E-03	0.2577
TOP 27(400)	26.06	24.38	6.123E-03	0.1855	8.331E-03	0.2524
TOP 28(400)	27.05	25.38	6.002E-03	0.1818	8.166E-03	0.2474
TOP 29(400)	28.05	26.37	5.887E-03	0.1784	8.011E-03	0.2427
TOP 30(400)	29.04	27.37	5.779E-03	0.1751	7.864E-03	0.2382
TOP 31(400)	30.04	28.36	5.677E-03	0.1720	7.725E-03	0.2340
TOP 32(400)	31.03	29.36	5.580E-03	0.1691	7.593E-03	0.2300

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
22	RS1 FORWARD	0.01	0.005	-0.06	30.06	0.0532	5 54 6

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	556.26	1319.67	95.85	0.0574	3835.	5.027E-05	7.713E-08	2.499E+06	3.301E-02	529.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	511.67	511.67	511.67	511.67	511.67	511.67
2.18	513.67	514.67	515.67	518.67	511.67	513.67
3.17	515.67	520.67	522.67	522.67	511.67	520.67
4.17	515.67	522.67	525.67	525.67	511.67	526.67
5.16	516.67	524.67	527.67	526.67	511.67	528.67
6.16	517.67	525.67	529.67	528.67	511.67	530.67
7.15	517.67	525.67	531.67	529.67	511.67	532.67
8.15	518.67	528.67	532.67	532.67	511.67	535.67
9.14	519.67	529.67	535.67	535.67	511.67	538.67
10.14	521.67	531.67	537.67	537.67	511.67	539.67
11.13	521.67	532.67	539.67	538.67	511.67	541.67
12.13	522.67	534.67	541.67	540.67	511.67	542.67
13.12	523.67	535.67	543.67	541.67	511.67	543.67
14.12	524.67	536.67	544.67	542.67	511.67	544.67
15.11	524.67	537.67	545.67	544.67	511.67	545.67
16.11	525.67	538.67	546.67	544.67	511.67	546.67
17.10	526.67	539.67	548.67	545.67	511.67	547.67
18.10	527.67	540.67	548.67	547.67	511.67	547.67
19.09	528.67	541.67	549.67	547.67	511.67	548.67
20.09	528.67	541.67	550.67	548.67	511.67	549.67
21.08	529.67	542.67	551.67	548.67	511.67	549.67
22.08	529.67	542.67	551.67	549.67	511.67	550.67
23.07	530.67	543.67	552.67	550.67	511.67	550.67
24.07	530.67	544.67	553.67	550.67	511.67	550.67
25.06	531.67	544.67	553.67	551.67	511.67	551.67
26.06	531.67	545.67	554.67	551.67	511.67	551.67
27.05	532.67	546.67	554.67	552.67	511.67	551.67
28.05	532.67	546.67	554.67	552.67	511.67	552.67
29.04	533.67	546.67	555.67	552.67	511.67	552.67
30.04	533.67	547.67	555.67	553.67	511.67	552.67
31.03	533.67	547.67	556.67	553.67	511.67	553.67

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
23	RSI FORWARD	0.01	0.005	-10.10	40.10	0.0532	6 22 47

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	555.36	1324.67	96.21	0.0573	3842.	5.000E-05	7.742E-08	2.481E+06	3.300E-02	529.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1885	450.	4.780E-01	7.101E-01	5.736E-01	1.004E+00

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(450)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(450)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(450)	2.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 4(450)	3.17		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.31					
TOP 5(450)	4.17	1.93	2.718E-02	0.8236	3.844E-02	1.1647
TOP 6(450)	5.16	2.93	2.208E-02	0.6691	3.123E-02	0.9463
TOP 7(450)	6.16	3.92	1.908E-02	0.5780	2.698E-02	0.8174
TOP 8(450)	7.15	4.92	1.704E-02	0.5162	2.409E-02	0.7301
TOP 9(450)	8.15	5.91	1.554E-02	0.4708	2.197E-02	0.6658
TOP 10(450)	9.14	6.91	1.437E-02	0.4356	2.033E-02	0.6160
TOP 11(450)	10.14	7.90	1.344E-02	0.4072	1.901E-02	0.5759
TOP 12(450)	11.13	8.90	1.266E-02	0.3838	1.791E-02	0.5427
TOP 13(450)	12.13	9.89	1.201E-02	0.3640	1.699E-02	0.5147
TOP 14(450)	13.12	10.89	1.145E-02	0.3469	1.619E-02	0.4906
TOP 15(450)	14.12	11.88	1.096E-02	0.3321	1.550E-02	0.4696
TOP 16(450)	15.11	12.88	1.053E-02	0.3190	1.489E-02	0.4511
TOP 17(450)	16.11	13.87	1.014E-02	0.3073	1.434E-02	0.4346
TOP 18(450)	17.10	14.87	9.797E-03	0.2969	1.386E-02	0.4198
TOP 19(450)	18.10	15.86	9.485E-03	0.2874	1.341E-02	0.4065
TOP 20(450)	19.09	16.86	9.201E-03	0.2788	1.301E-02	0.3943
TOP 21(450)	20.09	17.85	8.941E-03	0.2709	1.264E-02	0.3831
TOP 22(450)	21.08	18.85	8.702E-03	0.2637	1.231E-02	0.3729
TOP 23(450)	22.08	19.84	8.481E-03	0.2570	1.199E-02	0.3634
TOP 24(450)	23.07	20.84	8.276E-03	0.2508	1.170E-02	0.3546
TOP 25(450)	24.07	21.83	8.085E-03	0.2450	1.143E-02	0.3465
TOP 26(450)	25.06	22.83	7.907E-03	0.2396	1.118E-02	0.3388
TOP 27(450)	26.06	23.82	7.740E-03	0.2345	1.095E-02	0.3317
TOP 28(450)	27.05	24.82	7.583E-03	0.2298	1.072E-02	0.3250
TOP 29(450)	28.05	25.81	7.435E-03	0.2253	1.052E-02	0.3186
TOP 30(450)	29.04	26.81	7.296E-03	0.2211	1.032E-02	0.3127
TOP 31(450)	30.04	27.80	7.164E-03	0.2171	1.013E-02	0.3070
TOP 32(450)	31.03	28.80	7.040E-03	0.2133	9.955E-03	0.3017
TOP 33(450)	32.03	29.79	6.921E-03	0.2097	9.788E-03	0.2966

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
23	RSI FORWARD	0.01	0,005	-10.10	40.10	0.0532	6 22 47

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	555.36	1324.67	96.21	0.0573	3842.	5.000E-05	7.742E-08	2.481E+06	3.300E-02	529.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1885	450.	4.780E-01	7.101E-01	5.736E-01	1.004E+00

PIC NO		TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP	34(450)	33.02	30.79	6.808E-03	0.2063	9.628E-03	0.2917
TOP	35(450)	34.02	31.78	6.701E-03	0.2030	9.476E-03	0.2871
TOP	36(450)	35.01	32.78	6.598E-03	0.1999	9.331E-03	0.2828

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
23	PSI FORWARD	0.01	0.005	-10.10	40.10	0.0532	6 22 47

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	555.36	1324.67	96.21	0.0573	3842.	5.000E-05	7.742E-08	2.481E+06	3.300E-02	529.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	510.67	511.67	510.67	511.67	511.67	511.67
2.18	510.67	511.67	510.67	511.67	511.67	511.67
3.17	513.67	517.67	513.67	517.67	511.67	516.67
4.17	516.67	519.67	521.67	523.67	511.67	523.67
5.16	517.67	522.67	526.67	529.67	511.67	527.67
6.16	518.67	524.67	528.67	532.67	511.67	530.67
7.15	519.67	526.67	530.67	532.67	511.67	530.67
8.15	519.67	527.67	532.67	534.67	511.67	533.67
9.14	520.67	527.67	534.67	534.67	511.67	533.67
10.14	521.67	528.67	535.67	537.67	511.67	534.67
11.13	521.67	529.67	535.67	538.67	511.67	535.67
12.13	522.67	530.67	538.67	539.67	511.67	536.67
13.12	522.67	530.67	538.67	539.67	511.67	537.67
14.12	523.67	532.67	539.67	541.67	511.67	538.67
15.11	523.67	532.67	540.67	541.67	511.67	539.67
16.11	524.67	533.67	541.67	543.67	511.67	540.67
17.10	524.67	533.67	541.67	543.67	511.67	540.67
18.10	525.67	535.67	543.67	545.67	511.67	541.67
19.09	526.67	536.67	544.67	546.67	511.67	543.67
20.09	527.67	537.67	546.67	547.67	511.67	543.67
21.08	527.67	537.67	546.67	548.67	511.67	544.67
22.08	528.67	538.67	547.67	548.67	511.67	545.67
23.07	529.67	540.67	548.67	549.67	511.67	545.67
24.07	530.67	540.67	549.67	550.67	511.67	546.67
25.06	530.67	541.67	550.67	551.67	511.67	546.67
26.06	531.67	542.67	551.67	552.67	511.67	547.67
27.05	532.67	542.67	552.67	552.67	511.67	547.67
28.05	532.67	543.67	552.67	553.67	511.67	548.67
29.04	533.67	544.67	553.67	553.67	511.67	548.67
30.04	533.67	544.67	553.67	554.67	511.67	548.67
31.03	534.67	545.67	554.67	554.67	511.67	548.67
32.03	534.67	545.67	554.67	555.67	511.67	549.67
33.02	535.67	546.67	555.67	555.67	511.67	549.67
34.02	535.67	547.67	555.67	556.67	511.67	549.67
35.01	536.67	547.67	556.67	556.67	511.67	549.67

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
26	RSI FORWARD	0.00	0.000	-0.03	30.03	0.0532	21 25 36

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
8.00	803.98	1338.67	97.01	0.0824	3863.	7.122E-05	7.806E-08	3.524E+06	3.967E-02	529.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1843	450.	4.697E-01	6.890E-01	5.629E-01	9.657E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(450)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(450)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(450)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	2.32					
TOP 4(450)	3.17	2.05	2.558E-02	0.6447	3.585E-02	0.9037
TOP 5(450)	4.17	3.05	2.099E-02	0.5292	2.942E-02	0.7417
TOP 6(450)	5.16	4.04	1.823E-02	0.4595	2.555E-02	0.6440
TOP 7(450)	6.16	5.04	1.633E-02	0.4116	2.289E-02	0.5769
TOP 8(450)	7.15	6.03	1.492E-02	0.3762	2.091E-02	0.5272
TOP 9(450)	8.15	7.03	1.383E-02	0.3485	1.938E-02	0.4885
TOP 10(450)	9.14	8.02	1.294E-02	0.3262	1.814E-02	0.4572
TOP 11(450)	10.14	9.02	1.220E-02	0.3077	1.711E-02	0.4312
TOP 12(450)	11.13	10.01	1.158E-02	0.2920	1.623E-02	0.4093
TOP 13(450)	12.13	11.01	1.105E-02	0.2785	1.548E-02	0.3903
TOP 14(450)	13.12	12.00	1.058E-02	0.2667	1.483E-02	0.3738
TOP 15(450)	14.12	13.00	1.017E-02	0.2563	1.425E-02	0.3592
TOP 16(450)	15.11	13.99	9.798E-03	0.2470	1.373E-02	0.3462
TOP 17(450)	16.11	14.99	9.467E-03	0.2387	1.327E-02	0.3345
TOP 18(450)	17.10	15.98	9.168E-03	0.2311	1.285E-02	0.3239
TOP 19(450)	18.10	16.98	8.895E-03	0.2242	1.247E-02	0.3143
TOP 20(450)	19.09	17.97	8.645E-03	0.2179	1.212E-02	0.3055
TOP 21(450)	20.09	18.97	8.416E-03	0.2121	1.180E-02	0.2974
TOP 22(450)	21.08	19.96	8.203E-03	0.2068	1.150E-02	0.2899
TOP 23(450)	22.08	20.96	8.006E-03	0.2018	1.122E-02	0.2829
TOP 24(450)	23.07	21.95	7.823E-03	0.1972	1.096E-02	0.2764

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
26	RSI FORWARD	0.00	0.000	-0.03	30.03	0.0532	21 25 36

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
8.00	803.98	1338.67	97.01	0.0824	3863.	7.122E-05	7.806E-08	3.524E+06	3.967E-02	529.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	511.67	511.67	511.67	512.67	512.67	512.67
2.18	515.67	517.67	518.67	522.67	512.67	519.67
3.17	517.67	524.67	527.67	527.67	512.67	529.67
4.17	518.67	527.67	530.67	531.67	512.67	536.67
5.16	519.67	529.67	533.67	533.67	512.67	536.67
6.16	520.67	531.67	536.67	535.67	512.67	539.67
7.15	520.67	531.67	538.67	537.67	512.67	541.67
8.15	522.67	533.67	540.67	538.67	512.67	544.67
9.14	522.67	534.67	540.67	540.67	512.67	546.67
10.14	523.67	536.67	544.67	543.67	512.67	548.67
11.13	524.67	536.67	544.67	543.67	512.67	550.67
12.13	524.67	537.67	546.67	545.67	512.67	551.67
13.12	525.67	539.67	547.67	545.67	512.67	553.67
14.12	526.67	540.67	549.67	548.67	512.67	555.67
15.11	527.67	542.67	551.67	550.67	512.67	557.67
16.11	529.67	543.67	553.67	552.67	512.67	558.67
17.10	529.67	545.67	554.67	553.67	512.67	560.67
18.10	531.67	546.67	556.67	555.67	512.67	562.67
19.09	532.67	548.67	558.67	556.67	512.67	563.67
20.09	533.67	548.67	559.67	557.67	512.67	564.67
21.08	533.67	550.67	560.67	558.67	512.67	565.67
22.08	534.67	551.67	561.67	559.67	512.67	566.67
23.07	535.67	552.67	562.67	561.67	512.67	567.67

V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
27	RSI FORWARD	0.00	0.000	-0.03	30.03	0.0532	21 59 9

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	552.93	1324.67	96.21	0.0571	3842.	4.978E-05	7.742E-08	2.470E+06	3.293E-02	531.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1843	400.	4.136E-01	5.596E-01	4.966E-01	7.596E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(400)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(400)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(400)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	2.32					
TOP 4(400)	3.17	1.50	2.435E-02	0.7393	3.305E-02	1.0036
TOP 5(400)	4.17	2.49	1.887E-02	0.5729	2.561E-02	0.7776
TOP 6(400)	5.16	3.49	1.595E-02	0.4843	2.165E-02	0.6573
TOP 7(400)	6.16	4.48	1.406E-02	0.4271	1.909E-02	0.5798
TOP 8(400)	7.15	5.48	1.272E-02	0.3864	1.727E-02	0.5244
TOP 9(400)	8.15	6.47	1.170E-02	0.3554	1.589E-02	0.4824
TOP 10(400)	9.14	7.47	1.090E-02	0.3309	1.479E-02	0.4491
TOP 11(400)	10.14	8.46	1.024E-02	0.3108	1.389E-02	0.4219
TOP 12(400)	11.13	9.46	9.682E-03	0.2940	1.314E-02	0.3991
TOP 13(400)	12.13	10.45	9.209E-03	0.2797	1.250E-02	0.3796
TOP 14(400)	13.12	11.45	8.800E-03	0.2672	1.194E-02	0.3627
TOP 15(400)	14.12	12.44	8.440E-03	0.2563	1.146E-02	0.3479
TOP 16(400)	15.11	13.44	8.122E-03	0.2466	1.102E-02	0.3348
TOP 17(400)	16.11	14.43	7.837E-03	0.2380	1.064E-02	0.3230
TOP 18(400)	17.10	15.43	7.580E-03	0.2302	1.029E-02	0.3125
TOP 19(400)	18.10	16.42	7.347E-03	0.2231	9.972E-03	0.3028
TOP 20(400)	19.09	17.42	7.134E-03	0.2166	9.683E-03	0.2941
TOP 21(400)	20.09	18.41	6.938E-03	0.2107	9.418E-03	0.2860
TOP 22(400)	21.08	19.41	6.758E-03	0.2052	9.173E-03	0.2786
TOP 23(400)	22.08	20.40	6.591E-03	0.2002	8.947E-03	0.2717
TOP 24(400)	23.07	21.40	6.436E-03	0.1955	8.736E-03	0.2653
TOP 25(400)	24.07	22.39	6.291E-03	0.1911	8.540E-03	0.2593
TOP 26(400)	25.06	23.39	6.156E-03	0.1869	8.356E-03	0.2538
TOP 27(400)	26.06	24.38	6.029E-03	0.1831	8.184E-03	0.2485
TOP 28(400)	27.05	25.38	5.910E-03	0.1795	8.022E-03	0.2436
TOP 29(400)	28.05	26.37	5.797E-03	0.1761	7.869E-03	0.2390
TOP 30(400)	29.04	27.37	5.691E-03	0.1728	7.725E-03	0.2346
TOP 31(400)	30.04	28.36	5.590E-03	0.1698	7.588E-03	0.2304
TOP 32(400)	31.03	29.36	5.495E-03	0.1669	7.458E-03	0.2265
TOP 33(400)	32.03	30.35	5.404E-03	0.1641	7.335E-03	0.2227

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
27	RSI FORWARD	0.00	0.000	-0.03	30.03	0.0532	21 59 9

MACH	PO(PSIA)	TO(DEG F)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	552.93	1324.67	96.21	0.0571	3842.	4.978E-05	7.742E-08	2.470E+06	3.293E-02	531.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1843	400.	4.136E-01	5.596E-01	4.966E-01	7.596E-01

	PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HREF	H(.9TO)	H(.9TO)/ HREF
TOP	34(400)	33.02	31.35	5.317E-03	0.1615	7.218E-03	0.2192

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
27	RSI FORWARD	0.00	0.000	-0.03	30.03	0.0532	21 59 9

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	552.93	1324.67	96.21	0.0571	3842.	4.978E-05	7.742E-08	2.470E+06	3.293E-02	531.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	511.67	512.67	511.67	512.67	512.67	512.67
2.18	511.67	512.67	511.67	512.67	512.67	512.67
3.17	514.67	518.67	518.67	519.67	512.67	517.67
4.17	515.67	520.67	523.67	524.67	512.67	523.67
5.16	517.67	524.67	528.67	527.67	512.67	528.67
6.16	518.67	525.67	530.67	530.67	512.67	532.67
7.15	518.67	527.67	530.67	530.67	512.67	532.67
8.15	519.67	528.67	533.67	532.67	512.67	535.67
9.14	519.67	528.67	533.67	533.67	512.67	535.67
10.14	519.67	529.67	535.67	534.67	512.67	538.67
11.13	520.67	530.67	536.67	535.67	512.67	538.67
12.13	520.67	531.67	537.67	536.67	512.67	539.67
13.12	520.67	531.67	538.67	537.67	512.67	540.67
14.12	522.67	532.67	539.67	538.67	512.67	541.67
15.11	522.67	533.67	539.67	538.67	512.67	542.67
16.11	523.67	534.67	541.67	540.67	512.67	543.67
17.10	523.67	535.67	543.67	541.67	512.67	545.67
18.10	524.67	536.67	544.67	543.67	512.67	546.67
19.09	525.67	537.67	545.67	544.67	512.67	547.67
20.09	526.67	538.67	546.67	544.67	512.67	548.67
21.08	525.67	539.67	547.67	545.67	512.67	549.67
22.08	527.67	539.67	548.67	546.67	512.67	550.67
23.07	527.67	540.67	549.67	547.67	512.67	550.67
24.07	528.67	541.67	549.67	548.67	512.67	551.67
25.06	529.67	542.67	550.67	548.67	512.67	552.67
26.06	529.67	543.67	551.67	549.67	512.67	552.67
27.05	530.67	543.67	552.67	550.67	512.67	552.67
28.05	530.67	544.67	552.67	550.67	512.67	553.67
29.04	531.67	544.67	553.67	551.67	512.67	553.67
30.04	531.67	545.67	553.67	551.67	512.67	553.67
31.03	532.67	545.67	554.67	552.67	512.67	553.67
32.03	532.67	546.67	554.67	552.67	512.67	553.67
33.02	532.67	546.67	555.67	552.67	512.67	553.67

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
28	RSI FORWARD	0.01	0.000	-0.04	30.04	0.0532	23 32 5

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	672.68	1327.67	96.43	0.0695	3846.	6.043E-05	7.760E-08	2.995E+06	3.633E-02	531.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1843	350.	3.492E-01	4.347E-01	4.192E-01	5.714E-01

PIC NO		TIME	DELTIME	H(TO)	H(TO)/ HREF	H(.9TO)	H(.9TO)/ HREF
TOP	1(350)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP	2(350)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP	3(350)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =		2.32					
TOP	4(350)	3.17	2.05	1.614E-02	0.4441	2.121E-02	0.5838
TOP	5(350)	4.17	3.05	1.325E-02	0.3645	1.741E-02	0.4791
TOP	6(350)	5.16	4.04	1.150E-02	0.3165	1.512E-02	0.4160
TOP	7(350)	6.16	5.04	1.030E-02	0.2836	1.354E-02	0.3727
TOP	8(350)	7.15	6.03	9.415E-03	0.2591	1.237E-02	0.3406
TOP	9(350)	8.15	7.03	8.724E-03	0.2401	1.147E-02	0.3155
TOP	10(350)	9.14	8.02	8.165E-03	0.2247	1.073E-02	0.2953
TOP	11(350)	10.14	9.02	7.701E-03	0.2120	1.012E-02	0.2786
TOP	12(350)	11.13	10.01	7.309E-03	0.2011	9.606E-03	0.2644
TOP	13(350)	12.13	11.01	6.970E-03	0.1918	9.161E-03	0.2521
TOP	14(350)	13.12	12.00	6.675E-03	0.1837	8.774E-03	0.2415
TOP	15(350)	14.12	13.00	6.415E-03	0.1765	8.431E-03	0.2320
TOP	16(350)	15.11	13.99	6.183E-03	0.1702	8.126E-03	0.2236
TOP	17(350)	16.11	14.99	5.974E-03	0.1644	7.851E-03	0.2161
TOP	18(350)	17.10	15.98	5.785E-03	0.1592	7.603E-03	0.2093
TOP	19(350)	18.10	16.98	5.613E-03	0.1545	7.377E-03	0.2030
TOP	20(350)	19.09	17.97	5.455E-03	0.1501	7.170E-03	0.1973
TOP	21(350)	20.09	18.97	5.310E-03	0.1461	6.979E-03	0.1921
TOP	22(350)	21.08	19.96	5.176E-03	0.1425	6.803E-03	0.1872

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
28	RSI FORWARD	0.01	0.000	-0.04	30.04	0.0532	23 32 5

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	672.68	1327.67	96.43	0.0695	3846.	6.043E-05	7.760E-08	2.995E+06	3.633E-02	531.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	512.67	512.67	512.67	513.67	513.67	513.67
2.18	515.67	520.67	518.67	522.67	513.67	521.67
3.17	517.67	522.67	525.67	526.67	513.67	525.67
4.17	518.67	526.67	530.67	530.67	513.67	531.67
5.16	518.67	526.67	530.67	530.67	513.67	534.67
6.16	519.67	528.67	533.67	533.67	513.67	536.67
7.15	520.67	530.67	535.67	534.67	513.67	538.67
8.15	521.67	531.67	537.67	536.67	513.67	540.67
9.14	521.67	531.67	537.67	537.67	513.67	540.67
10.14	522.67	533.67	540.67	538.67	513.67	544.67
11.13	522.67	534.67	540.67	539.67	513.67	544.67
12.13	523.67	535.67	541.67	541.67	513.67	546.67
13.12	523.67	535.67	543.67	541.67	513.67	546.67
14.12	525.67	537.67	545.67	543.67	513.67	549.67
15.11	525.67	538.67	546.67	545.67	513.67	551.67
16.11	526.67	540.67	548.67	547.67	513.67	553.67
17.10	527.67	540.67	548.67	547.67	513.67	553.67
18.10	527.67	541.67	550.67	548.67	513.67	554.67
19.09	528.67	542.67	551.67	549.67	513.67	555.67
20.09	529.67	543.67	552.67	550.67	513.67	556.67
21.08	530.67	544.67	553.67	551.67	513.67	557.67

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
29	RSI FORWARD	0.01	0.000	-10.00	40.00	0.0532	23 53 20

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	674.09	1331.67	96.72	0.0696	3852.	6.037E-05	7.783E-08	2.988E+06	3.639E-02	533.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1843	450.	4.712E-01	6.927E-01	5.656E-01	9.752E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(450)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(450)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(450)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	2.32					
TOP 4(450)	3.17	2.05	2.571E-02	0.7066	3.620E-02	0.9948
TOP 5(450)	4.17	3.05	2.110E-02	0.5799	2.971E-02	0.8165
TOP 6(450)	5.16	4.04	1.833E-02	0.5036	2.580E-02	0.7090
TOP 7(450)	6.16	5.04	1.642E-02	0.4511	2.311E-02	0.6351
TOP 8(450)	7.15	6.03	1.500E-02	0.4122	2.112E-02	0.5804
TOP 9(450)	8.15	7.03	1.390E-02	0.3819	1.957E-02	0.5377
TOP 10(450)	9.14	8.02	1.301E-02	0.3575	1.832E-02	0.5033
TOP 11(450)	10.14	9.02	1.227E-02	0.3372	1.728E-02	0.4747
TOP 12(450)	11.13	10.01	1.165E-02	0.3200	1.640E-02	0.4505
TOP 13(450)	12.13	11.01	1.111E-02	0.3052	1.564E-02	0.4297
TOP 14(450)	13.12	12.00	1.064E-02	0.2923	1.497E-02	0.4115
TOP 15(450)	14.12	13.00	1.022E-02	0.2809	1.439E-02	0.3954
TOP 16(450)	15.11	13.99	9.851E-03	0.2707	1.387E-02	0.3811
TOP 17(450)	16.11	14.99	9.518E-03	0.2616	1.340E-02	0.3682
TOP 18(450)	17.10	15.98	9.217E-03	0.2533	1.298E-02	0.3566
TOP 19(450)	18.10	16.98	8.943E-03	0.2457	1.259E-02	0.3460
TOP 20(450)	19.09	17.97	8.692E-03	0.2388	1.224E-02	0.3363
TOP 21(450)	20.09	18.97	8.461E-03	0.2325	1.191E-02	0.3273
TOP 22(450)	21.08	19.96	8.248E-03	0.2266	1.161E-02	0.3191
TOP 23(450)	22.08	20.96	8.049E-03	0.2212	1.133E-02	0.3114
TOP 24(450)	23.07	21.95	7.865E-03	0.2161	1.107E-02	0.3043
TOP 25(450)	24.07	22.95	7.692E-03	0.2114	1.083E-02	0.2976
TOP 26(450)	25.06	23.94	7.531E-03	0.2069	1.060E-02	0.2914

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
29	RSI FORWARD	0.01	0.000	-10.00	40.00	0.0532	23 53 20

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	674.09	1331.67	96.72	0.0696	3852.	6.037E-05	7.783E-08	2.988E+06	3.639E-02	533.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	512.67	513.67	512.67	513.67	513.67	513.67
2.18	517.67	521.67	520.67	521.67	513.67	523.67
3.17	520.67	524.67	528.67	531.67	513.67	530.67
4.17	522.67	529.67	535.67	536.67	513.67	536.67
5.16	524.67	531.67	537.67	540.67	513.67	539.67
6.16	524.67	533.67	537.67	540.67	513.67	541.67
7.15	526.67	535.67	542.67	544.67	513.67	543.67
8.15	526.67	535.67	542.67	545.67	513.67	545.67
9.14	527.67	536.67	544.67	547.67	513.67	547.67
10.14	526.67	538.67	546.67	548.67	513.67	547.67
11.13	529.67	539.67	547.67	549.67	513.67	550.67
12.13	529.67	539.67	547.67	550.67	513.67	550.67
13.12	530.67	541.67	550.67	553.67	513.67	552.67
14.12	530.67	542.67	550.67	553.67	513.67	552.67
15.11	532.67	543.67	553.67	555.67	513.67	555.67
16.11	533.67	545.67	555.67	557.67	513.67	557.67
17.10	534.67	546.67	556.67	558.67	513.67	558.67
18.10	535.67	548.67	558.67	560.67	513.67	559.67
19.09	537.67	549.67	559.67	561.67	513.67	560.67
20.09	538.67	550.67	560.67	562.67	513.67	561.67
21.08	539.67	552.67	562.67	563.67	513.67	563.67
22.08	540.67	553.67	563.67	565.67	513.67	563.67
23.07	541.67	554.67	563.67	565.67	513.67	563.67
24.07	542.67	555.67	565.67	566.67	513.67	564.67
25.06	542.67	556.67	566.67	567.67	513.67	564.67

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
30	RSI FORWARD	0.01	0.000	-0.04	30.04	0.0532	0	8	48

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC.R	INITIAL TEMP DEG R
7.98	426.65	1300.67	94.69	0.0444	3807.	3.935E-05	7.620E-08	1.966E+06	2.892E-02	533.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1843	350.	3.598E-01	4.538E-01	4.333E-01	6.026E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(350)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(350)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(350)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	2.32					
TOP 4(350)	3.17	2.05	1.685E-02	0.5627	2.237E-02	0.7736
TOP 5(350)	4.17	3.05	1.383E-02	0.4782	1.836E-02	0.6349
TOP 6(350)	5.16	4.04	1.201E-02	0.4152	1.594E-02	0.5513
TOP 7(350)	6.16	5.04	1.076E-02	0.3720	1.428E-02	0.4939
TOP 8(350)	7.15	6.03	9.829E-03	0.3399	1.305E-02	0.4513
TOP 9(350)	8.15	7.03	9.107E-03	0.3150	1.209E-02	0.4182
TOP 10(350)	9.14	8.02	8.524E-03	0.2948	1.132E-02	0.3914
TOP 11(350)	10.14	9.02	8.040E-03	0.2780	1.067E-02	0.3692
TOP 12(350)	11.13	10.01	7.630E-03	0.2639	1.013E-02	0.3503
TOP 13(350)	12.13	11.01	7.277E-03	0.2517	9.661E-03	0.3341
TOP 14(350)	13.12	12.00	6.969E-03	0.2410	9.252E-03	0.3200
TOP 15(350)	14.12	13.00	6.697E-03	0.2316	8.891E-03	0.3075
TOP 16(350)	15.11	13.99	6.454E-03	0.2232	8.569E-03	0.2964
TOP 17(350)	16.11	14.99	6.236E-03	0.2157	8.280E-03	0.2864
TOP 18(350)	17.10	15.98	6.039E-03	0.2089	8.018E-03	0.2773
TOP 19(350)	18.10	16.98	5.860E-03	0.2026	7.780E-03	0.2690
TOP 20(350)	19.09	17.97	5.695E-03	0.1970	7.561E-03	0.2615
TOP 21(350)	20.09	18.97	5.544E-03	0.1917	7.360E-03	0.2545
TOP 22(350)	21.08	19.96	5.404E-03	0.1869	7.174E-03	0.2481
TOP 23(350)	22.08	20.96	5.274E-03	0.1824	7.002E-03	0.2422
TOP 24(350)	23.07	21.95	5.153E-03	0.1782	6.842E-03	0.2366
TOP 25(350)	24.07	22.95	5.040E-03	0.1743	6.692E-03	0.2314
TOP 26(350)	25.06	23.94	4.934E-03	0.1706	6.551E-03	0.2266
TOP 27(350)	26.06	24.94	4.835E-03	0.1672	6.419E-03	0.2220
TOP 28(350)	27.05	25.93	4.741E-03	0.1640	6.295E-03	0.2177
TOP 29(350)	28.05	26.93	4.653E-03	0.1609	6.177E-03	0.2136
TOP 30(350)	29.04	27.92	4.569E-03	0.1580	6.066E-03	0.2098
TOP 31(350)	30.04	28.92	4.490E-03	0.1553	5.961E-03	0.2062
TOP 32(350)	31.03	29.91	4.415E-03	0.1527	5.861E-03	0.2027
TOP 33(350)	32.03	30.91	4.343E-03	0.1502	5.766E-03	0.1994

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
30	RSI FORWARD	0.01	0.000	-0.04	30.04	0.0532	0	8	48

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.98	426.65	1300.67	94.69	0.0444	3807.	3.935E-05	7.620E-08	1.966E+06	2.892E-02	533.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	513.67	513.67	513.67	514.67	514.67	514.67
2.18	515.67	517.67	517.67	518.67	514.67	517.67
3.17	516.67	521.67	522.67	523.67	514.67	523.67
4.17	517.67	524.67	526.67	526.67	514.67	526.67
5.16	518.67	525.67	528.67	528.67	514.67	529.67
6.16	518.67	525.67	528.67	528.67	514.67	529.67
7.15	518.67	526.67	531.67	530.67	514.67	532.67
8.15	519.67	527.67	531.67	531.67	514.67	532.67
9.14	519.67	528.67	532.67	532.67	514.67	533.67
10.14	520.67	528.67	533.67	532.67	514.67	534.67
11.13	520.67	529.67	534.67	533.67	514.67	535.67
12.13	520.67	530.67	535.67	534.67	514.67	535.67
13.12	521.67	531.67	536.67	535.67	514.67	536.67
14.12	521.67	531.67	536.67	535.67	514.67	537.67
15.11	522.67	532.67	538.67	536.67	514.67	538.67
16.11	523.67	533.67	539.67	538.67	514.67	539.67
17.10	523.67	534.67	540.67	539.67	514.67	540.67
18.10	524.67	534.67	541.67	540.67	514.67	541.67
19.09	525.67	535.67	542.67	540.67	514.67	542.67
20.09	525.67	536.67	543.67	541.67	514.67	542.67
21.08	526.67	537.67	544.67	542.67	514.67	543.67
22.08	526.67	537.67	545.67	543.67	514.67	544.67
23.07	527.67	538.67	545.67	543.67	514.67	544.67
24.07	527.67	539.67	546.67	544.67	514.67	545.67
25.06	528.67	539.67	547.67	545.67	514.67	545.67
26.06	528.67	540.67	547.67	545.67	514.67	546.67
27.05	529.67	540.67	547.67	546.67	514.67	546.67
28.05	529.67	541.67	548.67	546.67	514.67	546.67
29.04	529.67	541.67	548.67	546.67	514.67	546.67
30.04	530.67	541.67	549.67	546.67	514.67	546.67
31.03	530.67	542.67	549.67	547.67	514.67	547.67
32.03	531.67	542.67	549.67	547.67	514.67	547.67

NASA/R1 OH90 TRANSITION TEST
V418-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
31	PSI FORWARD	0.01	0.000	-10.00	40.00	0.0532	0 25 57

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.98	426.05	1301.67	94.76	0.0444	3808.	3.927E-05	7.626E-08	1.961E+06	2.890E-02	538.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1843	400.	4.207E-01	5.748E-01	5.072E-01	7.895E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(400)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(400)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(400)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	2.32					
TOP 4(400)	3.17	1.50	2.501E-02	0.8653	3.435E-02	1.1886
TOP 5(400)	4.17	2.49	1.938E-02	0.6705	2.662E-02	0.9210
TOP 6(400)	5.16	3.49	1.638E-02	0.5668	2.250E-02	0.7785
TOP 7(400)	6.16	4.48	1.445E-02	0.4999	1.984E-02	0.6867
TOP 8(400)	7.15	5.48	1.307E-02	0.4522	1.795E-02	0.6211
TOP 9(400)	8.15	6.47	1.202E-02	0.4160	1.651E-02	0.5714
TOP 10(400)	9.14	7.47	1.119E-02	0.3873	1.537E-02	0.5319
TOP 11(400)	10.14	8.46	1.051E-02	0.3638	1.444E-02	0.4997
TOP 12(400)	11.13	9.46	9.944E-03	0.3441	1.366E-02	0.4727
TOP 13(400)	12.13	10.45	9.459E-03	0.3273	1.299E-02	0.4496
TOP 14(400)	13.12	11.45	9.038E-03	0.3126	1.242E-02	0.4296
TOP 15(400)	14.12	12.44	8.669E-03	0.3000	1.191E-02	0.4121
TOP 16(400)	15.11	13.44	8.342E-03	0.2887	1.146E-02	0.3965
TOP 17(400)	16.11	14.43	8.049E-03	0.2785	1.106E-02	0.3826
TOP 18(400)	17.10	15.43	7.785E-03	0.2694	1.069E-02	0.3701
TOP 19(400)	18.10	16.42	7.546E-03	0.2611	1.037E-02	0.3587
TOP 20(400)	19.09	17.42	7.327E-03	0.2535	1.006E-02	0.3483
TOP 21(400)	20.09	18.41	7.126E-03	0.2466	9.789E-03	0.3387
TOP 22(400)	21.08	19.41	6.941E-03	0.2402	9.535E-03	0.3299
TOP 23(400)	22.08	20.40	6.770E-03	0.2343	9.299E-03	0.3218
TOP 24(400)	23.07	21.40	6.610E-03	0.2287	9.080E-03	0.3142
TOP 25(400)	24.07	22.39	6.462E-03	0.2236	8.876E-03	0.3072
TOP 26(400)	25.06	23.39	6.323E-03	0.2188	8.685E-03	0.3005
TOP 27(400)	26.06	24.38	6.193E-03	0.2143	8.506E-03	0.2944
TOP 28(400)	27.05	25.38	6.070E-03	0.2100	8.338E-03	0.2885
TOP 29(400)	28.05	26.37	5.954E-03	0.2060	8.179E-03	0.2830
TOP 30(400)	29.04	27.37	5.845E-03	0.2023	8.029E-03	0.2778
TOP 31(400)	30.04	28.36	5.742E-03	0.1987	7.887E-03	0.2729

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
31	RST FORWARD	0.01	0.000	-10.00	40.00	0.0532	0 25 57

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.98	426.05	1301.67	94.76	0.0444	3808.	3.927E-05	7.626E-08	1.961E+06	2.890E-02	538.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	513.67	513.67	513.67	513.67	514.67	514.67
2.18	515.67	516.67	517.67	516.67	514.67	518.67
3.17	516.67	520.67	519.67	523.67	514.67	522.67
4.17	517.67	522.67	525.67	526.67	514.67	525.67
5.16	518.67	523.67	526.67	529.67	514.67	528.67
6.16	519.67	525.67	529.67	531.67	514.67	530.67
7.15	520.67	526.67	530.67	532.67	514.67	532.67
8.15	521.67	528.67	532.67	534.67	514.67	533.67
9.14	521.67	528.67	534.67	535.67	514.67	534.67
10.14	522.67	530.67	536.67	537.67	514.67	536.67
11.13	523.67	530.67	537.67	538.67	514.67	537.67
12.13	524.67	531.67	538.67	539.67	514.67	538.67
13.12	524.67	532.67	539.67	540.67	514.67	539.67
14.12	525.67	533.67	540.67	541.67	514.67	539.67
15.11	526.67	534.67	540.67	542.67	514.67	540.67
16.11	526.67	534.67	541.67	542.67	514.67	541.67
17.10	527.67	535.67	542.67	543.67	514.67	541.67
18.10	527.67	536.67	543.67	544.67	514.67	542.67
19.09	528.67	536.67	543.67	544.67	514.67	542.67
20.09	528.67	537.67	544.67	545.67	514.67	543.67
21.09	529.67	537.67	545.67	545.67	514.67	543.67
22.08	529.67	538.67	545.67	546.67	514.67	543.67
23.07	530.67	538.67	546.67	546.67	514.67	543.67
24.07	530.67	539.67	546.67	547.67	514.67	543.67
25.06	530.67	539.67	546.67	547.67	514.67	544.67
26.06	530.67	539.67	546.67	547.67	514.67	544.67
27.05	531.67	540.67	547.67	547.67	514.67	544.67
28.05	531.67	540.67	547.67	548.67	514.67	544.67
29.04	531.67	540.67	547.67	548.67	514.67	544.67
30.04	532.67	541.67	548.67	548.67	514.67	544.67

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
32	RSI FORWARD	0.01	0.000	-0.03	30.03	0.0532	0 46 59

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	321.27	1289.67	94.33	0.0340	3790.	3.023E-05	7.591E-08	1.510E+06	2.520E-02	537.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1843	300.	2.952E-01	3.448E-01	3.563E-01	4.474E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HREF	H(.9TO)	H(.9TO)/ HREF
TOP 1(300)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(300)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(300)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	2.32					
TOP 4(300)	3.17	1.50	1.500E-02	0.5955	1.947E-02	0.7726
TOP 5(300)	4.17	2.49	1.163E-02	0.4614	1.508E-02	0.5987
TOP 6(300)	5.16	3.49	9.827E-03	0.3900	1.275E-02	0.5061
TOP 7(300)	6.16	4.48	8.667E-03	0.3440	1.125E-02	0.4463
TOP 8(300)	7.15	5.48	7.840E-03	0.3112	1.017E-02	0.4037
TOP 9(300)	8.15	6.47	7.212E-03	0.2862	9.358E-03	0.3714
TOP 10(300)	9.14	7.47	6.714E-03	0.2665	8.712E-03	0.3458
TOP 11(300)	10.14	8.46	6.307E-03	0.2503	8.184E-03	0.3248
TOP 12(300)	11.13	9.46	5.966E-03	0.2368	7.741E-03	0.3072
TOP 13(300)	12.13	10.45	5.675E-03	0.2252	7.363E-03	0.2922
TOP 14(300)	13.12	11.45	5.423E-03	0.2152	7.036E-03	0.2793
TOP 15(300)	14.12	12.44	5.201E-03	0.2064	6.749E-03	0.2679
TOP 16(300)	15.11	13.44	5.005E-03	0.1986	6.494E-03	0.2577
TOP 17(300)	16.11	14.43	4.829E-03	0.1917	6.266E-03	0.2487
TOP 18(300)	17.10	15.43	4.671E-03	0.1854	6.061E-03	0.2405
TOP 19(300)	18.10	16.42	4.527E-03	0.1797	5.874E-03	0.2331
TOP 20(300)	19.09	17.42	4.396E-03	0.1745	5.704E-03	0.2264
TOP 21(300)	20.09	18.41	4.276E-03	0.1697	5.548E-03	0.2202
TOP 22(300)	21.08	19.41	4.165E-03	0.1653	5.404E-03	0.2145
TOP 23(300)	22.08	20.40	4.062E-03	0.1612	5.270E-03	0.2092
TOP 24(300)	23.07	21.40	3.966E-03	0.1574	5.146E-03	0.2042
TOP 25(300)	24.07	22.39	3.877E-03	0.1539	5.031E-03	0.1997
TOP 26(300)	25.06	23.39	3.794E-03	0.1506	4.922E-03	0.1954
TOP 27(300)	26.06	24.38	3.715E-03	0.1475	4.821E-03	0.1913
TOP 28(300)	27.05	25.38	3.642E-03	0.1445	4.725E-03	0.1875
TOP 29(300)	28.05	26.37	3.572E-03	0.1418	4.635E-03	0.1840
TOP 30(300)	29.04	27.37	3.507E-03	0.1392	4.550E-03	0.1806
TOP 31(300)	30.04	28.36	3.445E-03	0.1367	4.470E-03	0.1774
TOP 32(300)	31.03	29.36	3.386E-03	0.1344	4.393E-03	0.1744
TOP 33(300)	32.03	30.35	3.330E-03	0.1322	4.321E-03	0.1715

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
32	RSI FORWARD	0.01	0.000	-0.03	30.03	0.0532	0	46	59

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	321.27	1289.67	94.33	0.0340	3790.	3.023E-05	7.591E-08	1.510E+06	2.520E-02	537.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1843	300.	2.952E-01	3.448E-01	3.563E-01	4.474E-01

PIC NO		TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP	34(300)	33.02	31.35	3.277E-03	0.1301	4.252E-03	0.1687
TOP	35(300)	34.02	32.34	3.226E-03	0.1280	4.186E-03	0.1661
TOP	36(300)	35.01	33.34	3.177E-03	0.1261	4.123E-03	0.1636
TOP	37(300)	36.01	34.33	3.131E-03	0.1243	4.063E-03	0.1612
TOP	38(300)	37.00	35.33	3.087E-03	0.1225	4.005E-03	0.1590

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
33	RSI FORWARD	0.01	0.000	-0.03	30.03	0.0532	1	5	51

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	322.18	1269.67	94.33	0.0341	3790.	3.032E-05	7.591E-08	1.514E+06	2.523E-02	537.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1843	250.	2.287E-01	2.488E-01	2.761E-01	3.157E-01

PIC NO		TIME	DELTIME	H(TO)	H(TO)/ HFFR	H(.9TO)	H(.9TO)/ HRFR
TOP	1(250)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP	2(250)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP	3(250)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =		3.17					
TOP	4(250)	3.17	1.50	1.082E-02	0.4290	1.374E-02	0.5444
TOP	5(250)	4.17	2.49	8.387E-03	0.3324	1.064E-02	0.4218
TOP	6(250)	5.16	3.49	7.089E-03	0.2810	8.997E-03	0.3566
TOP	7(250)	6.16	4.48	6.252E-03	0.2478	7.935E-03	0.3145
TOP	8(250)	7.15	5.48	5.656E-03	0.2242	7.178E-03	0.2845
TOP	9(250)	8.15	6.47	5.203E-03	0.2062	6.603E-03	0.2617
TOP	10(250)	9.14	7.47	4.844E-03	0.1920	6.147E-03	0.2436
TOP	11(250)	10.14	8.46	4.550E-03	0.1803	5.775E-03	0.2289
TOP	12(250)	11.13	9.46	4.304E-03	0.1706	5.462E-03	0.2165
TOP	13(250)	12.13	10.45	4.094E-03	0.1623	5.196E-03	0.2059
TOP	14(250)	13.12	11.45	3.912E-03	0.1550	4.965E-03	0.1968
TOP	15(250)	14.12	12.44	3.752E-03	0.1487	4.762E-03	0.1887
TOP	16(250)	15.11	13.44	3.611E-03	0.1431	4.582E-03	0.1816
TOP	17(250)	16.11	14.43	3.484E-03	0.1381	4.421E-03	0.1752
TOP	18(250)	17.10	15.43	3.370E-03	0.1336	4.277E-03	0.1695
TOP	19(250)	18.10	16.42	3.266E-03	0.1294	4.145E-03	0.1643
TOP	20(250)	19.09	17.42	3.171E-03	0.1257	4.025E-03	0.1595
TOP	21(250)	20.09	18.41	3.084E-03	0.1222	3.914E-03	0.1551
TOP	22(250)	21.08	19.41	3.004E-03	0.1191	3.813E-03	0.1511
TOP	23(250)	22.08	20.40	2.930E-03	0.1161	3.719E-03	0.1474
TOP	24(250)	23.07	21.40	2.861E-03	0.1134	3.631E-03	0.1439
TOP	25(250)	24.07	22.39	2.797E-03	0.1108	3.550E-03	0.1407
TOP	26(250)	25.06	23.39	2.737E-03	0.1085	3.473E-03	0.1377
TOP	27(250)	26.06	24.38	2.680E-03	0.1062	3.402E-03	0.1348

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
33	PSI FORWARD	0.01	0.000	-0.03	30.03	0.0532	1	5	51

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	322.18	1289.67	94.33	0.0341	3790.	3.032E-05	7.591E-08	1.514E+06	2.523E-02	537.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	513.67	513.67	513.67	513.67	513.67	513.67
2.18	514.67	516.67	516.67	516.67	513.67	515.67
3.17	515.67	519.67	518.67	519.67	513.67	519.67
4.17	516.67	521.67	523.67	523.67	513.67	524.67
5.16	517.67	522.67	525.67	524.67	513.67	525.67
6.16	517.67	523.67	527.67	526.67	513.67	527.67
7.15	518.67	525.67	528.67	528.67	513.67	529.67
8.15	519.67	526.67	530.67	529.67	513.67	530.67
9.14	519.67	527.67	532.67	531.67	513.67	531.67
10.14	520.67	529.67	533.67	532.67	513.67	533.67
11.13	521.67	529.67	534.67	533.67	513.67	533.67
12.13	522.67	530.67	535.67	534.67	513.67	534.67
13.12	522.67	531.67	536.67	535.67	513.67	535.67
14.12	523.67	531.67	537.67	535.67	513.67	536.67
15.11	523.67	532.67	537.67	536.67	513.67	536.67
16.11	524.67	533.67	538.67	537.67	513.67	537.67
17.10	524.67	533.67	539.67	537.67	513.67	537.67
18.10	524.67	534.67	539.67	538.67	513.67	538.67
19.09	525.67	535.67	540.67	539.67	513.67	538.67
20.09	525.67	535.67	541.67	539.67	513.67	539.67
21.08	526.67	535.67	541.67	539.67	513.67	539.67
22.08	526.67	536.67	541.67	539.67	513.67	539.67
23.07	526.67	536.67	542.67	540.67	513.67	539.67
24.07	527.67	536.67	542.67	540.67	513.67	539.67
25.06	527.67	537.67	543.67	541.67	513.67	540.67
26.06	527.67	537.67	543.67	541.67	513.67	540.67

NASA/RI 0690 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
34	RSI FORWARD	0.01	0.000	-10.00	40.00	0.0532	1 18 57

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	321.47	1288.67	94.25	0.0340	3788.	3.028E-05	7.585E-08	1.512E+06	2.520E-02	544.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1843	250.	2.218E-01	2.395E-01	2.682E-01	3.042E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HREF	H(.9TO)	H(.9TO)/ HREF
TOP 1(250)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(250)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(250)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(250)	3.17	1.50	1.042E-02	0.4135	1.323E-02	0.5251
TOP 5(250)	4.17	2.49	8.074E-03	0.3204	1.025E-02	0.4069
TOP 6(250)	5.16	3.49	6.825E-03	0.2708	8.667E-03	0.3439
TOP 7(250)	6.16	4.48	6.020E-03	0.2389	7.645E-03	0.3034
TOP 8(250)	7.15	5.48	5.445E-03	0.2161	6.915E-03	0.2744
TOP 9(250)	8.15	6.47	5.009E-03	0.1988	6.361E-03	0.2524
TOP 10(250)	9.14	7.47	4.663E-03	0.1850	5.922E-03	0.2350
TOP 11(250)	10.14	8.46	4.380E-03	0.1738	5.563E-03	0.2208
TOP 12(250)	11.13	9.46	4.144E-03	0.1644	5.262E-03	0.2088
TOP 13(250)	12.13	10.45	3.941E-03	0.1564	5.005E-03	0.1986
TOP 14(250)	13.12	11.45	3.766E-03	0.1494	4.783E-03	0.1898
TOP 15(250)	14.12	12.44	3.612E-03	0.1433	4.586E-03	0.1820
TOP 16(250)	15.11	13.44	3.476E-03	0.1379	4.415E-03	0.1752
TOP 17(250)	16.11	14.43	3.354E-03	0.1331	4.260E-03	0.1690
TOP 18(250)	17.10	15.43	3.244E-03	0.1287	4.120E-03	0.1635
TOP 19(250)	18.10	16.42	3.144E-03	0.1248	3.993E-03	0.1585
TOP 20(250)	19.09	17.42	3.053E-03	0.1212	3.877E-03	0.1539
TOP 21(250)	20.09	18.41	2.969E-03	0.1178	3.771E-03	0.1496
TOP 22(250)	21.08	19.41	2.892E-03	0.1148	3.673E-03	0.1458

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
34	RSI FORWARD	0.01	0.000	-10.00	40.00	0.0532	1 18 57

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	321.47	1288.67	94.25	0.0340	3788.	3.028E-05	7.585E-08	1.512E+06	2.520E-02	544.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	513.67	513.67	513.67	513.67	513.67	513.67
2.18	514.67	516.67	516.67	517.67	513.67	516.67
3.17	515.67	517.67	519.67	520.67	513.67	520.67
4.17	516.67	520.67	521.67	524.67	513.67	522.67
5.16	517.67	522.67	524.67	526.67	513.67	525.67
6.16	518.67	522.67	526.67	527.67	513.67	527.67
7.15	519.67	524.67	527.67	529.67	513.67	528.67
8.15	519.67	525.67	529.67	530.67	513.67	530.67
9.14	520.67	526.67	531.67	532.67	513.67	531.67
10.14	520.67	526.67	531.67	533.67	513.67	532.67
11.13	521.67	527.67	533.67	534.67	513.67	532.67
12.13	522.67	528.67	534.67	535.67	513.67	534.67
13.12	522.67	529.67	535.67	536.67	513.67	534.67
14.12	523.67	530.67	536.67	536.67	513.67	535.67
15.11	523.67	530.67	536.67	537.67	513.67	535.67
16.11	524.67	531.67	537.67	538.67	513.67	536.67
17.10	524.67	531.67	537.67	538.67	513.67	536.67
18.10	525.67	532.67	538.67	539.67	513.67	537.67
19.09	525.67	532.67	538.67	539.67	513.67	537.67
20.09	526.67	533.67	539.67	540.67	513.67	537.67
21.08	526.67	533.67	539.67	540.67	513.67	538.67

V416-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
35	RSI FORWARD	0.01	0.010	-0.03	30.03	0.0532	2	9	57

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	212.07	1274.67	93.67	0.0228	3767.	2.043E-05	7.537E-08	1.021E+06	2.055E-02	532.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1943	200.	1.712E-01	1.759E-01	2.067E-01	2.198E-01

	PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HREF	H(.9TO)	H(.9TO)/ HREF
TOP	1(200)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP	2(200)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP	3(200)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =		3.17					
TOP	4(200)	3.17	1.50	7.651E-03	0.3724	9.563E-03	0.4655
TOP	5(200)	4.17	2.49	5.929E-03	0.2886	7.410E-03	0.3607
TOP	6(200)	5.16	3.49	5.012E-03	0.2439	6.264E-03	0.3049
TOP	7(200)	6.16	4.48	4.420E-03	0.2151	5.525E-03	0.2689
TOP	8(200)	7.15	5.48	3.998E-03	0.1946	4.998E-03	0.2433
TOP	9(200)	8.15	6.47	3.678E-03	0.1790	4.597E-03	0.2238
TOP	10(200)	9.14	7.47	3.424E-03	0.1667	4.280E-03	0.2083
TOP	11(200)	10.14	8.46	3.217E-03	0.1566	4.020E-03	0.1957
TOP	12(200)	11.13	9.46	3.043E-03	0.1481	3.803E-03	0.1851
TOP	13(200)	12.13	10.45	2.894E-03	0.1409	3.617E-03	0.1761
TOP	14(200)	13.12	11.45	2.766E-03	0.1346	3.457E-03	0.1682
TOP	15(200)	14.12	12.44	2.653E-03	0.1291	3.316E-03	0.1614
TOP	16(200)	15.11	13.44	2.553E-03	0.1242	3.190E-03	0.1553
TOP	17(200)	16.11	14.43	2.463E-03	0.1199	3.078E-03	0.1498
TOP	18(200)	17.10	15.43	2.382E-03	0.1160	2.977E-03	0.1449
TOP	19(200)	18.10	16.42	2.309E-03	0.1124	2.886E-03	0.1405
TOP	20(200)	19.09	17.42	2.242E-03	0.1091	2.802E-03	0.1364
TOP	21(200)	20.09	18.41	2.181E-03	0.1061	2.725E-03	0.1327
TOP	22(200)	21.08	19.41	2.124E-03	0.1034	2.655E-03	0.1292
TOP	23(200)	22.08	20.40	2.071E-03	0.1008	2.589E-03	0.1260
TOP	24(200)	23.07	21.40	2.023E-03	0.0985	2.528E-03	0.1231
TOP	25(200)	24.07	22.39	1.977E-03	0.0962	2.471E-03	0.1203
TOP	26(200)	25.06	23.39	1.935E-03	0.0942	2.418E-03	0.1177
TOP	27(200)	26.06	24.38	1.895E-03	0.0922	2.368E-03	0.1153

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
35	PSI FORWARD	0.01	0.010	-0.03	30.03	0.0532	2 9 57

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	212.07	1274.67	93.67	0.0228	3767.	2.043E-05	7.537E-08	1.021E+06	2.055E-02	532.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	512.67	513.67	512.67	513.67	513.67	513.67
2.18	513.67	515.67	514.67	516.67	513.67	515.67
3.17	514.67	516.67	517.67	518.67	513.67	518.67
4.17	514.67	518.67	519.67	520.67	513.67	519.67
5.16	515.67	518.67	520.67	520.67	513.67	520.67
6.16	515.67	519.67	521.67	522.67	513.67	520.67
7.15	516.67	520.67	523.67	522.67	513.67	521.67
8.15	516.67	521.67	524.67	523.67	513.67	522.67
9.14	516.67	521.67	524.67	523.67	513.67	523.67
10.14	517.67	522.67	525.67	524.67	513.67	523.67
11.13	517.67	522.67	525.67	525.67	513.67	524.67
12.13	517.67	523.67	526.67	526.67	513.67	524.67
13.12	517.67	524.67	527.67	526.67	513.67	525.67
14.12	518.67	524.67	527.67	527.67	513.67	526.67
15.11	518.67	525.67	529.67	528.67	513.67	526.67
16.11	519.67	526.67	530.67	529.67	513.67	527.67
17.10	519.67	526.67	530.67	529.67	513.67	527.67
18.10	519.67	527.67	531.67	530.67	513.67	528.67
19.09	520.67	527.67	532.67	530.67	513.67	528.67
20.09	520.67	528.67	532.67	531.67	513.67	529.67
21.08	520.67	528.67	533.67	531.67	513.67	529.67
22.08	521.67	528.67	533.67	532.67	513.67	529.67
23.07	521.67	529.67	534.67	532.67	513.67	530.67
24.07	522.67	529.67	534.67	533.67	513.67	530.67
25.06	522.67	530.67	535.67	533.67	513.67	531.67
26.06	522.67	530.67	535.67	534.67	513.67	531.67

V418-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
36	RSI FORWARD	0.01	0.010	-10.00	40.00	0.0532	2 35 59

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	211.77	1272.67	93.52	0.0228	3764.	2.043E-05	7.525E-08	1.022E+06	2.052E-02	537.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1843	250.	2.340E-01	2.559E-01	2.830E-01	3.261E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HRFR	P(.9TO)	H(.9TO)/HRFR
TOP 1(250)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(250)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(250)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(250)	3.17	1.50	1.113E-02	0.5425	1.419E-02	0.6913
TOP 5(250)	4.17	2.49	8.628E-03	0.4204	1.099E-02	0.5357
TOP 6(250)	5.16	3.49	7.293E-03	0.3553	9.294E-03	0.4528
TOP 7(250)	6.16	4.48	6.432E-03	0.3134	8.197E-03	0.3994
TOP 8(250)	7.15	5.48	5.819E-03	0.2835	7.415E-03	0.3613
TOP 9(250)	8.15	6.47	5.352E-03	0.2608	6.821E-03	0.3323
TOP 10(250)	9.14	7.47	4.983E-03	0.2428	6.350E-03	0.3094
TOP 11(250)	10.14	8.46	4.681E-03	0.2281	5.965E-03	0.2906
TOP 12(250)	11.13	9.46	4.428E-03	0.2157	5.642E-03	0.2749
TOP 13(250)	12.13	10.45	4.212E-03	0.2052	5.367E-03	0.2615
TOP 14(250)	13.12	11.45	4.024E-03	0.1961	5.128E-03	0.2499
TOP 15(250)	14.12	12.44	3.860E-03	0.1881	4.919E-03	0.2397
TOP 16(250)	15.11	13.44	3.714E-03	0.1810	4.733E-03	0.2306

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GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
36	RSI FORWARD	0.01	0.010	-10.00	40.00	0.0532	2 35 59

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	211.77	1272.67	93.52	0.0228	3764.	2.043E-05	7.525E-08	1.022E+06	2.052E-02	537.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	512.67	513.67	512.67	513.67	513.67	513.67
2.18	513.67	515.67	514.67	515.67	513.67	514.67
3.17	514.67	516.67	516.67	518.67	513.67	516.67
4.17	515.67	518.67	519.67	521.67	513.67	519.67
5.16	516.67	519.67	521.67	522.67	513.67	521.67
6.16	516.67	520.67	523.67	524.67	513.67	522.67
7.15	517.67	521.67	524.67	526.67	513.67	523.67
8.15	517.67	522.67	526.67	527.67	513.67	524.67
9.14	518.67	523.67	527.67	528.67	513.67	525.67
10.14	518.67	523.67	527.67	529.67	513.67	526.67
11.13	519.67	524.67	528.67	530.67	513.67	526.67
12.13	519.67	525.67	529.67	530.67	513.67	527.67
13.12	520.67	525.67	530.67	531.67	513.67	528.67
14.12	520.67	526.67	531.67	532.67	513.67	528.67
15.11	520.67	526.67	531.67	532.67	513.67	529.67

V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
37	RSI FORWARD	0.01	0.010	-0.04	30.04	0.0532	2 49 0

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.92	155.31	1270.67	93.81	0.0170	3760.	1.518E-05	7.549E-08	7.564E+05	1.767E-02	537.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1643	200.	1.664E-01	1.703E-01	2.013E-01	2.130E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(200)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(200)	1.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(200)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(200)	3.17	1.50	7.408E-03	0.4192	9.267E-03	0.5244
TOP 5(200)	4.17	2.49	5.740E-03	0.3248	7.181E-03	0.4063
TOP 6(200)	5.16	3.49	4.852E-03	0.2746	6.070E-03	0.3435
TOP 7(200)	6.16	4.48	4.279E-03	0.2422	5.354E-03	0.3029
TOP 8(200)	7.15	5.48	3.871E-03	0.2190	4.843E-03	0.2740
TOP 9(200)	8.15	6.47	3.561E-03	0.2015	4.455E-03	0.2521
TOP 10(200)	9.14	7.47	3.315E-03	0.1876	4.147E-03	0.2347
TOP 11(200)	10.14	8.46	3.114E-03	0.1762	3.896E-03	0.2205
TOP 12(200)	11.13	9.46	2.946E-03	0.1667	3.685E-03	0.2085
TOP 13(200)	12.13	10.45	2.802E-03	0.1586	3.505E-03	0.1984
TOP 14(200)	13.12	11.45	2.677E-03	0.1515	3.350E-03	0.1895
TOP 15(200)	14.12	12.44	2.568E-03	0.1453	3.213E-03	0.1818
TOP 16(200)	15.11	13.44	2.471E-03	0.1398	3.092E-03	0.1749
TOP 17(200)	16.11	14.43	2.384E-03	0.1349	2.983E-03	0.1688
TOP 18(200)	17.10	15.43	2.306E-03	0.1305	2.885E-03	0.1633
TOP 19(200)	18.10	16.42	2.235E-03	0.1265	2.796E-03	0.1582
TOP 20(200)	19.09	17.42	2.170E-03	0.1228	2.715E-03	0.1537
TOP 21(200)	20.09	18.41	2.111E-03	0.1195	2.641E-03	0.1494
TOP 22(200)	21.08	19.41	2.056E-03	0.1164	2.572E-03	0.1456
TOP 23(200)	22.08	20.40	2.005E-03	0.1135	2.509E-03	0.1420
TOP 24(200)	23.07	21.40	1.958E-03	0.1108	2.450E-03	0.1386
TOP 25(200)	24.07	22.39	1.914E-03	0.1083	2.395E-03	0.1355
TOP 26(200)	25.06	23.39	1.873E-03	0.1060	2.343E-03	0.1326
TOP 27(200)	26.06	24.38	1.834E-03	0.1038	2.295E-03	0.1299
TOP 28(200)	27.05	25.38	1.798E-03	0.1017	2.250E-03	0.1273
TOP 29(200)	28.05	26.37	1.764E-03	0.0998	2.207E-03	0.1249
TOP 30(200)	29.04	27.37	1.732E-03	0.0980	2.166E-03	0.1226
TOP 31(200)	30.04	28.36	1.701E-03	0.0962	2.128E-03	0.1204
TOP 32(200)	31.03	29.36	1.672E-03	0.0946	2.091E-03	0.1184
TOP 33(200)	32.03	30.35	1.644E-03	0.0930	2.057E-03	0.1164

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
37	RSI FORWARD	0.01	0.010	-0.04	30.04	0.0532	2	49	0

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.92	155.31	1270.67	93.81	0.0170	3760.	1.518E-05	7.549E-08	7.564E+05	1.767E-02	537.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1843	200.	1.664E-01	1.703E-01	2.013E-01	2.130E-01

	PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HREF	H(.9TO)	H(.9TO)/ HREF
TOP	34(200)	33.02	31.35	1.618E-03	0.0915	2.024E-03	0.1145

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
37	RSI FORWARD	0.01	0.010	-0.04	30.04	0.0532	2 49 0

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.92	155.31	1270.67	93.81	0.0170	3760.	1.516E-05	7.549E-08	7.564E+05	1.767E-02	537.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	512.67	513.67	512.67	513.67	513.67	513.67
2.18	513.67	514.67	513.67	515.67	513.67	514.67
3.17	514.67	516.67	516.67	517.67	513.67	517.67
4.17	514.67	517.67	519.67	518.67	513.67	518.67
5.16	514.67	518.67	519.67	519.67	513.67	519.67
6.16	515.67	519.67	520.67	521.67	513.67	520.67
7.15	515.67	519.67	521.67	521.67	513.67	520.67
8.15	516.67	520.67	522.67	522.67	513.67	521.67
9.14	516.67	521.67	523.67	523.67	513.67	522.67
10.14	516.67	522.67	525.67	524.67	513.67	523.67
11.13	517.67	522.67	525.67	525.67	513.67	524.67
12.13	517.67	523.67	526.67	526.67	513.67	524.67
13.12	518.67	524.67	527.67	526.67	513.67	525.67
14.12	518.67	524.67	528.67	527.67	513.67	525.67
15.11	519.67	525.67	528.67	527.67	513.67	526.67
16.11	519.67	525.67	529.67	528.67	513.67	526.67
17.10	519.67	526.67	530.67	529.67	513.67	527.67
18.10	520.67	526.67	530.67	529.67	513.67	527.67
19.09	520.67	527.67	531.67	530.67	513.67	527.67
20.09	520.67	527.67	531.67	530.67	513.67	528.67
21.08	521.67	527.67	532.67	530.67	513.67	528.67
22.08	521.67	528.67	532.67	531.67	513.67	528.67
23.07	521.67	528.67	532.67	531.67	513.67	528.67
24.07	521.67	528.67	533.67	531.67	513.67	529.67
25.06	522.67	529.67	533.67	531.67	513.67	529.67
26.06	522.67	529.67	533.67	532.67	513.67	529.67
27.05	522.67	529.67	533.67	532.67	513.67	529.67
28.05	522.67	530.67	534.67	532.67	513.67	530.67
29.04	523.67	530.67	534.67	533.67	513.67	530.67
30.04	523.67	530.67	534.67	533.67	513.67	530.67
31.03	523.67	530.67	534.67	533.67	513.67	530.67
32.03	523.67	531.67	534.67	533.67	513.67	530.67
33.02	523.67	531.67	535.67	533.67	513.67	530.67

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
38	PSI FORWARD	0.01	0.010	-9.99	39.99	0.0532	3 2 26

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.92	156.72	1268.67	93.66	0.0171	3758.	1.535E-05	7.537E-08	7.651E+05	1.775E-02	533.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1843	200.	1.714E-01	1.762E-01	2.072E-01	2.205E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(200)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(200)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(200)	2.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 4(200)	3.17		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.31					
TOP 5(200)	4.17	1.93	6.743E-03	0.3799	8.440E-03	0.4756
TOP 6(200)	5.16	2.37	6.090E-03	0.3432	7.623E-03	0.4295
TOP 7(200)	6.16	3.36	5.110E-03	0.2879	6.397E-03	0.3604
TOP 8(200)	7.15	4.36	4.489E-03	0.2529	5.619E-03	0.3166
TOP 9(200)	8.15	5.35	4.050E-03	0.2282	5.070E-03	0.2857
TOP 10(200)	9.14	6.35	3.719E-03	0.2096	4.656E-03	0.2623
TOP 11(200)	10.14	7.34	3.458E-03	0.1949	4.329E-03	0.2439
TOP 12(200)	11.13	8.34	3.245E-03	0.1829	4.062E-03	0.2289
TOP 13(200)	12.13	9.33	3.068E-03	0.1728	3.840E-03	0.2164
TOP 14(200)	13.12	10.33	2.916E-03	0.1643	3.650E-03	0.2057
TOP 15(200)	14.12	11.32	2.785E-03	0.1569	3.486E-03	0.1964
TOP 16(200)	15.11	12.32	2.670E-03	0.1505	3.342E-03	0.1883
TOP 17(200)	16.11	13.31	2.568E-03	0.1447	3.215E-03	0.1812
TOP 18(200)	17.10	14.31	2.477E-03	0.1396	3.101E-03	0.1747
TOP 19(200)	18.10	15.30	2.396E-03	0.1350	2.999E-03	0.1690
TOP 20(200)	19.09	16.30	2.321E-03	0.1308	2.906E-03	0.1637
TOP 21(200)	20.09	17.29	2.254E-03	0.1270	2.821E-03	0.1589
TOP 22(200)	21.08	18.29	2.191E-03	0.1235	2.743E-03	0.1546
TOP 23(200)	22.08	19.28	2.134E-03	0.1203	2.671E-03	0.1505
TOP 24(200)	23.07	20.28	2.081E-03	0.1173	2.605E-03	0.1468
TOP 25(200)	24.07	21.27	2.032E-03	0.1145	2.543E-03	0.1433
TOP 26(200)	25.06	22.27	1.986E-03	0.1119	2.486E-03	0.1401
TOP 27(200)	26.06	23.26	1.943E-03	0.1095	2.432E-03	0.1370
TOP 28(200)	27.05	24.26	1.903E-03	0.1072	2.382E-03	0.1342
TOP 29(200)	28.05	25.25	1.865E-03	0.1051	2.334E-03	0.1315
TOP 30(200)	29.04	26.25	1.829E-03	0.1031	2.290E-03	0.1290
TOP 31(200)	30.04	27.24	1.795E-03	0.1012	2.247E-03	0.1266
TOP 32(200)	31.03	28.24	1.764E-03	0.0994	2.208E-03	0.1244

V418-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
38	RSI FORWARD	0.01	0.010	-9.99	39.99	0.0532	3 2 26

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.92	156.72	1268.67	93.66	0.0171	3758.	1.535E-05	7.537E-08	7.651E+05	1.775E-02	533.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1843	200.	1.714E-01	1.762E-01	2.072E-01	2.205E-01

	PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP	33(200)	32.03	29.23	1.733E-03	0.0977	2.170E-03	0.1223
TOP	34(200)	33.02	30.23	1.705E-03	0.0960	2.134E-03	0.1202

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
38	RSI FORWARD	0.01	0.010	-9.99	39.99	0.0532	3 2 26

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.92	156.72	1268.67	93.66	0.0171	3758.	1.535E-05	7.537E-08	7.651E+05	1.775E-02	533.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	512.67	513.67	512.67	513.67	513.67	513.67
2.18	512.67	513.67	512.67	513.67	513.67	513.67
3.17	513.67	514.67	513.67	515.67	513.67	513.67
4.17	514.67	514.67	514.67	515.67	513.67	515.67
5.16	514.67	516.67	517.67	518.67	513.67	517.67
6.16	515.67	518.67	518.67	520.67	513.67	518.67
7.15	515.67	518.67	520.67	521.67	513.67	519.67
8.15	515.67	518.67	520.67	521.67	513.67	520.67
9.14	516.67	519.67	521.67	522.67	513.67	520.67
10.14	516.67	519.67	522.67	523.67	513.67	521.67
11.13	516.67	520.67	522.67	523.67	513.67	521.67
12.13	516.67	520.67	523.67	524.67	513.67	522.67
13.12	517.67	520.67	523.67	524.67	513.67	522.67
14.12	517.67	521.67	523.67	525.67	513.67	523.67
15.11	517.67	521.67	524.67	526.67	513.67	523.67
16.11	517.67	521.67	524.67	526.67	513.67	523.67
17.10	517.67	522.67	525.67	526.67	513.67	523.67
18.10	518.67	522.67	525.67	526.67	513.67	524.67
19.09	518.67	522.67	526.67	527.67	513.67	524.67
20.09	518.67	522.67	526.67	527.67	513.67	525.67
21.08	518.67	523.67	527.67	528.67	513.67	525.67
22.08	519.67	523.67	527.67	528.67	513.67	525.67
23.07	519.67	524.67	528.67	529.67	513.67	526.67
24.07	519.67	524.67	528.67	529.67	513.67	526.67
25.06	520.67	525.67	529.67	530.67	513.67	527.67
26.06	520.67	525.67	529.67	530.67	513.67	527.67
27.05	520.67	525.67	530.67	530.67	513.67	527.67
28.05	521.67	526.67	530.67	531.67	513.67	528.67
29.04	521.67	526.67	531.67	531.67	513.67	528.67
30.04	521.67	526.67	531.67	532.67	513.67	528.67
31.03	521.67	527.67	531.67	532.67	513.67	528.67
32.03	522.67	527.67	532.67	532.67	513.67	529.67
33.02	522.67	527.67	532.67	532.67	513.67	529.67

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
39	RSI FORWARD	0.01	0.010	-0.03	30.03	0.0532	3 30 43

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.90	106.59	1263.67	93.73	0.0118	3749.	1.060E-05	7.542E-08	5.270E+05	1.471E-02	532.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1843	150.	1.053E-01	1.019E-01	1.273E-01	1.256E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(150)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(150)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(150)	2.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 4(150)	3.17		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.31					
TOP 5(150)	4.17	2.49	3.435E-03	0.2335	4.235E-03	0.2879
TOP 6(150)	5.16	3.49	2.903E-03	0.1974	3.580E-03	0.2434
TOP 7(150)	6.16	4.48	2.561E-03	0.1741	3.158E-03	0.2147
TOP 8(150)	7.15	5.48	2.316E-03	0.1575	2.856E-03	0.1942
TOP 9(150)	8.15	6.47	2.131E-03	0.1449	2.627E-03	0.1786
TOP 10(150)	9.14	7.47	1.984E-03	0.1349	2.446E-03	0.1663
TOP 11(150)	10.14	8.46	1.863E-03	0.1267	2.298E-03	0.1562
TOP 12(150)	11.13	9.46	1.763E-03	0.1198	2.174E-03	0.1478
TOP 13(150)	12.13	10.45	1.677E-03	0.1140	2.067E-03	0.1406
TOP 14(150)	13.12	11.45	1.602E-03	0.1089	1.976E-03	0.1343
TOP 15(150)	14.12	12.44	1.537E-03	0.1045	1.895E-03	0.1288
TOP 16(150)	15.11	13.44	1.479E-03	0.1005	1.823E-03	0.1240
TOP 17(150)	16.11	14.43	1.427E-03	0.0970	1.759E-03	0.1196
TOP 18(150)	17.10	15.43	1.380E-03	0.0938	1.702E-03	0.1157
TOP 19(150)	18.10	16.42	1.338E-03	0.0909	1.649E-03	0.1121
TOP 20(150)	19.09	17.42	1.299E-03	0.0883	1.602E-03	0.1089
TOP 21(150)	20.09	18.41	1.263E-03	0.0859	1.558E-03	0.1059
TOP 22(150)	21.08	19.41	1.230E-03	0.0836	1.517E-03	0.1031
TOP 23(150)	22.08	20.40	1.200E-03	0.0816	1.480E-03	0.1006
TOP 24(150)	23.07	21.40	1.172E-03	0.0797	1.445E-03	0.0982
TOP 25(150)	24.07	22.39	1.145E-03	0.0779	1.412E-03	0.0960
TOP 26(150)	25.06	23.39	1.121E-03	0.0762	1.382E-03	0.0940
TOP 27(150)	26.06	24.38	1.098E-03	0.0746	1.354E-03	0.0920
TOP 28(150)	27.05	25.38	1.076E-03	0.0732	1.327E-03	0.0902
TOP 29(150)	28.05	26.37	1.055E-03	0.0718	1.301E-03	0.0885
TOP 30(150)	29.04	27.37	1.036E-03	0.0704	1.278E-03	0.0869
TOP 31(150)	30.04	28.36	1.018E-03	0.0692	1.255E-03	0.0853
TOP 32(150)	31.03	29.36	1.000E-03	0.0680	1.234E-03	0.0839

V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
39	RSI FORWARD	0.01	0.010	-0.03	30.03	0.0532	3 30 43

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.90	106.59	1263.67	93.73	0.0118	3749.	1.060E-05	7.542E-08	5.270E+05	1.471E-02	532.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	512.67	513.67	512.67	513.67	513.67	513.67
2.18	513.67	513.67	513.67	515.67	513.67	514.67
3.17	513.67	515.67	516.67	516.67	513.67	516.67
4.17	514.67	516.67	517.67	518.67	513.67	517.67
5.16	514.67	517.67	518.67	518.67	513.67	517.67
6.16	514.67	517.67	519.67	519.67	513.67	518.67
7.15	514.67	517.67	519.67	519.67	513.67	518.67
8.15	515.67	518.67	520.67	520.67	513.67	519.67
9.14	515.67	519.67	520.67	520.67	513.67	519.67
10.14	515.67	519.67	521.67	521.67	513.67	520.67
11.13	515.67	519.67	521.67	521.67	513.67	520.67
12.13	515.67	519.67	522.67	522.67	513.67	521.67
13.12	516.67	520.67	522.67	522.67	513.67	521.67
14.12	516.67	520.67	523.67	523.67	513.67	521.67
15.11	516.67	521.67	523.67	523.67	513.67	522.67
16.11	517.67	521.67	524.67	524.67	513.67	522.67
17.10	517.67	522.67	525.67	524.67	513.67	523.67
18.10	517.67	522.67	525.67	525.67	513.67	523.67
19.09	517.67	523.67	526.67	525.67	513.67	523.67
20.09	518.67	523.67	526.67	526.67	513.67	524.67
21.08	518.67	523.67	526.67	526.67	513.67	524.67
22.08	518.67	524.67	527.67	526.67	513.67	524.67
23.07	519.67	524.67	527.67	527.67	513.67	525.67
24.07	519.67	524.67	528.67	527.67	513.67	525.67
25.06	519.67	525.67	528.67	527.67	513.67	525.67
26.06	519.67	525.67	528.67	527.67	513.67	525.67
27.05	520.67	525.67	528.67	528.67	513.67	526.67
28.05	520.67	525.67	529.67	528.67	513.67	526.67
29.04	520.67	526.67	529.67	528.67	513.67	526.67
30.04	520.67	526.67	529.67	528.67	513.67	526.67
31.03	520.67	526.67	529.67	529.67	513.67	526.67

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
40	RSI FORWARD	0.01	0.010	-9.98	39.98	0.0532	3 45 40

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.90	104.78	1266.67	93.95	0.0116	3754.	1.040E-05	7.560E-08	5.163E+05	1.459E-02	535.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1843	150.	1.012E-01	9.759E-02	1.224E-01	1.202E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HRFR	H(.9TO)	H(.9TO)/HRFR
TOP 1(150)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(150)	1.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	2.13					
TOP 3(150)	2.18	1.62	4.082E-03	0.2798	5.030E-03	0.3448
TOP 4(150)	3.17	2.05	3.623E-03	0.2483	4.464E-03	0.3060
TOP 5(150)	4.17	3.05	2.973E-03	0.2038	3.664E-03	0.2511
TOP 6(150)	5.16	4.04	2.582E-03	0.1770	3.181E-03	0.2180
TOP 7(150)	6.16	5.04	2.313E-03	0.1585	2.850E-03	0.1953
TOP 8(150)	7.15	6.03	2.114E-03	0.1449	2.604E-03	0.1785
TOP 9(150)	8.15	7.03	1.958E-03	0.1342	2.413E-03	0.1654
TOP 10(150)	9.14	8.02	1.833E-03	0.1256	2.258E-03	0.1548
TOP 11(150)	10.14	9.02	1.729E-03	0.1185	2.130E-03	0.1460
TOP 12(150)	11.13	10.01	1.641E-03	0.1125	2.022E-03	0.1386
TOP 13(150)	12.13	11.01	1.565E-03	0.1073	1.928E-03	0.1322
TOP 14(150)	13.12	12.00	1.496E-03	0.1027	1.846E-03	0.1266
TOP 15(150)	14.12	13.00	1.440E-03	0.0987	1.774E-03	0.1216
TOP 16(150)	15.11	13.99	1.388E-03	0.0951	1.710E-03	0.1172
TOP 17(150)	16.11	14.99	1.341E-03	0.0919	1.652E-03	0.1133
TOP 18(150)	17.10	15.98	1.299E-03	0.0890	1.600E-03	0.1097
TOP 19(150)	18.10	16.98	1.260E-03	0.0864	1.553E-03	0.1064
TOP 20(150)	19.09	17.97	1.225E-03	0.0839	1.509E-03	0.1034
TOP 21(150)	20.09	18.97	1.192E-03	0.0817	1.469E-03	0.1007
TOP 22(150)	21.08	19.96	1.162E-03	0.0796	1.432E-03	0.0981
TOP 23(150)	22.08	20.96	1.134E-03	0.0777	1.397E-03	0.0958
TOP 24(150)	23.07	21.95	1.108E-03	0.0759	1.365E-03	0.0936
TOP 25(150)	24.07	22.95	1.084E-03	0.0743	1.335E-03	0.0915
TOP 26(150)	25.06	23.94	1.061E-03	0.0727	1.307E-03	0.0896
TOP 27(150)	26.06	24.94	1.040E-03	0.0713	1.281E-03	0.0878

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
40	RSI FORWARD	0.01	0.010	-9.98	39.98	0.0532	3 45 40

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.90	104.78	1266.67	93.95	0.0116	3754.	1.040E-05	7.560E-08	5.163E+05	1.459E-02	535.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	512.67	513.67	512.67	513.67	513.67	513.67
2.18	513.67	514.67	513.67	515.67	513.67	514.67
3.17	513.67	515.67	516.67	516.67	513.67	516.67
4.17	514.67	516.67	517.67	518.67	513.67	517.67
5.16	514.67	517.67	518.67	519.67	513.67	518.67
6.16	514.67	517.67	519.67	519.67	513.67	519.67
7.15	515.67	518.67	519.67	520.67	513.67	519.67
8.15	515.67	518.67	520.67	521.67	513.67	520.67
9.14	516.67	519.67	521.67	522.67	513.67	521.67
10.14	516.67	519.67	522.67	523.67	513.67	521.67
11.13	516.67	520.67	523.67	524.67	513.67	522.67
12.13	517.67	520.67	523.67	524.67	513.67	522.67
13.12	517.67	521.67	524.67	525.67	513.67	523.67
14.12	517.67	521.67	524.67	525.67	513.67	523.67
15.11	517.67	522.67	525.67	526.67	513.67	524.67
16.11	518.67	522.67	525.67	526.67	513.67	524.67
17.10	518.67	522.67	526.67	526.67	513.67	524.67
18.10	518.67	522.67	526.67	527.67	513.67	524.67
19.09	519.67	523.67	526.67	527.67	513.67	525.67
20.09	519.67	523.67	526.67	527.67	513.67	525.67
21.08	519.67	523.67	527.67	527.67	513.67	525.67
22.08	519.67	523.67	527.67	528.67	513.67	525.67
23.07	519.67	524.67	527.67	528.67	513.67	525.67
24.07	519.67	524.67	527.67	528.67	513.67	526.67
25.06	520.67	524.67	528.67	528.67	513.67	526.67
26.06	520.67	524.67	528.67	529.67	513.67	526.67

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
41	RSI FORWARD	0.01	0.010	-0.04	30.04	0.0532	4 3 19

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	322.28	1290.67	94.40	0.0341	3791.	3.030E-05	7.596E-08	1.513E+06	2.524E-02	536.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1898	300.	2.958E-01	3.457E-01	3.568E-01	4.484E-01

PIC	NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP	1(300)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP	2(300)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP	3(300)	2.18		MODEL HAS NOT REACHED CENTERLINE			
TOP	4(300)	3.17		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =		3.31					
TOP	5(300)	4.17	2.49	1.165E-02	0.4618	1.512E-02	0.5989
TOP	6(300)	5.16	3.49	9.851E-03	0.3903	1.278E-02	0.5062
TOP	7(300)	6.16	4.48	8.689E-03	0.3443	1.127E-02	0.4465
TOP	8(300)	7.15	5.48	7.860E-03	0.3114	1.019E-02	0.4039
TOP	9(300)	8.15	6.47	7.230E-03	0.2865	9.377E-03	0.3715
TOP	10(300)	9.14	7.47	6.731E-03	0.2667	8.730E-03	0.3459
TOP	11(300)	10.14	8.46	6.323E-03	0.2505	8.200E-03	0.3249
TOP	12(300)	11.13	9.46	5.981E-03	0.2370	7.757E-03	0.3073
TOP	13(300)	12.13	10.45	5.689E-03	0.2254	7.376E-03	0.2923
TOP	14(300)	13.12	11.45	5.436E-03	0.2154	7.050E-03	0.2794
TOP	15(300)	14.12	12.44	5.214E-03	0.2066	6.763E-03	0.2679
TOP	16(300)	15.11	13.44	5.017E-03	0.1988	6.507E-03	0.2578
TOP	17(300)	16.11	14.43	4.841E-03	0.1918	6.279E-03	0.2488
TOP	18(300)	17.10	15.43	4.683E-03	0.1855	6.073E-03	0.2406
TOP	19(300)	18.10	16.42	4.539E-03	0.1798	5.886E-03	0.2332
TOP	20(300)	19.09	17.42	4.407E-03	0.1746	5.716E-03	0.2265
TOP	21(300)	20.09	18.41	4.286E-03	0.1698	5.559E-03	0.2203
TOP	22(300)	21.08	19.41	4.175E-03	0.1654	5.415E-03	0.2145
TOP	23(300)	22.08	20.40	4.072E-03	0.1613	5.281E-03	0.2092
TOP	24(300)	23.07	21.40	3.976E-03	0.1575	5.157E-03	0.2043
TOP	25(300)	24.07	22.39	3.887E-03	0.1540	5.041E-03	0.1997
TOP	26(300)	25.06	23.39	3.803E-03	0.1507	4.932E-03	0.1954

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
41	RSI FORWARD	0.01	0.010	-0.04	30.04	0.0532	4	3	19

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	322.28	1290.67	94.40	0.0341	3791.	3.030E-05	7.596E-08	1.513E+06	2.524E-02	536.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	513.67	513.67	512.67	513.67	513.67	513.67
2.18	514.67	516.67	517.67	516.67	513.67	517.67
3.17	515.67	518.67	519.67	521.67	513.67	520.67
4.17	516.67	521.67	523.67	522.67	513.67	522.67
5.16	516.67	521.67	523.67	523.67	513.67	523.67
6.16	516.67	522.67	524.67	525.67	513.67	524.67
7.15	517.67	523.67	525.67	525.67	513.67	525.67
8.15	517.67	524.67	527.67	526.67	513.67	526.67
9.14	518.67	524.67	528.67	527.67	513.67	527.67
10.14	518.67	525.67	529.67	528.67	513.67	528.67
11.13	516.67	526.67	529.67	529.67	513.67	528.67
12.13	519.67	526.67	531.67	529.67	513.67	529.67
13.12	519.67	526.67	531.67	530.67	513.67	529.67
14.12	519.67	527.67	532.67	531.67	513.67	530.67
15.11	520.67	528.67	533.67	531.67	513.67	530.67
16.11	520.67	528.67	533.67	532.67	513.67	531.67
17.10	521.67	529.67	535.67	534.67	513.67	532.67
18.10	521.67	530.67	536.67	534.67	513.67	533.67
19.09	522.67	531.67	536.67	535.67	513.67	534.67
20.09	522.67	531.67	538.67	536.67	513.67	535.67
21.08	523.67	532.67	538.67	536.67	513.67	535.67
22.08	523.67	532.67	538.67	537.67	513.67	535.67
23.07	524.67	533.67	539.67	537.67	513.67	536.67
24.07	524.67	534.67	540.67	538.67	513.67	536.67
25.06	524.67	534.67	540.67	539.67	513.67	537.67

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
42	RSI FORWARD	0.01	0.010	-10.01	40.01	0.0532	4 14 32

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	321.47	1289.67	94.33	0.0340	3790.	3.025E-05	7.591E-08	1.510E+06	2.520E-02	543.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1898	350.	3.566E-01	4.478E-01	4.311E-01	5.975E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(350)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(350)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(350)	2.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 4(350)	3.17		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.31					
TOP 5(350)	4.17	2.49	1.510E-02	0.5990	2.014E-02	0.7992
TOP 6(350)	5.16	3.49	1.276E-02	0.5063	1.703E-02	0.6756
TOP 7(350)	6.16	4.48	1.126E-02	0.4466	1.502E-02	0.5959
TOP 8(350)	7.15	5.48	1.018E-02	0.4040	1.359E-02	0.5390
TOP 9(350)	8.15	6.47	9.366E-03	0.3716	1.250E-02	0.4958
TOP 10(350)	9.14	7.47	8.720E-03	0.3460	1.163E-02	0.4616
TOP 11(350)	10.14	8.46	8.191E-03	0.3250	1.093E-02	0.4336
TOP 12(350)	11.13	9.46	7.748E-03	0.3074	1.034E-02	0.4102
TOP 13(350)	12.13	10.45	7.370E-03	0.2924	9.833E-03	0.3902
TOP 14(350)	13.12	11.45	7.042E-03	0.2794	9.396E-03	0.3728
TOP 15(350)	14.12	12.44	6.755E-03	0.2680	9.013E-03	0.3576
TOP 16(350)	15.11	13.44	6.500E-03	0.2579	8.673E-03	0.3441
TOP 17(350)	16.11	14.43	6.272E-03	0.2488	8.368E-03	0.3320
TOP 18(350)	17.10	15.43	6.066E-03	0.2407	8.094E-03	0.3211
TOP 19(350)	18.10	16.42	5.880E-03	0.2333	7.845E-03	0.3113
TOP 20(350)	19.09	17.42	5.709E-03	0.2265	7.617E-03	0.3022
TOP 21(350)	20.09	18.41	5.553E-03	0.2203	7.409E-03	0.2939
TOP 22(350)	21.08	19.41	5.408E-03	0.2146	7.216E-03	0.2863
TOP 23(350)	22.08	20.40	5.275E-03	0.2093	7.038E-03	0.2792
TOP 24(350)	23.07	21.40	5.151E-03	0.2044	6.872E-03	0.2727
TOP 25(350)	24.07	22.39	5.035E-03	0.1998	6.718E-03	0.2665
TOP 26(350)	25.06	23.39	4.927E-03	0.1955	6.574E-03	0.2608
TOP 27(350)	26.06	24.38	4.825E-03	0.1914	6.438E-03	0.2554
TOP 28(350)	27.05	25.38	4.730E-03	0.1877	6.310E-03	0.2504
TOP 29(350)	28.05	26.37	4.640E-03	0.1841	6.190E-03	0.2456

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
42	RSI FORWARD	0.01	0.010	-10.01	40.01	0.0532	4 14 32

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	321.47	1289.67	94.33	0.0340	3790.	3.025E-05	7.591E-08	1.510E+06	2.520E-02	543.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	513.67	513.67	513.67	513.67	514.67	513.67
2.18	515.67	515.67	514.67	518.67	514.67	516.67
3.17	515.67	518.67	519.67	521.67	514.67	520.67
4.17	516.67	519.67	522.67	523.67	514.67	523.67
5.16	516.67	520.67	522.67	524.67	514.67	523.67
6.16	517.67	521.67	523.67	525.67	514.67	524.67
7.15	517.67	521.67	525.67	526.67	514.67	525.67
8.15	518.67	522.67	526.67	527.67	514.67	526.67
9.14	518.67	523.67	526.67	528.67	514.67	527.67
10.14	518.67	524.67	528.67	529.67	514.67	528.67
11.13	518.67	524.67	528.67	529.67	514.67	529.67
12.13	519.67	524.67	529.67	531.67	514.67	529.67
13.12	519.67	525.67	530.67	531.67	514.67	530.67
14.12	520.67	526.67	530.67	532.67	514.67	531.67
15.11	520.67	526.67	531.67	533.67	514.67	531.67
16.11	520.67	527.67	532.67	534.67	514.67	532.67
17.10	521.67	527.67	533.67	534.67	514.67	533.67
18.10	521.67	528.67	534.67	535.67	514.67	534.67
19.09	522.67	529.67	535.67	536.67	514.67	535.67
20.09	523.67	530.67	536.67	537.67	514.67	535.67
21.08	523.67	530.67	536.67	537.67	514.67	536.67
22.08	523.67	530.67	537.67	538.67	514.67	536.67
23.07	523.67	531.67	537.67	538.67	514.67	537.67
24.07	524.67	532.67	538.67	539.67	514.67	537.67
25.06	525.67	532.67	539.67	540.67	514.67	537.67
26.06	525.67	533.67	539.67	540.67	514.67	538.67
27.05	526.67	533.67	540.67	541.67	514.67	538.67
28.05	526.67	534.67	540.67	541.67	514.67	539.67

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
47	RSI FORWARD	0.01	0.010	-0.02	30.02	0.0532	5 18 39

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.98	426.15	1304.67	94.98	0.0444	3813.	3.918E-05	7.643E-08	1.955E+06	2.891E-02	535.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1898	400.	4.213E-01	5.761E-01	5.074E-01	7.900E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(400)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(400)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(400)	2.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 4(400)	3.17		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.31					
TOP 5(400)	4.17	2.49	1.942E-02	0.6717	2.663E-02	0.9211
TOP 6(400)	5.16	3.49	1.642E-02	0.5678	2.251E-02	0.7786
TOP 7(400)	6.16	4.48	1.448E-02	0.5008	1.985E-02	0.6867
TOP 8(400)	7.15	5.48	1.310E-02	0.4530	1.796E-02	0.6212
TOP 9(400)	8.15	6.47	1.205E-02	0.4167	1.652E-02	0.5714
TOP 10(400)	9.14	7.47	1.122E-02	0.3879	1.538E-02	0.5320
TOP 11(400)	10.14	8.46	1.054E-02	0.3644	1.445E-02	0.4997
TOP 12(400)	11.13	9.46	9.967E-03	0.3447	1.367E-02	0.4727
TOP 13(400)	12.13	10.45	9.480E-03	0.3279	1.300E-02	0.4496
TOP 14(400)	13.12	11.45	9.059E-03	0.3133	1.242E-02	0.4296
TOP 15(400)	14.12	12.44	8.689E-03	0.3005	1.192E-02	0.4121
TOP 16(400)	15.11	13.44	8.361E-03	0.2892	1.147E-02	0.3965
TOP 17(400)	16.11	14.43	8.068E-03	0.2790	1.106E-02	0.3826
TOP 18(400)	17.10	15.43	7.803E-03	0.2699	1.070E-02	0.3701
TOP 19(400)	18.10	16.42	7.563E-03	0.2616	1.037E-02	0.3587
TOP 20(400)	19.09	17.42	7.344E-03	0.2540	1.007E-02	0.3483
TOP 21(400)	20.09	18.41	7.143E-03	0.2470	9.795E-03	0.3388
TOP 22(400)	21.08	19.41	6.957E-03	0.2406	9.540E-03	0.3300
TOP 23(400)	22.08	20.40	6.785E-03	0.2347	9.305E-03	0.3218
TOP 24(400)	23.07	21.40	6.626E-03	0.2292	9.086E-03	0.3142
TOP 25(400)	24.07	22.39	6.477E-03	0.2240	8.881E-03	0.3072
TOP 26(400)	25.06	23.39	6.337E-03	0.2192	8.690E-03	0.3006
TOP 27(400)	26.06	24.38	6.207E-03	0.2147	8.511E-03	0.2944
TOP 28(400)	27.05	25.38	6.084E-03	0.2104	8.343E-03	0.2885
TOP 29(400)	28.05	26.37	5.968E-03	0.2064	8.184E-03	0.2830
TOP 30(400)	29.04	27.37	5.858E-03	0.2026	8.034E-03	0.2779
TOP 31(400)	30.04	28.36	5.755E-03	0.1990	7.892E-03	0.2729

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
47	RSI FORWARD	0.01	0.010	-0.02	30.02	0.0532	5 18 39

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.98	426.15	1304.67	94.98	0.0444	3813.	3.918E-05	7.643E-08	1.955E+06	2.891E-02	535.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	513.67	513.67	513.67	513.67	514.67	513.67
2.18	514.67	516.67	515.67	518.67	514.67	516.67
3.17	516.67	520.67	521.67	521.67	514.67	521.67
4.17	517.67	522.67	525.67	525.67	514.67	526.67
5.16	518.67	525.67	528.67	527.67	514.67	529.67
6.16	518.67	526.67	530.67	529.67	514.67	530.67
7.15	518.67	526.67	530.67	530.67	514.67	532.67
8.15	519.67	528.67	533.67	531.67	514.67	534.67
9.14	520.67	529.67	535.67	533.67	514.67	536.67
10.14	521.67	530.67	536.67	535.67	514.67	537.67
11.13	522.67	531.67	538.67	537.67	514.67	538.67
12.13	523.67	533.67	539.67	538.67	514.67	539.67
13.12	523.67	534.67	541.67	539.67	514.67	541.67
14.12	524.67	535.67	541.67	540.67	514.67	542.67
15.11	525.67	535.67	542.67	541.67	514.67	542.67
16.11	525.67	536.67	543.67	542.67	514.67	543.67
17.10	526.67	537.67	544.67	543.67	514.67	544.67
18.10	527.67	537.67	545.67	544.67	514.67	544.67
19.09	527.67	538.67	546.67	544.67	514.67	545.67
20.09	528.67	539.67	547.67	545.67	514.67	545.67
21.08	528.67	540.67	547.67	546.67	514.67	546.67
22.08	529.67	540.67	548.67	546.67	514.67	546.67
23.07	529.67	541.67	548.67	547.67	514.67	546.67
24.07	529.67	541.67	549.67	547.67	514.67	547.67
25.06	530.67	542.67	549.67	548.67	514.67	547.67
26.06	530.67	542.67	550.67	548.67	514.67	547.67
27.05	531.67	543.67	551.67	549.67	514.67	548.67
28.05	531.67	543.67	551.67	549.67	514.67	548.67
29.04	531.67	544.67	551.67	549.67	514.67	548.67
30.04	532.67	544.67	552.67	550.67	514.67	548.67

V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VAF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL P

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
48	PSI FORWARD	0.01	0.005	-0.03	30.03	0.0532	5 43 58

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	427.46	1303.67	94.91	0.0445	3811.	3.933E-05	7.637E-08	1.963E+06	2.895E-02	536.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1898	350.	3.559E-01	4.467E-01	4.288E-01	5.925E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HREF	H(.9TO)	H(.9TO)/ HREF
TOP 1(350)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(350)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(350)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(350)	3.17	1.50	1.943E-02	0.6712	2.578E-02	0.8903
TOP 5(350)	4.17	2.49	1.505E-02	0.5201	1.997E-02	0.6899
TOP 6(350)	5.16	3.49	1.273E-02	0.4396	1.688E-02	0.5831
TOP 7(350)	6.16	4.48	1.123E-02	0.3878	1.489E-02	0.5143
TOP 8(350)	7.15	5.48	1.016E-02	0.3508	1.347E-02	0.4652
TOP 9(350)	8.15	6.47	9.342E-03	0.3227	1.239E-02	0.4280
TOP 10(350)	9.14	7.47	8.698E-03	0.3004	1.154E-02	0.3984
TOP 11(350)	10.14	8.46	8.170E-03	0.2822	1.084E-02	0.3743
TOP 12(350)	11.13	9.46	7.723E-03	0.2669	1.025E-02	0.3540
TOP 13(350)	12.13	10.45	7.351E-03	0.2539	9.751E-03	0.3368
TOP 14(350)	13.12	11.45	7.024E-03	0.2426	9.317E-03	0.3218
TOP 15(350)	14.12	12.44	6.739E-03	0.2327	8.937E-03	0.3087
TOP 16(350)	15.11	13.44	6.483E-03	0.2239	8.599E-03	0.2970
TOP 17(350)	16.11	14.43	6.256E-03	0.2161	8.298E-03	0.2866
TOP 18(350)	17.10	15.43	6.051E-03	0.2090	8.026E-03	0.2772
TOP 19(350)	18.10	16.42	5.864E-03	0.2025	7.779E-03	0.2687
TOP 20(350)	19.09	17.42	5.694E-03	0.1967	7.553E-03	0.2609
TOP 21(350)	20.09	18.41	5.536E-03	0.1913	7.346E-03	0.2537
TOP 22(350)	21.09	19.41	5.395E-03	0.1863	7.155E-03	0.2471
TOP 23(350)	22.08	20.40	5.261E-03	0.1817	6.979E-03	0.2410
TOP 24(350)	23.07	21.40	5.138E-03	0.1774	6.814E-03	0.2354
TOP 25(350)	24.07	22.39	5.022E-03	0.1735	6.661E-03	0.2301
TOP 26(350)	25.06	23.39	4.914E-03	0.1697	6.518E-03	0.2251
TOP 27(350)	26.06	24.38	4.813E-03	0.1662	6.384E-03	0.2205
TOP 28(350)	27.05	25.38	4.718E-03	0.1629	6.257E-03	0.2161
TOP 29(350)	28.05	26.37	4.628E-03	0.1598	6.138E-03	0.2120
TOP 30(350)	29.04	27.37	4.543E-03	0.1569	6.025E-03	0.2081

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
48	RSI FORWARD	0.01	0.005	-0.03	30.03	0.0532	5 43 58

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.98	427.46	1303.67	94.91	0.0445	3811.	3.933E-05	7.637E-08	1.963E+06	2.895E-02	536.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	513.67	513.67	513.67	513.67	513.67	513.67
2.18	514.67	515.67	514.67	515.67	513.67	514.67
3.17	516.67	520.67	521.67	522.67	513.67	520.67
4.17	517.67	522.67	525.67	524.67	513.67	524.67
5.16	517.67	523.67	525.67	525.67	513.67	526.67
6.16	518.67	524.67	526.67	526.67	513.67	528.67
7.15	518.67	524.67	528.67	527.67	513.67	529.67
8.15	519.67	526.67	530.67	528.67	513.67	531.67
9.14	519.67	527.67	531.67	529.67	513.67	532.67
10.14	520.67	528.67	532.67	531.67	513.67	534.67
11.13	521.67	529.67	534.67	533.67	513.67	536.67
12.13	521.67	530.67	536.67	535.67	513.67	537.67
13.12	522.67	532.67	537.67	536.67	513.67	538.67
14.12	523.67	532.67	538.67	537.67	513.67	539.67
15.11	523.67	533.67	540.67	538.67	513.67	541.67
16.11	524.67	534.67	540.67	539.67	513.67	541.67
17.10	525.67	535.67	542.67	540.67	513.67	542.67
18.10	525.67	536.67	543.67	541.67	513.67	543.67
19.09	526.67	537.67	544.67	542.67	513.67	544.67
20.09	527.67	537.67	544.67	542.67	513.67	544.67
21.08	527.67	538.67	545.67	543.67	513.67	545.67
22.08	527.67	539.67	546.67	544.67	513.67	545.67
23.07	528.67	539.67	546.67	544.67	513.67	546.67
24.07	529.67	540.67	547.67	545.67	513.67	546.67
25.06	529.67	540.67	548.67	545.67	513.67	546.67
26.06	529.67	541.67	548.67	546.67	513.67	547.67
27.05	530.67	541.67	548.67	546.67	513.67	547.67
28.05	530.67	542.67	549.67	547.67	513.67	547.67
29.04	531.67	542.67	549.67	547.67	513.67	547.67

V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
49	RSI FORWARD	0.01	0.005	-9.99	39.99	0.0532	5 54 21

MACH	P0(PSIA)	T0(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.98	425.25	1304.67	94.98	0.0443	3813.	3.910E-05	7.643E-08	1.950E+06	2.888E-02	539.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1898	400.	4.183E-01	5.695E-01	5.043E-01	7.811E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(400)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(400)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(400)	2.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 4(400)	3.17		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.31					
TOP 5(400)	4.17	2.49	1.920E-02	0.6648	2.633E-02	0.9118
TOP 6(400)	5.16	3.49	1.623E-02	0.5619	2.226E-02	0.7707
TOP 7(400)	6.16	4.48	1.431E-02	0.4956	1.963E-02	0.6798
TOP 8(400)	7.15	5.48	1.295E-02	0.4483	1.776E-02	0.6149
TOP 9(400)	8.15	6.47	1.191E-02	0.4124	1.634E-02	0.5656
TOP 10(400)	9.14	7.47	1.109E-02	0.3840	1.521E-02	0.5266
TOP 11(400)	10.14	8.46	1.042E-02	0.3607	1.429E-02	0.4947
TOP 12(400)	11.13	9.46	9.854E-03	0.3412	1.351E-02	0.4679
TOP 13(400)	12.13	10.45	9.373E-03	0.3245	1.286E-02	0.4451
TOP 14(400)	13.12	11.45	8.956E-03	0.3101	1.228E-02	0.4253
TOP 15(400)	14.12	12.44	8.591E-03	0.2974	1.178E-02	0.4079
TOP 16(400)	15.11	13.44	8.266E-03	0.2862	1.134E-02	0.3925
TOP 17(400)	16.11	14.43	7.976E-03	0.2762	1.094E-02	0.3788
TOP 18(400)	17.10	15.43	7.715E-03	0.2671	1.058E-02	0.3663
TOP 19(400)	18.10	16.42	7.477E-03	0.2589	1.026E-02	0.3551
TOP 20(400)	19.09	17.42	7.261E-03	0.2514	9.958E-03	0.3448
TOP 21(400)	20.09	18.41	7.062E-03	0.2445	9.685E-03	0.3353
TOP 22(400)	21.06	19.41	6.878E-03	0.2381	9.434E-03	0.3266
TOP 23(400)	22.08	20.40	6.708E-03	0.2323	9.201E-03	0.3186
TOP 24(400)	23.07	21.40	6.551E-03	0.2268	8.984E-03	0.3111
TOP 25(400)	24.07	22.39	6.403E-03	0.2217	8.782E-03	0.3041
TOP 26(400)	25.06	23.39	6.266E-03	0.2169	8.594E-03	0.2975
TOP 27(400)	26.06	24.38	6.136E-03	0.2125	8.416E-03	0.2914
TOP 28(400)	27.05	25.38	6.015E-03	0.2083	8.250E-03	0.2856
TOP 29(400)	28.05	26.37	5.900E-03	0.2043	8.093E-03	0.2802
TOP 30(400)	29.04	27.37	5.792E-03	0.2005	7.944E-03	0.2750
TOP 31(400)	30.04	28.36	5.690E-03	0.1970	7.803E-03	0.2702
TOP 32(400)	31.03	29.36	5.592E-03	0.1936	7.670E-03	0.2656

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
49	RSI FORWARD	0.01	0.005	-9.99	39.99	0.0532	5 54 21

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.98	425.25	1304.67	94.98	0.0443	3813.	3.910E-05	7.643E-08	1.950E+06	2.888E-02	539.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	513.67	513.67	513.67	514.67	514.67	514.67
2.18	516.67	516.67	516.67	517.67	514.67	518.67
3.17	517.67	520.67	522.67	523.67	514.67	523.67
4.17	518.67	521.67	523.67	526.67	514.67	524.67
5.16	518.67	523.67	525.67	526.67	514.67	526.67
6.16	519.67	524.67	527.67	528.67	514.67	527.67
7.15	519.67	524.67	528.67	530.67	514.67	529.67
8.15	519.67	525.67	530.67	531.67	514.67	530.67
9.14	520.67	526.67	530.67	531.67	514.67	531.67
10.14	520.67	527.67	531.67	532.67	514.67	532.67
11.13	521.67	527.67	532.67	533.67	514.67	533.67
12.13	521.67	527.67	533.67	535.67	514.67	534.67
13.12	521.67	528.67	534.67	535.67	514.67	535.67
14.12	522.67	529.67	535.67	536.67	514.67	537.67
15.11	523.67	530.67	537.67	538.67	514.67	538.67
16.11	524.67	531.67	538.67	539.67	514.67	539.67
17.10	524.67	532.67	539.67	540.67	514.67	540.67
18.10	525.67	533.67	540.67	541.67	514.67	541.67
19.09	526.67	534.67	541.67	542.67	514.67	542.67
20.09	526.67	534.67	541.67	542.67	514.67	542.67
21.08	527.67	535.67	542.67	543.67	514.67	543.67
22.08	527.67	536.67	543.67	544.67	514.67	543.67
23.07	528.67	536.67	544.67	545.67	514.67	544.67
24.07	529.67	537.67	544.67	546.67	514.67	544.67
25.06	529.67	538.67	545.67	546.67	514.67	545.67
26.06	529.67	538.67	546.67	546.67	514.67	545.67
27.05	530.67	539.67	546.67	547.67	514.67	545.67
28.05	530.67	539.67	547.67	547.67	514.67	545.67
29.04	531.67	539.67	547.67	548.67	514.67	546.67
30.04	531.67	540.67	548.67	548.67	514.67	546.67
31.03	532.67	541.67	548.67	549.67	514.67	546.67

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
50	RSI FORWARD	0.01	0.005	-0.02	30.02	0.0532	6	10	48

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	322.66	1289.67	94.33	0.0341	3790.	3.037E-05	7.591E-08	1.516E+06	2.525E-02	549.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1898	250.	2.162E-01	2.322E-01	2.619E-01	2.949E-01

PIC NO		TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP	1(250)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP	2(250)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP	3(250)	2.18		MODEL HAS NOT REACHED CENTERLINE			
TOP	4(250)	3.17		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =		3.31					
TOP	5(250)	4.17	2.49	7.827E-03	0.3100	9.941E-03	0.3937
TOP	6(250)	5.16	3.49	6.616E-03	0.2620	8.403E-03	0.3328
TOP	7(250)	6.16	4.48	5.835E-03	0.2311	7.412E-03	0.2935
TOP	8(250)	7.15	5.48	5.279E-03	0.2090	6.704E-03	0.2655
TOP	9(250)	8.15	6.47	4.856E-03	0.1923	6.167E-03	0.2442
TOP	10(250)	9.14	7.47	4.521E-03	0.1790	5.742E-03	0.2274
TOP	11(250)	10.14	8.46	4.246E-03	0.1682	5.394E-03	0.2136
TOP	12(250)	11.13	9.46	4.017E-03	0.1591	5.102E-03	0.2020
TOP	13(250)	12.13	10.45	3.821E-03	0.1513	4.853E-03	0.1922
TOP	14(250)	13.12	11.45	3.651E-03	0.1446	4.637E-03	0.1836
TOP	15(250)	14.12	12.44	3.502E-03	0.1387	4.448E-03	0.1761
TOP	16(250)	15.11	13.44	3.370E-03	0.1335	4.280E-03	0.1695
TOP	17(250)	16.11	14.43	3.252E-03	0.1288	4.130E-03	0.1635
TOP	18(250)	17.10	15.43	3.145E-03	0.1245	3.994E-03	0.1582
TOP	19(250)	18.10	16.42	3.048E-03	0.1207	3.871E-03	0.1533
TOP	20(250)	19.09	17.42	2.960E-03	0.1172	3.759E-03	0.1489
TOP	21(250)	20.09	18.41	2.879E-03	0.1140	3.656E-03	0.1448
TOP	22(250)	21.08	19.41	2.804E-03	0.1110	3.561E-03	0.1410
TOP	23(250)	22.08	20.40	2.735E-03	0.1083	3.473E-03	0.1376
TOP	24(250)	23.07	21.40	2.670E-03	0.1058	3.392E-03	0.1343
TOP	25(250)	24.07	22.39	2.610E-03	0.1034	3.315E-03	0.1313
TOP	26(250)	25.06	23.39	2.554E-03	0.1012	3.244E-03	0.1285
TOP	27(250)	26.06	24.38	2.502E-03	0.0991	3.177E-03	0.1258
TOP	28(250)	27.05	25.38	2.452E-03	0.0971	3.114E-03	0.1233
TOP	29(250)	28.05	26.37	2.405E-03	0.0953	3.055E-03	0.1210
TOP	30(250)	29.04	27.37	2.361E-03	0.0935	2.999E-03	0.1188
TOP	31(250)	30.04	28.36	2.319E-03	0.0919	2.946E-03	0.1167
TOP	32(250)	31.03	29.36	2.280E-03	0.0903	2.895E-03	0.1147
TOP	33(250)	32.03	30.35	2.242E-03	0.0888	2.848E-03	0.1128
TOP	34(250)	33.02	31.35	2.206E-03	0.0874	2.8[illegible]E-03	0.1110

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
50	RSI FORWARD	0.01	0.005	-0.02	30.02	0.0532	6	10	48

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	322.68	1289.67	94.33	0.0341	3790.	3.037E-05	7.591E-08	1.516E+06	2.525E-02	549.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1898	250.	2.162E-01	2.322E-01	2.619E-01	2.949E-01

PIC NO		TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP	35(250)	34.02	32.34	2.172E-03	0.0860	2.759E-03	0.1092
TOP	36(250)	35.01	33.34	2.139E-03	0.0847	2.717E-03	0.1076
TOP	37(250)	36.01	34.33	2.108E-03	0.0835	2.677E-03	0.1060
TOP	38(250)	37.00	35.33	2.078E-03	0.0823	2.640E-03	0.1045
TOP	39(250)	38.00	36.32	2.049E-03	0.0812	2.603E-03	0.1031

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
50	RSI FORWARD	0.01	0.005	-0.02	30.02	0.0532	6 10 48

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	322.68	1289.67	94.33	0.0341	3790.	3.037E-05	7.591E-08	1.516E+06	2.525E-02	549.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	513.67	514.67	513.67	514.67	514.67	514.67
2.18	515.67	518.67	517.67	517.67	514.67	517.67
3.17	516.67	519.67	520.67	520.67	514.67	521.67
4.17	516.67	520.67	523.67	522.67	514.67	522.67
5.16	517.67	522.67	523.67	523.67	514.67	524.67
6.16	517.67	523.67	525.67	524.67	514.67	525.67
7.15	517.67	523.67	526.67	525.67	514.67	526.67
8.15	518.67	524.67	527.67	526.67	514.67	527.67
9.14	518.67	525.67	528.67	527.67	514.67	528.67
10.14	519.67	525.67	529.67	528.67	514.67	529.67
11.13	519.67	526.67	529.67	528.67	514.67	530.67
12.13	519.67	527.67	531.67	530.67	514.67	530.67
13.12	520.67	527.67	531.67	530.67	514.67	530.67
14.12	520.67	528.67	532.67	531.67	514.67	532.67
15.11	520.67	528.67	533.67	531.67	514.67	532.67
16.11	521.67	529.67	533.67	533.67	514.67	533.67
17.10	522.67	530.67	535.67	533.67	514.67	534.67
18.10	522.67	531.67	536.67	534.67	514.67	535.67
19.09	523.67	531.67	536.67	535.67	514.67	536.67
20.09	523.67	532.67	537.67	536.67	514.67	536.67
21.08	523.67	533.67	538.67	537.67	514.67	537.67
22.08	524.67	533.67	539.67	537.67	514.67	537.67
23.07	525.67	534.67	540.67	538.67	514.67	538.67
24.07	525.67	535.67	540.67	539.67	514.67	538.67
25.06	526.67	535.67	541.67	539.67	514.67	539.67
26.06	526.67	536.67	542.67	540.67	514.67	539.67
27.05	526.67	536.67	542.67	540.67	514.67	539.67
28.05	527.67	537.67	542.67	540.67	514.67	540.67
29.04	527.67	537.67	543.67	541.67	514.67	540.67
30.04	527.67	537.67	543.67	541.67	514.67	540.67
31.03	528.67	538.67	544.67	542.67	514.67	540.67
32.03	528.67	539.67	544.67	542.67	514.67	541.67
33.02	528.67	538.67	544.67	542.67	514.67	541.67
34.02	529.67	539.67	545.67	543.67	514.67	541.67
35.01	529.67	539.67	545.67	543.67	514.67	541.67
36.01	529.67	540.67	546.67	543.67	514.67	541.67
37.00	530.67	540.67	546.67	543.67	514.67	541.67
38.00	530.67	540.67	546.67	544.67	514.67	542.67

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
51	PSI FORWARD	0.01	0.005	-9.99	39.99	0.0532	6 19 22

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	321.77	1293.67	94.62	0.0340	3796.	3.019E-05	7.614E-08	1.505E+06	2.523E-02	543.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1698	300.	2.880E-01	3.337E-01	3.480E-01	4.326E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(300)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(300)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(300)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(300)	3.17	1.50	1.452E-02	0.5755	1.882E-02	0.7459
TOP 5(300)	4.17	2.49	1.125E-02	0.4460	1.458E-02	0.5780
TOP 6(300)	5.16	3.49	9.510E-03	0.3770	1.233E-02	0.4886
TOP 7(300)	6.16	4.48	8.388E-03	0.3325	1.087E-02	0.4309
TOP 8(300)	7.15	5.48	7.588E-03	0.3008	9.835E-03	0.3898
TOP 9(300)	8.15	6.47	6.980E-03	0.2767	9.047E-03	0.3586
TOP 10(300)	9.14	7.47	6.498E-03	0.2576	8.422E-03	0.3338
TOP 11(300)	10.14	8.46	6.104E-03	0.2419	7.912E-03	0.3136
TOP 12(300)	11.13	9.46	5.774E-03	0.2289	7.484E-03	0.2966
TOP 13(300)	12.13	10.45	5.492E-03	0.2177	7.119E-03	0.2822
TOP 14(300)	13.12	11.45	5.248E-03	0.2080	6.802E-03	0.2696
TOP 15(300)	14.12	12.44	5.034E-03	0.1995	6.524E-03	0.2586
TOP 16(300)	15.11	13.44	4.844E-03	0.1920	6.278E-03	0.2488
TOP 17(300)	16.11	14.43	4.674E-03	0.1853	6.058E-03	0.2401
TOP 18(300)	17.10	15.43	4.521E-03	0.1792	5.859E-03	0.2322
TOP 19(300)	18.10	16.42	4.382E-03	0.1737	5.679E-03	0.2251
TOP 20(300)	19.09	17.42	4.255E-03	0.1686	5.514E-03	0.2186
TOP 21(300)	20.09	18.41	4.138E-03	0.1640	5.363E-03	0.2126
TOP 22(300)	21.08	19.41	4.030E-03	0.1598	5.224E-03	0.2071
TOP 23(300)	22.08	20.40	3.931E-03	0.1558	5.095E-03	0.2019

V11A-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
51	RSI FORWARD	0.01	0.005	-9.99	39.99	0.0532	6 19 22

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	321.77	1293.67	94.62	0.0340	3796.	3.019E-05	7.614E-08	1.505E+06	2.523E-02	543.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	514.67	514.67	513.67	514.67	514.67	514.67
2.18	515.67	516.67	515.67	517.67	514.67	514.67
3.17	517.67	519.67	518.67	521.67	514.67	519.67
4.17	517.67	521.67	523.67	524.67	514.67	524.67
5.16	518.67	522.67	525.67	526.67	514.67	526.67
6.16	519.67	523.67	527.67	528.67	514.67	527.67
7.15	519.67	525.67	528.67	530.67	514.67	529.67
8.15	520.67	525.67	530.67	531.67	514.67	530.67
9.14	521.67	527.67	531.67	533.67	514.67	531.67
10.14	521.67	527.67	533.67	534.67	514.67	533.67
11.13	522.67	528.67	533.67	535.67	514.67	534.67
12.13	523.67	529.67	535.67	536.67	514.67	535.67
13.12	523.67	530.67	535.67	537.67	514.67	535.67
14.12	524.67	531.67	536.67	537.67	514.67	536.67
15.11	524.67	531.67	537.67	538.67	514.67	537.67
16.11	525.67	532.67	538.67	538.67	514.67	537.67
17.10	525.67	532.67	538.67	539.67	514.67	538.67
18.10	525.67	533.67	539.67	540.67	514.67	538.67
19.09	526.67	533.67	539.67	540.67	514.67	538.67
20.09	526.67	534.67	540.67	541.67	514.67	539.67
21.08	527.67	534.67	541.67	541.67	514.67	539.67
22.08	527.67	535.67	541.67	542.67	514.67	539.67

V418-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
52	FSI FORWARD	0.01	0.005	-0.01	30.01	0.0532	6 32 10

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	209.36	1275.67	93.74	0.0225	3769.	2.015E-05	7.543E-08	1.007E+06	2.042E-02	553.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1898	200.	1.468E-01	1.474E-01	1.783E-01	1.845E-01

PIC	NO	TIME	DELTIME	H(TO)	H(TO)/ HREF	H(.9TO)	H(.9TO)/ HREF
TOP	1(200)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP	2(200)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP	3(200)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =		3.17					
TOP	4(200)	3.17	1.50	6.414E-03	0.3142	8.025E-03	0.3931
TOP	5(200)	4.17	2.49	4.970E-03	0.2434	6.218E-03	0.3046
TOP	6(200)	5.16	3.49	4.201E-03	0.2058	5.256E-03	0.2575
TOP	7(200)	6.16	4.48	3.705E-03	0.1815	4.636E-03	0.2271
TOP	8(200)	7.15	5.48	3.352E-03	0.1642	4.194E-03	0.2054
TOP	9(200)	8.15	6.47	3.083E-03	0.1510	3.858E-03	0.1890
TOP	10(200)	9.14	7.47	2.871E-03	0.1406	3.591E-03	0.1759
TOP	11(200)	10.14	8.46	2.697E-03	0.1321	3.374E-03	0.1652
TOP	12(200)	11.13	9.46	2.551E-03	0.1249	3.191E-03	0.1563
TOP	13(200)	12.13	10.45	2.426E-03	0.1188	3.035E-03	0.1487
TOP	14(200)	13.12	11.45	2.318E-03	0.1136	2.901E-03	0.1421
TOP	15(200)	14.12	12.44	2.224E-03	0.1089	2.782E-03	0.1363
TOP	16(200)	15.11	13.44	2.140E-03	0.1048	2.677E-03	0.1311
TOP	17(200)	16.11	14.43	2.065E-03	0.1011	2.583E-03	0.1265
TOP	18(200)	17.10	15.43	1.997E-03	0.0978	2.498E-03	0.1224
TOP	19(200)	18.10	16.42	1.936E-03	0.0948	2.422E-03	0.1186
TOP	20(200)	19.09	17.42	1.879E-03	0.0921	2.351E-03	0.1152
TOP	21(200)	20.09	18.41	1.828E-03	0.0895	2.287E-03	0.1120
TOP	22(200)	21.08	19.41	1.780E-03	0.0872	2.228E-03	0.1091
TOP	23(200)	22.08	20.40	1.737E-03	0.0851	2.173E-03	0.1064
TOP	24(200)	23.07	21.40	1.696E-03	0.0831	2.121E-03	0.1039
TOP	25(200)	24.07	22.39	1.658E-03	0.0812	2.074E-03	0.1016
TOP	26(200)	25.06	23.39	1.622E-03	0.0794	2.029E-03	0.0994
TOP	27(200)	26.06	24.38	1.584E-03	0.0778	1.987E-03	0.0973
TOP	28(200)	27.05	25.38	1.557E-03	0.0763	1.948E-03	0.0954
TOP	29(200)	28.05	26.37	1.527E-03	0.0748	1.911E-03	0.0936
TOP	30(200)	29.04	27.37	1.499E-03	0.0734	1.876E-03	0.0919
TOP	31(200)	30.04	28.36	1.473E-03	0.0721	1.843E-03	0.0903
TOP	32(200)	31.03	29.36	1.448E-03	0.0709	1.811E-03	0.0887
TOP	33(200)	32.03	30.35	1.424E-03	0.0697	1.781E-03	0.0872

V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
52	PSI FORWARD	0.01	0.005	-0.01	30.01	0.0532	6 32 10

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	209.36	1275.67	93.74	0.0225	3769.	2.015E-05	7.543E-08	1.007E+06	2.042E-02	553.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1898	200.	1.468E-01	1.474E-01	1.793E-01	1.845E-01

PIC NO		TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP	34(200)	33.02	31.35	1.401E-03	0.0686	1.753E-03	0.0858
TOP	35(200)	34.02	32.34	1.379E-03	0.0676	1.726E-03	0.0845
TOP	36(200)	35.01	33.34	1.358E-03	0.0665	1.700E-03	0.0832
TOP	37(200)	36.01	34.33	1.339E-03	0.0656	1.675E-03	0.0820
TOP	38(200)	37.00	35.33	1.320E-03	0.0646	1.651E-03	0.0809
TOP	39(200)	38.00	36.32	1.301E-03	0.0637	1.628E-03	0.0798
TOP	40(200)	38.99	37.32	1.284E-03	0.0629	1.606E-03	0.0787
TOP	41(200)	39.99	38.31	1.267E-03	0.0621	1.585E-03	0.0777

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
52	RSI FORWARD	0.01	0.005	-0.01	30.01	0.0532	6 32 10

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	209.36	1275.67	93.74	0.0225	3769.	2.015E-05	7.543E-08	1.007E+06	2.042E-02	553.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	513.67	514.67	513.67	514.67	514.67	514.67
2.18	513.67	516.67	513.67	515.67	514.67	514.67
3.17	515.67	517.67	517.67	518.67	514.67	518.67
4.17	516.67	519.67	520.67	521.67	514.67	520.67
5.16	516.67	521.67	523.67	522.67	514.67	522.67
6.16	517.67	522.67	524.67	524.67	514.67	524.67
7.15	517.67	523.67	525.67	525.67	514.67	525.67
8.15	518.67	524.67	527.67	526.67	514.67	526.67
9.14	519.67	525.67	528.67	527.67	514.67	527.67
10.14	519.67	525.67	529.67	528.67	514.67	528.67
11.13	520.67	526.67	530.67	529.67	514.67	529.67
12.13	520.67	527.67	531.67	530.67	514.67	529.67
13.12	521.67	528.67	532.67	531.67	514.67	530.67
14.12	521.67	529.67	532.67	531.67	514.67	531.67
15.11	522.67	529.67	533.67	532.67	514.67	531.67
16.11	522.67	529.67	534.67	532.67	514.67	531.67
17.10	522.67	530.67	534.67	533.67	514.67	532.67
18.10	523.67	530.67	535.67	533.67	514.67	532.67
19.09	523.67	530.67	535.67	534.67	514.67	532.67
20.09	523.67	531.67	536.67	534.67	514.67	533.67
21.08	524.67	531.67	536.67	534.67	514.67	533.67
22.08	524.67	532.67	536.67	535.67	514.67	533.67
23.07	524.67	532.67	537.67	535.67	514.67	534.67
24.07	524.67	532.67	537.67	535.67	514.67	534.67
25.06	525.67	533.67	537.67	536.67	514.67	534.67
26.06	525.67	533.67	538.67	536.67	514.67	534.67
27.05	525.67	533.67	538.67	536.67	514.67	534.67
28.05	525.67	533.67	538.67	536.67	514.67	534.67
29.04	525.67	533.67	538.67	536.67	514.67	534.67
30.04	525.67	533.67	538.67	536.67	514.67	534.67
31.03	525.67	534.67	538.67	537.67	514.67	535.67
32.03	526.67	534.67	538.67	537.67	514.67	535.67
33.02	526.67	534.67	538.67	537.67	514.67	535.67
34.02	526.67	534.67	539.67	537.67	514.67	535.67
35.01	526.67	534.67	539.67	537.67	514.67	535.67
36.01	526.67	535.67	539.67	537.67	514.67	535.67
37.00	526.67	535.67	539.67	537.67	514.67	535.67
38.00	526.67	535.67	539.67	537.67	514.67	535.67
38.99	527.67	535.67	539.67	537.67	514.67	535.67
39.99	527.67	535.67	540.67	538.67	514.67	535.67

V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
54	RSI FORWARD	0.01	0.005	0.03	29.97	0.0532	7	10	52

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	672.28	1334.67	96.94	0.0694	3856.	6.008E-05	7.801E-08	2.970E+06	3.636E-02	538.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1898	450.	4.661E-01	6.799E-01	5.600E-01	9.556E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HREF	H(.9TO)	H(.9TO)/ HREF
TOP 1(450)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(450)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(450)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(450)	3.17	1.50	2.958E-02	0.8136	4.158E-02	1.1435
TOP 5(450)	4.17	2.49	2.292E-02	0.6304	3.222E-02	0.8861
TOP 6(450)	5.16	3.49	1.937E-02	0.5329	2.723E-02	0.7490
TOP 7(450)	6.16	4.48	1.709E-02	0.4700	2.402E-02	0.6606
TOP 8(450)	7.15	5.48	1.546E-02	0.4251	2.173E-02	0.5976
TOP 9(450)	8.15	6.47	1.422E-02	0.3911	1.999E-02	0.5497
TOP 10(450)	9.14	7.47	1.324E-02	0.3641	1.861E-02	0.5118
TOP 11(450)	10.14	8.46	1.243E-02	0.3420	1.748E-02	0.4807
TOP 12(450)	11.13	9.46	1.176E-02	0.3235	1.653E-02	0.4547
TOP 13(450)	12.13	10.45	1.119E-02	0.3077	1.573E-02	0.4326
TOP 14(450)	13.12	11.45	1.069E-02	0.2941	1.503E-02	0.4133
TOP 15(450)	14.12	12.44	1.025E-02	0.2821	1.441E-02	0.3964
TOP 16(450)	15.11	13.44	9.866E-03	0.2714	1.387E-02	0.3815
TOP 17(450)	16.11	14.43	9.521E-03	0.2619	1.338E-02	0.3681
TOP 18(450)	17.10	15.43	9.209E-03	0.2533	1.294E-02	0.3560
TOP 19(450)	18.10	16.42	8.926E-03	0.2455	1.255E-02	0.3451
TOP 20(450)	19.09	17.42	8.667E-03	0.2384	1.218E-02	0.3351
TOP 21(450)	20.09	18.41	8.430E-03	0.2319	1.185E-02	0.3259
TOP 22(450)	21.08	19.41	8.211E-03	0.2258	1.154E-02	0.3174
TOP 23(450)	22.08	20.40	8.008E-03	0.2203	1.126E-02	0.3096
TOP 24(450)	23.07	21.40	7.819E-03	0.2151	1.099E-02	0.3023
TOP 25(450)	24.07	22.39	7.644E-03	0.2102	1.074E-02	0.2955
TOP 26(450)	25.06	23.39	7.479E-03	0.2057	1.051E-02	0.2892
TOP 27(450)	26.06	24.38	7.325E-03	0.2015	1.030E-02	0.2832
TOP 28(450)	27.05	25.38	7.180E-03	0.1975	1.009E-02	0.2776
TOP 29(450)	28.05	26.37	7.043E-03	0.1937	9.900E-03	0.2723
TOP 30(450)	29.04	27.37	6.914E-03	0.1902	9.718E-03	0.2673

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
54	RSI FOR+ARD	0.01	0.005	0.03	29.97	0.0532	7	10	52

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	672.28	1334.67	96.94	0.0694	3856.	6.008E-05	7.801E-08	2.970E+06	3.636E-02	538.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	514.67	514.67	513.67	514.67	514.67	514.67
2.16	516.67	516.67	515.67	520.67	514.67	515.67
3.17	518.67	524.67	525.67	525.67	514.67	524.67
4.17	519.67	526.67	530.67	529.67	514.67	531.67
5.16	520.67	528.67	530.67	531.67	514.67	534.67
6.16	520.67	529.67	533.67	533.67	514.67	537.67
7.15	521.67	529.67	535.67	533.67	514.67	539.67
8.15	522.67	531.67	537.67	536.67	514.67	541.67
9.14	522.67	532.67	538.67	536.67	514.67	543.67
10.14	523.67	534.67	540.67	540.67	514.67	546.67
11.13	525.67	536.67	543.67	542.67	514.67	548.67
12.13	525.67	537.67	545.67	543.67	514.67	550.67
13.12	526.67	539.67	546.67	545.67	514.67	552.67
14.12	527.67	540.67	548.67	547.67	514.67	554.67
15.11	529.67	542.67	550.67	548.67	514.67	556.67
16.11	530.67	543.67	552.67	550.67	514.67	557.67
17.10	530.67	544.67	553.67	551.67	514.67	558.67
18.10	531.67	545.67	554.67	552.67	514.67	559.67
19.09	532.67	546.67	555.67	554.67	514.67	560.67
20.09	533.67	547.67	556.67	554.67	514.67	561.67
21.08	533.67	548.67	557.67	555.67	514.67	561.67
22.08	534.67	549.67	558.67	556.67	514.67	562.67
23.07	535.67	549.67	559.67	557.67	514.67	562.67
24.07	535.67	550.67	559.67	558.67	514.67	563.67
25.06	536.67	551.67	560.67	558.67	514.67	563.67
26.06	536.67	551.67	561.67	559.67	514.67	563.67
27.05	537.67	552.67	561.67	559.67	514.67	564.67
28.05	537.67	553.67	562.67	560.67	514.67	564.67
29.04	538.67	553.67	563.67	560.67	514.67	564.67

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD EF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
55	RSI FORWARD	0.01	0.005	-9.99	39.99	0.0532	7 31 29

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	671.68	1329.67	96.58	0.0694	3849.	6.025E-05	7.772E-08	2.984E+06	3.632E-02	535.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1898	500.	5.340E-01	8.697E-01	6.414E-01	1.295E+00

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF
TOP 1(500)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(500)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(500)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(500)	3.17	1.50	3.784E-02	1.0418	5.635E-02	1.5517
TOP 5(500)	4.17	2.49	2.932E-02	0.8073	4.367E-02	1.2024
TOP 6(500)	5.16	3.49	2.478E-02	0.6824	3.691E-02	1.0164
TOP 7(500)	6.16	4.48	2.186E-02	0.6019	3.256E-02	0.8964
TOP 8(500)	7.15	5.48	1.977E-02	0.5444	2.945E-02	0.8109
TOP 9(500)	8.15	6.47	1.819E-02	0.5008	2.709E-02	0.7459
TOP 10(500)	9.14	7.47	1.693E-02	0.4663	2.522E-02	0.6944
TOP 11(500)	10.14	8.46	1.591E-02	0.4380	2.369E-02	0.6523
TOP 12(500)	11.13	9.46	1.505E-02	0.4143	2.241E-02	0.6171
TOP 13(500)	12.13	10.45	1.431E-02	0.3941	2.132E-02	0.5869
TOP 14(500)	13.12	11.45	1.368E-02	0.3766	2.037E-02	0.5609
TOP 15(500)	14.12	12.44	1.312E-02	0.3612	1.954E-02	0.5380
TOP 16(500)	15.11	13.44	1.262E-02	0.3476	1.880E-02	0.5177
TOP 17(500)	16.11	14.43	1.218E-02	0.3354	1.814E-02	0.4995
TOP 18(500)	17.10	15.43	1.178E-02	0.3244	1.755E-02	0.4831
TOP 19(500)	18.10	16.42	1.142E-02	0.3144	1.701E-02	0.4682
TOP 20(500)	19.09	17.42	1.109E-02	0.3053	1.651E-02	0.4547
TOP 21(500)	20.09	18.41	1.078E-02	0.2969	1.606E-02	0.4422
TOP 22(500)	21.08	19.41	1.050E-02	0.2892	1.564E-02	0.4307
TOP 23(500)	22.08	20.40	1.024E-02	0.2821	1.526E-02	0.4201
TOP 24(500)	23.07	21.40	1.000E-02	0.2754	1.490E-02	0.4102
TOP 25(500)	24.07	22.39	9.778E-03	0.2692	1.456E-02	0.4010
TOP 26(500)	25.06	23.39	9.567E-03	0.2634	1.425E-02	0.3924
TOP 27(500)	26.06	24.38	9.370E-03	0.2580	1.396E-02	0.3843

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
55	RSI FORWARD	0.01	0.005	-9.99	39.99	0.0532	7 31 29

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	671.68	1329.67	96.58	0.0694	3849.	6.025E-05	7.772E-08	2.984E+06	3.632E-02	535.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	513.67	514.67	513.67	514.67	514.67	513.67
2.18	515.67	518.67	514.67	515.67	514.67	520.67
3.17	520.67	523.67	524.67	528.67	514.67	525.67
4.17	523.67	528.67	531.67	536.67	514.67	536.67
5.16	525.67	532.67	537.67	540.67	514.67	541.67
6.16	526.67	534.67	541.67	543.67	514.67	544.67
7.15	528.67	537.67	543.67	546.67	514.67	548.67
8.15	530.67	539.67	547.67	549.67	514.67	551.67
9.14	531.67	541.67	550.67	551.67	514.67	554.67
10.14	532.67	543.67	551.67	554.67	514.67	556.67
11.13	534.67	545.67	554.67	556.67	514.67	558.67
12.13	535.67	547.67	556.67	558.67	514.67	560.67
13.12	537.67	548.67	558.67	560.67	514.67	562.67
14.12	537.67	550.67	559.67	561.67	514.67	563.67
15.11	538.67	550.67	560.67	562.67	514.67	564.67
16.11	540.67	552.67	562.67	563.67	514.67	565.67
17.10	541.67	553.67	563.67	564.67	514.67	566.67
18.10	541.67	554.67	564.67	566.67	514.67	566.67
19.09	542.67	556.67	565.67	567.67	514.67	567.67
20.09	544.67	556.67	566.67	567.67	514.67	567.67
21.08	544.67	557.67	567.67	568.67	514.67	568.67
22.08	545.67	558.67	568.67	569.67	514.67	568.67
23.07	546.67	559.67	569.67	570.67	514.67	568.67
24.07	547.67	559.67	569.67	570.67	514.67	568.67
25.06	547.67	560.67	570.67	571.67	514.67	569.67
26.06	548.67	561.67	571.67	572.67	514.67	569.67

V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
57	RCC NOVAMIDE	0.00	0.000	-10.10	40.10	0.0532	20	52	29

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.98	424.21	1302.67	94.84	0.0442	3810.	3.907E-05	7.631E-08	1.950E+06	2.884E-02	538.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1891	400.	4.202E-01	5.735E-01	5.065E-01	7.874E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HRFR	H(.9TO)	H(.9TO)/HRFR
TOP 1(400)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(400)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(400)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	2.32					
TOP 4(400)	3.17	1.50	2.495E-02	0.8652	3.426E-02	1.1879
TOP 5(400)	4.17	2.49	1.934E-02	0.6705	2.655E-02	0.9205
TOP 6(400)	5.16	3.49	1.634E-02	0.5667	2.244E-02	0.7781
TOP 7(400)	6.16	4.48	1.442E-02	0.4998	1.979E-02	0.6863
TOP 8(400)	7.15	5.48	1.304E-02	0.4522	1.790E-02	0.6208
TOP 9(400)	8.15	6.47	1.200E-02	0.4159	1.647E-02	0.5710
TOP 10(400)	9.14	7.47	1.117E-02	0.3872	1.533E-02	0.5316
TOP 11(400)	10.14	8.46	1.049E-02	0.3637	1.440E-02	0.4994
TOP 12(400)	11.13	9.46	9.923E-03	0.3441	1.362E-02	0.4724
TOP 13(400)	12.13	10.45	9.439E-03	0.3273	1.296E-02	0.4493
TOP 14(400)	13.12	11.45	9.019E-03	0.3127	1.238E-02	0.4294
TOP 15(400)	14.12	12.44	8.651E-03	0.3000	1.188E-02	0.4118
TOP 16(400)	15.11	13.44	8.325E-03	0.2886	1.143E-02	0.3963
TOP 17(400)	16.11	14.43	8.032E-03	0.2785	1.103E-02	0.3824
TOP 18(400)	17.10	15.43	7.769E-03	0.2694	1.067E-02	0.3698
TOP 19(400)	18.10	16.42	7.530E-03	0.2611	1.034E-02	0.3585
TOP 20(400)	19.09	17.42	7.312E-03	0.2535	1.004E-02	0.3481
TOP 21(400)	20.09	18.41	7.111E-03	0.2466	9.763E-03	0.3385
TOP 22(400)	21.06	19.41	6.927E-03	0.2402	9.510E-03	0.3297
TOP 23(400)	22.08	20.40	6.756E-03	0.2342	9.275E-03	0.3216
TOP 24(400)	23.07	21.40	6.597E-03	0.2287	9.057E-03	0.3140
TOP 25(400)	24.07	22.39	6.448E-03	0.2236	8.853E-03	0.3070
TOP 26(400)	25.06	23.39	6.310E-03	0.2188	8.663E-03	0.3004
TOP 27(400)	26.06	24.38	6.180E-03	0.2143	8.484E-03	0.2942
TOP 28(400)	27.05	25.38	6.057E-03	0.2100	8.316E-03	0.2884
TOP 29(400)	28.05	26.37	5.942E-03	0.2060	8.158E-03	0.2829
TOP 30(400)	29.04	27.37	5.833E-03	0.2022	8.008E-03	0.2777
TOP 31(400)	30.04	28.36	5.730E-03	0.1987	7.866E-03	0.2728
TOP 32(400)	31.03	29.36	5.632E-03	0.1953	7.732E-03	0.2681
TOP 33(400)	32.03	30.35	5.539E-03	0.1920	7.604E-03	0.2637

NASA/RI OH90 TRANSITION TEST
V416-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
57	RCC NOVAMIDE	0.00	0.000	-10.10	40.10	0.0532	20 52 29

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.98	424.21	1302.67	94.84	0.0442	3810.	3.907E-05	7.631E-08	1.950E+06	2.884E-02	538.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1891	400.	4.202E-01	5.735E-01	5.065E-01	7.874E-01

PIC NO		TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP	34(400)	33.02	31.35	5.450E-03	0.1890	7.482E-03	0.2594
TOP	35(400)	34.02	32.34	5.366E-03	0.1860	7.366E-03	0.2554
TOP	36(400)	35.01	33.34	5.285E-03	0.1832	7.256E-03	0.2516
TOP	37(400)	36.01	34.33	5.208E-03	0.1806	7.150E-03	0.2479

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
57	RCC NOVAMIDE	0.00	0.000	-10.10	40.10	0.0532	20 52 29

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.98	424.21	1302.67	94.84	0.0442	3810.	3.907E-05	7.631E-08	1.950E+06	2.884E-02	538.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	515.67	516.67	459.67	-15923.33	459.67	459.67
2.18	518.67	518.67	459.67	-15923.33	459.67	459.67
3.17	519.67	523.67	459.67	-15923.33	459.67	459.67
4.17	520.67	524.67	459.67	-15923.33	459.67	459.67
5.16	520.67	525.67	459.67	-15923.33	459.67	459.67
6.16	521.67	526.67	459.67	-15923.33	459.67	459.67
7.15	521.67	526.67	459.67	-15923.33	459.67	459.67
8.15	522.67	527.67	459.67	-15923.33	459.67	459.67
9.14	523.67	528.67	459.67	-15923.33	459.67	459.67
10.14	523.67	529.67	459.67	-15923.33	459.67	459.67
11.13	524.67	529.67	459.67	-15923.33	459.67	459.67
12.13	525.67	530.67	459.67	-15923.33	459.67	459.67
13.12	525.67	530.67	459.67	-15923.33	459.67	459.67
14.12	525.67	531.67	459.67	-15923.33	459.67	459.67
15.11	526.67	531.67	459.67	-15923.33	459.67	459.67
16.11	526.67	531.67	459.67	-15923.33	459.67	459.67
17.10	527.67	531.67	459.67	-15923.33	459.67	459.67
18.10	527.67	532.67	459.67	-15923.33	459.67	459.67
19.09	527.67	532.67	459.67	-15923.33	459.67	459.67
20.09	528.67	532.67	459.67	-15923.33	459.67	459.67
21.08	528.67	533.67	459.67	-15923.33	459.67	459.67
22.08	528.67	533.67	459.67	-15923.33	459.67	459.67
23.07	529.67	533.67	459.67	-15923.33	459.67	459.67
24.07	529.67	533.67	459.67	-15923.33	459.67	459.67
25.06	529.67	533.67	459.67	-15923.33	459.67	459.67
26.06	529.67	534.67	459.67	-15923.33	459.67	459.67
27.05	529.67	534.67	459.67	-15923.33	459.67	459.67
28.05	530.67	534.67	459.67	-15923.33	459.67	459.67
29.04	530.67	534.67	459.67	-15923.33	459.67	459.67
30.04	530.67	534.67	459.67	-15923.33	459.67	459.67
31.03	530.67	534.67	459.67	-15923.33	459.67	459.67
32.03	530.67	534.67	459.67	-15923.33	459.67	459.67
33.02	530.67	534.67	459.67	-15923.33	459.67	459.67
34.02	530.67	534.67	459.67	-15923.33	459.67	459.67
35.01	530.67	535.67	459.67	-15923.33	459.67	459.67
36.01	530.67	535.67	459.67	-15923.33	459.67	459.67

V418-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
58	RCC NOVAMIDE	0.00	0.000	-0.07	30.07	0.0532	21	10	44

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.98	426.12	1303.67	94.91	0.0444	3811.	3.921E-05	7.637E-08	1.957E+06	2.891E-02	544.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1891	350.	3.491E-01	4.346E-01	4.215E-01	5.766E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(350)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(350)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(350)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	2.32					
TOP 4(350)	3.17	1.50	1.891E-02	0.6540	2.509E-02	0.8677
TOP 5(350)	4.17	2.49	1.465E-02	0.5068	1.944E-02	0.6724
TOP 6(350)	5.16	3.49	1.238E-02	0.4284	1.643E-02	0.5684
TOP 7(350)	6.16	4.48	1.092E-02	0.3778	1.449E-02	0.5013
TOP 8(350)	7.15	5.48	9.880E-03	0.3418	1.311E-02	0.4535
TOP 9(350)	8.15	6.47	9.089E-03	0.3144	1.206E-02	0.4171
TOP 10(350)	9.14	7.47	8.461E-03	0.2927	1.123E-02	0.3883
TOP 11(350)	10.14	8.46	7.948E-03	0.2749	1.055E-02	0.3648
TOP 12(350)	11.13	9.46	7.516E-03	0.2601	9.976E-03	0.3451
TOP 13(350)	12.13	10.45	7.152E-03	0.2474	9.499E-03	0.3282
TOP 14(350)	13.12	11.45	6.834E-03	0.2364	9.067E-03	0.3136
TOP 15(350)	14.12	12.44	6.555E-03	0.2267	8.697E-03	0.3008
TOP 16(350)	15.11	13.44	6.307E-03	0.2182	8.369E-03	0.2895
TOP 17(350)	16.11	14.43	6.086E-03	0.2105	8.075E-03	0.2793
TOP 18(350)	17.10	15.43	5.886E-03	0.2036	7.810E-03	0.2702
TOP 19(350)	18.10	16.42	5.705E-03	0.1974	7.570E-03	0.2619
TOP 20(350)	19.09	17.42	5.540E-03	0.1916	7.350E-03	0.2543
TOP 21(350)	20.09	18.41	5.388E-03	0.1864	7.149E-03	0.2473
TOP 22(350)	21.08	19.41	5.248E-03	0.1815	6.963E-03	0.2409
TOP 23(350)	22.08	20.40	5.119E-03	0.1771	6.791E-03	0.2349
TOP 24(350)	23.07	21.40	4.998E-03	0.1729	6.632E-03	0.2294
TOP 25(350)	24.07	22.39	4.886E-03	0.1690	6.483E-03	0.2242

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
58	RCC NOVAMIDE	0.00	0.000	-0.07	30.07	0.0532	21 10 44

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.98	426.12	1303.67	94.91	0.0444	3811.	3.921E-05	7.637E-08	1.957E+06	2.891E-02	544.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	516.67	516.67	459.67	-15923.33	459.67	459.67
2.18	518.67	521.67	459.67	-15923.33	459.67	459.67
3.17	519.67	523.67	459.67	-15923.33	459.67	459.67
4.17	519.67	525.67	459.67	-15923.33	459.67	459.67
5.16	520.67	525.67	459.67	-15923.33	459.67	459.67
6.16	521.67	527.67	459.67	-15923.33	459.67	459.67
7.15	521.67	528.67	459.67	-15923.33	459.67	459.67
8.15	522.67	528.67	459.67	-15923.33	459.67	459.67
9.14	523.67	529.67	459.67	-15923.33	459.67	459.67
10.14	523.67	529.67	459.67	-15923.33	459.67	459.67
11.13	524.67	530.67	459.67	-15923.33	459.67	459.67
12.13	524.67	531.67	459.67	-15923.33	459.67	459.67
13.12	525.67	531.67	459.67	-15923.33	459.67	459.67
14.12	525.67	532.67	459.67	-15923.33	459.67	459.67
15.11	526.67	532.67	459.67	-15923.33	459.67	459.67
16.11	526.67	532.67	459.67	-15923.33	459.67	459.67
17.10	526.67	533.67	459.67	-15923.33	459.67	459.67
18.10	526.67	533.67	459.67	-15923.33	459.67	459.67
19.09	527.67	533.67	459.67	-15923.33	459.67	459.67
20.09	527.67	533.67	459.67	-15923.33	459.67	459.67
21.08	527.67	533.67	459.67	-15923.33	459.67	459.67
22.08	527.67	534.67	459.67	-15923.33	459.67	459.67
23.07	528.67	534.67	459.67	-15923.33	459.67	459.67
24.07	528.67	534.67	459.67	-15923.33	459.67	459.67

NASA/RI 0H90 TRANSITION TEST
V418-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
59	RCC NOVAMIDE	0.00	0.000	-10.09	40.09	0.0532	21	28	31

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.98	426.72	1313.67	95.64	0.0444	3826.	3.897E-05	7.696E-08	1.937E+06	2.897E-02	546.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1891	350.	3.429E-01	4.235E-01	4.138E-01	5.599E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF
TOP 1(350)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(350)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(350)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	2.32					
TOP 4(350)	3.17	1.50	1.843E-02	0.6361	2.436E-02	0.8409
TOP 5(350)	4.17	1.93	1.621E-02	0.5596	2.143E-02	0.7398
TOP 6(350)	5.16	2.93	1.317E-02	0.4547	1.741E-02	0.6010
TOP 7(350)	6.16	3.92	1.138E-02	0.3928	1.504E-02	0.5192
TOP 8(350)	7.15	4.92	1.016E-02	0.3508	1.343E-02	0.4637
TOP 9(350)	8.15	5.91	9.267E-03	0.3199	1.225E-02	0.4229
TOP 10(350)	9.14	6.91	8.573E-03	0.2960	1.133E-02	0.3913
TOP 11(350)	10.14	7.90	8.015E-03	0.2767	1.060E-02	0.3658
TOP 12(350)	11.13	8.90	7.554E-03	0.2608	9.986E-03	0.3447
TOP 13(350)	12.13	9.89	7.164E-03	0.2473	9.470E-03	0.3269
TOP 14(350)	13.12	10.89	6.829E-03	0.2357	9.027E-03	0.3116
TOP 15(350)	14.12	11.88	6.536E-03	0.2256	8.641E-03	0.2983
TOP 16(350)	15.11	12.88	6.279E-03	0.2168	8.300E-03	0.2865
TOP 17(350)	16.11	13.87	6.049E-03	0.2088	7.997E-03	0.2761
TOP 18(350)	17.10	14.87	5.844E-03	0.2017	7.725E-03	0.2667
TOP 19(350)	18.10	15.86	5.657E-03	0.1953	7.479E-03	0.2582
TOP 20(350)	19.09	16.86	5.488E-03	0.1894	7.255E-03	0.2504
TOP 21(350)	20.09	17.85	5.333E-03	0.1841	7.050E-03	0.2434
TOP 22(350)	21.08	18.85	5.190E-03	0.1792	6.861E-03	0.2368
TOP 23(350)	22.08	19.84	5.058E-03	0.1746	6.687E-03	0.2308
TOP 24(350)	23.07	20.84	4.936E-03	0.1704	6.525E-03	0.2253

NASA/RI OH90 TRANSITION TEST
V416-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
59	RCC NOVAMIDE	0.00	0.000	-10.09	40.09	0.0532	21 28 31

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.98	426.72	1313.67	95.64	0.0444	3826.	3.697E-05	7.696E-08	1.937E+06	2.897E-02	546.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	516.67	516.67	459.67	-15923.33	459.67	459.67
2.18	516.67	516.67	459.67	-15923.33	459.67	459.67
3.17	519.67	520.67	459.67	-15923.33	459.67	459.67
4.17	519.67	520.67	459.67	-15923.33	459.67	459.67
5.16	520.67	524.67	459.67	-15923.33	459.67	459.67
6.16	521.67	526.67	459.67	-15923.33	459.67	459.67
7.15	522.67	527.67	459.67	-15923.33	459.67	459.67
8.15	523.67	527.67	459.67	-15923.33	459.67	459.67
9.14	523.67	527.67	459.67	-15923.33	459.67	459.67
10.14	523.67	528.67	459.67	-15923.33	459.67	459.67
11.13	524.67	529.67	459.67	-15923.33	459.67	459.67
12.13	524.67	529.67	459.67	-15923.33	459.67	459.67
13.12	524.67	529.67	459.67	-15923.33	459.67	459.67
14.12	525.67	529.67	459.67	-15923.33	459.67	459.67
15.11	525.67	530.67	459.67	-15923.33	459.67	459.67
16.11	525.67	530.67	459.67	-15923.33	459.67	459.67
17.10	526.67	530.67	459.67	-15923.33	459.67	459.67
18.10	526.67	531.67	459.67	-15923.33	459.67	459.67
19.09	527.67	531.67	459.67	-15923.33	459.67	459.67
20.09	527.67	531.67	459.67	-15923.33	459.67	459.67
21.08	527.67	532.67	459.67	-15923.33	459.67	459.67
22.08	526.67	532.67	459.67	-15923.33	459.67	459.67
23.07	526.67	533.67	459.67	-15923.33	459.67	459.67

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
60	RCC NOVAMIDE	0.00	0.000	-0.05	30.05	0.0532	21 54 47

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	320.09	1291.67	94.47	0.0339	3793.	3.008E-05	7.602E-08	1.501E+06	2.516E-02	545.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1891	300.	2.869E-01	3.320E-01	3.469E-01	4.306E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HREF	H(.9TO)	H(.9TO)/ HREF
TOP 1(300)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(300)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(300)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(300)	3.17	1.50	1.444E-02	0.5741	1.873E-02	0.7447
TOP 5(300)	4.17	2.49	1.119E-02	0.4449	1.452E-02	0.5771
TOP 6(300)	5.16	3.49	9.460E-03	0.3760	1.227E-02	0.4878
TOP 7(300)	6.16	4.48	8.344E-03	0.3317	1.082E-02	0.4302
TOP 8(300)	7.15	5.48	7.547E-03	0.3000	9.790E-03	0.3892
TOP 9(300)	8.15	6.47	6.943E-03	0.2760	9.006E-03	0.3580
TOP 10(300)	9.14	7.47	6.464E-03	0.2569	8.385E-03	0.3333
TOP 11(300)	10.14	8.46	6.072E-03	0.2414	7.876E-03	0.3131
TOP 12(300)	11.13	9.46	5.743E-03	0.2283	7.450E-03	0.2962
TOP 13(300)	12.13	10.45	5.463E-03	0.2172	7.087E-03	0.2817
TOP 14(300)	13.12	11.45	5.220E-03	0.2075	6.772E-03	0.2692
TOP 15(300)	14.12	12.44	5.007E-03	0.1990	6.495E-03	0.2582
TOP 16(300)	15.11	13.44	4.818E-03	0.1915	6.250E-03	0.2484
TOP 17(300)	16.11	14.43	4.649E-03	0.1848	6.031E-03	0.2397
TOP 18(300)	17.10	15.43	4.497E-03	0.1787	5.833E-03	0.2319
TOP 19(300)	18.10	16.42	4.358E-03	0.1732	5.653E-03	0.2247
TOP 20(300)	19.09	17.42	4.232E-03	0.1682	5.490E-03	0.2182
TOP 21(300)	20.09	18.41	4.116E-03	0.1636	5.339E-03	0.2122
TOP 22(300)	21.08	19.41	4.009E-03	0.1594	5.200E-03	0.2067
TOP 23(300)	22.08	20.40	3.910E-03	0.1554	5.072E-03	0.2016
TOP 24(300)	23.07	21.40	3.818E-03	0.1518	4.953E-03	0.1969
TOP 25(300)	24.07	22.39	3.732E-03	0.1484	4.841E-03	0.1925

NASA/RI 0H90 TRANSITION TEST
V418-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
60	RCC NOVAMIDE	0.00	0.000	-0.05	30.05	0.0532	21 54 47

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	320.09	1291.67	94.47	0.0339	3793.	3.008E-05	7.602E-08	1.501E+06	2.516E-02	545.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	516.67	517.67	459.67	-15923.33	459.67	459.67
2.18	518.67	520.67	459.67	-15923.33	459.67	459.67
3.17	519.67	522.67	459.67	-15923.33	459.67	459.67
4.17	520.67	524.67	459.67	-15923.33	459.67	459.67
5.16	520.67	524.67	459.67	-15923.33	459.67	459.67
6.16	521.67	526.67	459.67	-15923.33	459.67	459.67
7.15	521.67	526.67	459.67	-15923.33	459.67	459.67
8.15	522.67	527.67	459.67	-15923.33	459.67	459.67
9.14	522.67	528.67	459.67	-15923.33	459.67	459.67
10.14	522.67	528.67	459.67	-15923.33	459.67	459.67
11.13	523.67	529.67	459.67	-15923.33	459.67	459.67
12.13	523.67	529.67	459.67	-15923.33	459.67	459.67
13.12	524.67	529.67	459.67	-15923.33	459.67	459.67
14.12	524.67	530.67	459.67	-15923.33	459.67	459.67
15.11	524.67	530.67	459.67	-15923.33	459.67	459.67
16.11	525.67	530.67	459.67	-15923.33	459.67	459.67
17.10	525.67	530.67	459.67	-15923.33	459.67	459.67
18.10	525.67	531.67	459.67	-15923.33	459.67	459.67
19.09	525.67	531.67	459.67	-15923.33	459.67	459.67
20.09	526.67	531.67	459.67	-15923.33	459.67	459.67
21.08	526.67	531.67	459.67	-15923.33	459.67	459.67
22.08	526.67	532.67	459.67	-15923.33	459.67	459.67
23.07	526.67	532.67	459.67	-15923.33	459.67	459.67
24.07	526.67	532.67	459.67	-15923.33	459.67	459.67

V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
61	RCC NOVAMIDE	0.00	0.000	-10.12	40.12	0.0532	22	18	42

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	321.40	1293.67	94.62	0.0340	3796.	3.015E-05	7.614E-08	1.503E+06	2.521E-02	542.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1891	300.	2.889E-01	3.352E-01	3.491E-01	4.344E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(300)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(300)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(300)	2.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 4(300)	3.17		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.31					
TOP 5(300)	4.17	2.49	1.130E-02	0.4491	1.465E-02	0.5809
TOP 6(300)	5.16	3.49	9.551E-03	0.3788	1.238E-02	0.4910
TOP 7(300)	6.16	4.48	8.424E-03	0.3341	1.092E-02	0.4331
TOP 8(300)	7.15	5.48	7.620E-03	0.3022	9.878E-03	0.3917
TOP 9(300)	8.15	6.47	7.010E-03	0.2780	9.086E-03	0.3604
TOP 10(300)	9.14	7.47	6.526E-03	0.2588	8.459E-03	0.3355
TOP 11(300)	10.14	8.46	6.130E-03	0.2431	7.946E-03	0.3151
TOP 12(300)	11.13	9.46	5.799E-03	0.2300	7.516E-03	0.2981
TOP 13(300)	12.13	10.45	5.516E-03	0.2188	7.150E-03	0.2836
TOP 14(300)	13.12	11.45	5.271E-03	0.2090	6.832E-03	0.2709
TOP 15(300)	14.12	12.44	5.055E-03	0.2005	6.553E-03	0.2599
TOP 16(300)	15.11	13.44	4.865E-03	0.1929	6.306E-03	0.2501
TOP 17(300)	16.11	14.43	4.694E-03	0.1862	6.084E-03	0.2413
TOP 18(300)	17.10	15.43	4.540E-03	0.1801	5.885E-03	0.2334
TOP 19(300)	18.10	16.42	4.400E-03	0.1745	5.704E-03	0.2262
TOP 20(300)	19.09	17.42	4.273E-03	0.1695	5.538E-03	0.2197
TOP 21(300)	20.09	18.41	4.156E-03	0.1648	5.387E-03	0.2136

NASA/RI OH90 TRANSITION TEST
V416-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
61	RCC NOVAMIDE	0.00	0.000	-10.12	40.12	0.0532	22 18 42

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	321.40	1293.67	94.62	0.0340	3796.	3.015E-05	7.614E-08	1.503E+06	2.521E-02	542.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	516.67	517.67	459.67	-15923.33	459.67	459.67
2.18	519.67	518.67	459.67	-15923.33	459.67	459.67
3.17	519.67	522.67	459.67	-15923.33	459.67	459.67
4.17	520.67	524.67	459.67	-15923.33	459.67	459.67
5.16	521.67	525.67	459.67	-15923.33	459.67	459.67
6.16	522.67	526.67	459.67	-15923.33	459.67	459.67
7.15	522.67	527.67	459.67	-15923.33	459.67	459.67
8.15	523.67	527.67	459.67	-15923.33	459.67	459.67
9.14	523.67	528.67	459.67	-15923.33	459.67	459.67
10.14	524.67	528.67	459.67	-15923.33	459.67	459.67
11.13	524.67	529.67	459.67	-15923.33	459.67	459.67
12.13	524.67	529.67	459.67	-15923.33	459.67	459.67
13.12	525.67	529.67	459.67	-15923.33	459.67	459.67
14.12	525.67	530.67	459.67	-15923.33	459.67	459.67
15.11	526.67	530.67	459.67	-15923.33	459.67	459.67
16.11	526.67	530.67	459.67	-15923.33	459.67	459.67
17.10	526.67	530.67	459.67	-15923.33	459.67	459.67
18.10	526.67	531.67	459.67	-15923.33	459.67	459.67
19.09	527.67	531.67	459.67	-15923.33	459.67	459.67
20.09	527.67	531.67	459.67	-15923.33	459.67	459.67

V416-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
62	RCC NOVAMIDE	0.00	0.000	-0.06	30.06	0.0532	22 34 30

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	557.67	1310.67	95.20	0.0576	3822.	5.075E-05	7.660E-08	2.532E+06	3.301E-02	542.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1891	350.	3.477E-01	4.319E-01	4.192E-01	5.715E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(350)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(350)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(350)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(350)	3.17	1.50	1.879E-02	0.5693	2.486E-02	0.7532
TOP 5(350)	4.17	2.49	1.456E-02	0.4411	1.927E-02	0.5837
TOP 6(350)	5.16	3.49	1.231E-02	0.3729	1.629E-02	0.4934
TOP 7(350)	6.16	4.48	1.086E-02	0.3289	1.436E-02	0.4351
TOP 8(350)	7.15	5.48	9.820E-03	0.2975	1.299E-02	0.3936
TOP 9(350)	8.15	6.47	9.034E-03	0.2737	1.195E-02	0.3621
TOP 10(350)	9.14	7.47	8.410E-03	0.2548	1.113E-02	0.3371
TOP 11(350)	10.14	8.46	7.900E-03	0.2393	1.045E-02	0.3167
TOP 12(350)	11.13	9.46	7.473E-03	0.2264	9.887E-03	0.2995
TOP 13(350)	12.13	10.45	7.108E-03	0.2153	9.405E-03	0.2849
TOP 14(350)	13.12	11.45	6.792E-03	0.2058	8.987E-03	0.2723
TOP 15(350)	14.12	12.44	6.515E-03	0.1974	8.620E-03	0.2611
TOP 16(350)	15.11	13.44	6.269E-03	0.1899	8.295E-03	0.2513
TOP 17(350)	16.11	14.43	6.049E-03	0.1833	8.004E-03	0.2425
TOP 18(350)	17.10	15.43	5.851E-03	0.1772	7.741E-03	0.2345
TOP 19(350)	18.10	16.42	5.671E-03	0.1718	7.503E-03	0.2273
TOP 20(350)	19.09	17.42	5.506E-03	0.1668	7.285E-03	0.2207
TOP 21(350)	20.09	18.41	5.355E-03	0.1622	7.086E-03	0.2147

GROUP	***** MODEL DESCRIPTION *****			ALPHA-SECTOR	ALPHA-MODEL	PCK1/2	HR MIN SEC
	TILE TYPE	GAP	HEIGHT	DEG	DEG		
62	RCC NOVAMIDE	0.00	0.000	-0.06	30.06	0.0532	22 34 30

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	PHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	557.67	1310.67	95.20	0.0576	3822.	5.075E-05	7.660E-08	2.532E+06	3.301E-02	542.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	516.67	517.67	459.67	-15923.33	459.67	459.67
2.18	519.67	521.67	459.67	-15923.33	459.67	459.67
3.17	521.67	526.67	459.67	-15923.33	459.67	459.67
4.17	522.67	527.67	459.67	-15923.33	459.67	459.67
5.16	522.67	527.67	459.67	-15923.33	459.67	459.67
6.16	523.67	530.67	459.67	-15923.33	459.67	459.67
7.15	523.67	530.67	459.67	-15923.33	459.67	459.67
8.15	524.67	530.67	459.67	-15923.33	459.67	459.67
9.14	524.67	531.67	459.67	-15923.33	459.67	459.67
10.14	525.67	532.67	459.67	-15923.33	459.67	459.67
11.13	525.67	532.67	459.67	-15923.33	459.67	459.67
12.13	526.67	533.67	459.67	-15923.33	459.67	459.67
13.12	526.67	533.67	459.67	-15923.33	459.67	459.67
14.12	527.67	534.67	459.67	-15923.33	459.67	459.67
15.11	527.67	534.67	459.67	-15923.33	459.67	459.67
16.11	528.67	535.67	459.67	-15923.33	459.67	459.67
17.10	528.67	535.67	459.67	-15923.33	459.67	459.67
18.10	528.67	535.67	459.67	-15923.33	459.67	459.67
19.09	529.67	536.67	459.67	-15923.33	459.67	459.67
20.09	529.67	536.67	459.67	-15923.33	459.67	459.67

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
63	RCC NOVAMIDE	0.00	0.000	-10.12	40.12	0.0532	23 0 33

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	555.26	1324.67	96.21	0.0573	3842.	4.999E-05	7.742E-08	2.481E+06	3.300E-02	543.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1891	400.	4.046E-01	5.407E-01	4.873E-01	7.344E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HREF	H(.9TO)	H(.9TO)/ HREF
TOP 1(400)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(400)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(400)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(400)	3.17	1.50	2.352E-02	0.7129	3.195E-02	0.9683
TOP 5(400)	4.17	2.49	1.823E-02	0.5524	2.476E-02	0.7503
TOP 6(400)	5.16	3.49	1.541E-02	0.4669	2.093E-02	0.6342
TOP 7(400)	6.16	4.48	1.359E-02	0.4118	1.846E-02	0.5594
TOP 8(400)	7.15	5.48	1.229E-02	0.3725	1.670E-02	0.5060
TOP 9(400)	8.15	6.47	1.131E-02	0.3427	1.536E-02	0.4655
TOP 10(400)	9.14	7.47	1.053E-02	0.3190	1.430E-02	0.4333
TOP 11(400)	10.14	8.46	9.890E-03	0.2997	1.343E-02	0.4071
TOP 12(400)	11.13	9.46	9.355E-03	0.2835	1.271E-02	0.3850
TOP 13(400)	12.13	10.45	8.898E-03	0.2697	1.209E-02	0.3663
TOP 14(400)	13.12	11.45	8.503E-03	0.2577	1.155E-02	0.3500
TOP 15(400)	14.12	12.44	8.156E-03	0.2471	1.108E-02	0.3357
TOP 16(400)	15.11	13.44	7.848E-03	0.2378	1.066E-02	0.3230
TOP 17(400)	16.11	14.43	7.572E-03	0.2295	1.029E-02	0.3117
TOP 18(400)	17.10	15.43	7.324E-03	0.2220	9.948E-03	0.3015
TOP 19(400)	18.10	16.42	7.099E-03	0.2151	9.642E-03	0.2922
TOP 20(400)	19.09	17.42	6.893E-03	0.2089	9.362E-03	0.2837
TOP 21(400)	20.09	18.41	6.704E-03	0.2032	9.106E-03	0.2759

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
63	RCC NOVANIDE	0.00	0.000	-10.12	40.12	0.0532	23 0 33

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	555.26	1324.67	96.21	0.0573	3842.	4.999E-05	7.742E-08	2.481E+06	3.300E-02	543.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	517.67	517.67	459.67	-15923.33	459.67	459.67
2.18	521.67	523.67	459.67	-15923.33	459.67	459.67
3.17	522.67	526.67	459.67	-15923.33	459.67	459.67
4.17	524.67	528.67	459.67	-15923.33	459.67	459.67
5.16	525.67	530.67	459.67	-15923.33	459.67	459.67
6.16	526.67	531.67	459.67	-15923.33	459.67	459.67
7.15	527.67	531.67	459.67	-15923.33	459.67	459.67
8.15	528.67	533.67	459.67	-15923.33	459.67	459.67
9.14	529.67	533.67	459.67	-15923.33	459.67	459.67
10.14	530.67	534.67	459.67	-15923.33	459.67	459.67
11.13	530.67	535.67	459.67	-15923.33	459.67	459.67
12.13	531.67	535.67	459.67	-15923.33	459.67	459.67
13.12	531.67	536.67	459.67	-15923.33	459.67	459.67
14.12	532.67	536.67	459.67	-15923.33	459.67	459.67
15.11	532.67	537.67	459.67	-15923.33	459.67	459.67
16.11	533.67	537.67	459.67	-15923.33	459.67	459.67
17.10	533.67	538.67	459.67	-15923.33	459.67	459.67
18.10	533.67	538.67	459.67	-15923.33	459.67	459.67
19.09	534.67	538.67	459.67	-15923.33	459.67	459.67
20.09	534.67	538.67	459.67	-15923.33	459.67	459.67

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VAF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
64	RCC NOVAMIDE	0.00	0.000	-0.06	30.06	0.0532	23 26 53

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	672.35	1335.67	97.01	0.0694	3858.	6.004E-05	7.807E-08	2.967E+06	3.636E-02	548.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1891	400.	3.952E-01	5.215E-01	4.759E-01	7.048E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(400)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(400)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(400)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(400)	3.17	1.50	2.269E-02	0.6239	3.066E-02	0.8433
TOP 5(400)	4.17	2.49	1.758E-02	0.4835	2.376E-02	0.6534
TOP 6(400)	5.16	3.49	1.486E-02	0.4087	2.008E-02	0.5523
TOP 7(400)	6.16	4.48	1.311E-02	0.3604	1.771E-02	0.4872
TOP 8(400)	7.15	5.48	1.186E-02	0.3260	1.602E-02	0.4407
TOP 9(400)	8.15	6.47	1.091E-02	0.2999	1.474E-02	0.4054
TOP 10(400)	9.14	7.47	1.015E-02	0.2792	1.372E-02	0.3774
TOP 11(400)	10.14	8.46	9.538E-03	0.2623	1.289E-02	0.3545
TOP 12(400)	11.13	9.46	9.022E-03	0.2181	1.219E-02	0.3353
TOP 13(400)	12.13	10.45	8.582E-03	0.2360	1.160E-02	0.3190
TOP 14(400)	13.12	11.45	8.209E-03	0.2255	1.108E-02	0.3048
TOP 15(400)	14.12	12.44	7.886E-03	0.2163	1.063E-02	0.2923
TOP 16(400)	15.11	13.44	7.569E-03	0.2081	1.023E-02	0.2813
TOP 17(400)	16.11	14.43	7.303E-03	0.2008	9.871E-03	0.2714
TOP 18(400)	17.10	15.43	7.064E-03	0.1943	9.547E-03	0.2625
TOP 19(400)	18.10	16.42	6.846E-03	0.1883	9.253E-03	0.2545
TOP 20(400)	19.09	17.42	6.648E-03	0.1828	8.985E-03	0.2471
TOP 21(400)	20.09	18.41	6.466E-03	0.1778	8.739E-03	0.2403
TOP 22(400)	21.08	19.41	6.298E-03	0.1732	8.512E-03	0.2341
TOP 23(400)	22.08	20.40	6.142E-03	0.1689	8.302E-03	0.2283
TOP 24(400)	23.07	21.40	5.996E-03	0.1649	8.106E-03	0.2229

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
64	RCC NOVAMIDE	0.00	0.000	-0.06	30.06	0.0532	23 26 53

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	672.35	1335.67	97.01	0.0694	3858.	6.004E-05	7.807E-08	2.967E+06	3.636E-02	548.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	517.67	518.67	459.67	-15923.33	459.67	459.67
2.18	522.67	524.67	459.67	-15923.33	459.67	459.67
3.17	522.67	526.67	459.67	-15923.33	459.67	459.67
4.17	523.67	529.67	459.67	-15923.33	459.67	459.67
5.16	524.67	529.67	459.67	-15923.33	459.67	459.67
6.16	525.67	530.67	459.67	-15923.33	459.67	459.67
7.15	525.67	531.67	459.67	-15923.33	459.67	459.67
8.15	526.67	532.67	459.67	-15923.33	459.67	459.67
9.14	526.67	532.67	459.67	-15923.33	459.67	459.67
10.14	527.67	534.67	459.67	-15923.33	459.67	459.67
11.13	528.67	534.67	459.67	-15923.33	459.67	459.67
12.13	528.67	536.67	459.67	-15923.33	459.67	459.67
13.12	529.67	536.67	459.67	-15923.33	459.67	459.67
14.12	530.67	537.67	459.67	-15923.33	459.67	459.67
15.11	530.67	537.67	459.67	-15923.33	459.67	459.67
16.11	531.67	538.67	459.67	-15923.33	459.67	459.67
17.10	531.67	538.67	459.67	-15923.33	459.67	459.67
18.10	532.67	539.67	459.67	-15923.33	459.67	459.67
19.09	532.67	539.67	459.67	-15923.33	459.67	459.67
20.09	533.67	540.67	459.67	-15923.33	459.67	459.67
21.08	533.67	540.67	459.67	-15923.33	459.67	459.67
22.08	533.67	541.67	459.67	-15923.33	459.67	459.67
23.07	533.67	541.67	459.67	-15923.33	459.67	459.67

V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
65	RCC NOVAMIDE	0.00	0.000	-10.01	40.01	0.0532	23 51 13

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	670.74	1338.67	97.23	0.0693	3862.	5.976E-05	7.824E-08	2.950E+06	3.633E-02	541.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1891	450.	4.617E-01	6.692E-01	5.549E-01	9.383E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(450)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(450)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(450)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(450)	3.17	1.50	2.911E-02	0.8013	4.082E-02	1.1235
TOP 5(450)	4.17	2.49	2.256E-02	0.6209	3.163E-02	0.8706
TOP 6(450)	5.16	3.49	1.907E-02	0.5248	2.674E-02	0.7359
TOP 7(450)	6.16	4.48	1.682E-02	0.4629	2.358E-02	0.6490
TOP 8(450)	7.15	5.48	1.521E-02	0.4187	2.133E-02	0.5871
TOP 9(450)	8.15	6.47	1.400E-02	0.3852	1.962E-02	0.5401
TOP 10(450)	9.14	7.47	1.303E-02	0.3586	1.827E-02	0.5028
TOP 11(450)	10.14	8.46	1.224E-02	0.3368	1.716E-02	0.4723
TOP 12(450)	11.13	9.46	1.156E-02	0.3186	1.623E-02	0.4468
TOP 13(450)	12.13	10.45	1.101E-02	0.3031	1.544E-02	0.4250
TOP 14(450)	13.12	11.45	1.052E-02	0.2896	1.475E-02	0.4061
TOP 15(450)	14.12	12.44	1.009E-02	0.2778	1.415E-02	0.3895
TOP 16(450)	15.11	13.44	9.712E-03	0.2673	1.362E-02	0.3748
TOP 17(450)	16.11	14.43	9.371E-03	0.2579	1.314E-02	0.3616
TOP 18(450)	17.10	15.43	9.064E-03	0.2495	1.271E-02	0.3498
TOP 19(450)	18.10	16.42	8.785E-03	0.2418	1.232E-02	0.3390
TOP 20(450)	19.09	17.42	8.531E-03	0.2348	1.196E-02	0.3292
TOP 21(450)	20.09	18.41	8.297E-03	0.2283	1.163E-02	0.3202
TOP 22(450)	21.08	19.41	8.081E-03	0.2224	1.133E-02	0.3119
TOP 23(450)	22.08	20.40	7.882E-03	0.2169	1.105E-02	0.3042

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
65	RCC NOVAMIDE	0.00	0.000	-10.01	40.01	0.0532	23 51 13

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	670.74	1338.67	97.23	0.0693	3662.	5.976E-05	7.824E-08	2.950E+06	3.633E-02	541.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	518.67	519.67	459.67	-15923.33	459.67	459.67
2.18	522.67	523.67	459.67	-15923.33	459.67	459.67
3.17	526.67	528.67	459.67	-15923.33	459.67	459.67
4.17	527.67	532.67	459.67	-15923.33	459.67	459.67
5.16	528.67	532.67	459.67	-15923.33	459.67	459.67
6.16	529.67	534.67	459.67	-15923.33	459.67	459.67
7.15	530.67	535.67	459.67	-15923.33	459.67	459.67
8.15	531.67	536.67	459.67	-15923.33	459.67	459.67
9.14	531.67	536.67	459.67	-15923.33	459.67	459.67
10.14	532.67	538.67	459.67	-15923.33	459.67	459.67
11.13	533.67	539.67	459.67	-15923.33	459.67	459.67
12.13	534.67	540.67	459.67	-15923.33	459.67	459.67
13.12	535.67	541.67	459.67	-15923.33	459.67	459.67
14.12	536.67	542.67	459.67	-15923.33	459.67	459.67
15.11	536.67	542.67	459.67	-15923.33	459.67	459.67
16.11	537.67	543.67	459.67	-15923.33	459.67	459.67
17.10	538.67	544.67	459.67	-15923.33	459.67	459.67
18.10	538.67	544.67	459.67	-15923.33	459.67	459.67
19.09	539.67	545.67	459.67	-15923.33	459.67	459.67
20.09	539.67	545.67	459.67	-15923.33	459.67	459.67
21.08	540.67	546.67	459.67	-15923.33	459.67	459.67
22.08	541.67	546.67	459.67	-15923.33	459.67	459.67

NASA/RI OH90 TRANSITION TEST PAGE 1 3/ 8/78
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
67	RCC NOVAMIDE	0.00	0.000	0.03	29.97	0.0532	0 56 12

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
8.00	802.99	1336.67	96.86	0.0823	3860.	7.124E-05	7.794E-08	3.528E+06	3.963E-02	549.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1891	450.	4.574E-01	6.587E-01	5.510E-01	9.250E-01

PIC	NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP	1(450)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP	2(450)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP	3(450)	2.18		MODEL HAS NOT REACHED CENTERLINE			
TOP	4(450)	3.17		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =		3.31					
TOP	5(450)	4.17	1.93	2.521E-02	0.6362	3.541E-02	0.8934
TOP	6(450)	5.16	2.37	2.277E-02	0.5746	3.196E-02	0.8068
TOP	7(450)	6.16	3.36	1.911E-02	0.4821	2.683E-02	0.6770
TOP	8(450)	7.15	4.36	1.679E-02	0.4235	2.357E-02	0.5948
TOP	9(450)	8.15	5.35	1.515E-02	0.3821	2.127E-02	0.5366
TOP	10(450)	9.14	6.35	1.391E-02	0.3509	1.953E-02	0.4928
TOP	11(450)	10.14	7.34	1.293E-02	0.3263	1.816E-02	0.4582
TOP	12(450)	11.13	8.34	1.214E-02	0.3062	1.704E-02	0.4300
TOP	13(450)	12.13	9.33	1.147E-02	0.2894	1.611E-02	0.4064
TOP	14(450)	13.12	10.33	1.090E-02	0.2751	1.531E-02	0.3863
TOP	15(450)	14.12	11.32	1.041E-02	0.2628	1.462E-02	0.3690
TOP	16(450)	15.11	12.32	9.984E-03	0.2519	1.402E-02	0.3538
TOP	17(450)	16.11	13.31	9.604E-03	0.2423	1.349E-02	0.3403
TOP	18(450)	17.10	14.31	9.264E-03	0.2337	1.301E-02	0.3282
TOP	19(450)	18.10	15.30	8.958E-03	0.2260	1.258E-02	0.3174
TOP	20(450)	19.09	16.30	8.680E-03	0.2190	1.219E-02	0.3076
TOP	21(450)	20.09	17.29	8.427E-03	0.2126	1.183E-02	0.2986
TOP	22(450)	21.08	18.29	8.194E-03	0.2067	1.151E-02	0.2903
TOP	23(450)	22.08	19.28	7.980E-03	0.2013	1.121E-02	0.2827
TOP	24(450)	23.07	20.28	7.782E-03	0.1963	1.093E-02	0.2757
TOP	25(450)	24.07	21.27	7.598E-03	0.1917	1.067E-02	0.2692

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
67	RCC NOVAMIDE	0.00	0.000	0.03	29.97	0.0532	0 56 12

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
8.00	802.99	1336.67	96.86	0.0823	3860.	7.124E-05	7.794E-08	3.528E+06	3.963E-02	549.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	519.67	519.67	459.67	-15923.33	459.67	459.67
2.18	519.67	519.67	459.67	-15923.33	459.67	459.67
3.17	523.67	526.67	459.67	-15923.33	459.67	459.67
4.17	523.67	526.67	459.67	-15923.33	459.67	459.67
5.16	526.67	533.67	459.67	-15923.33	459.67	459.67
6.16	527.67	534.67	459.67	-15923.33	459.67	459.67
7.15	528.67	537.67	459.67	-15923.33	459.67	459.67
8.15	529.67	537.67	459.67	-15923.33	459.67	459.67
9.14	530.67	538.67	459.67	-15923.33	459.67	459.67
10.14	530.67	538.67	459.67	-15923.33	459.67	459.67
11.13	531.67	540.67	459.67	-15923.33	459.67	459.67
12.13	531.67	540.67	459.67	-15923.33	459.67	459.67
13.12	532.67	541.67	459.67	-15923.33	459.67	459.67
14.12	532.67	541.67	459.67	-15923.33	459.67	459.67
15.11	533.67	542.67	459.67	-15923.33	459.67	459.67
16.11	533.67	542.67	459.67	-15923.33	459.67	459.67
17.10	534.67	543.67	459.67	-15923.33	459.67	459.67
18.10	534.67	543.67	459.67	-15923.33	459.67	459.67
19.09	535.67	544.67	459.67	-15923.33	459.67	459.67
20.09	536.67	544.67	459.67	-15923.33	459.67	459.67
21.08	536.67	545.67	459.67	-15923.33	459.67	459.67
22.08	537.67	545.67	459.67	-15923.33	459.67	459.67
23.07	537.67	546.67	459.67	-15923.33	459.67	459.67
24.07	538.67	546.67	459.67	-15923.33	459.67	459.67

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
68	RCC NOVAMIDE	0.00	0.000	-10.01	40.01	0.0532	1	15	19

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
8.00	801.99	1337.67	96.93	0.0821	3861.	7.109E-05	7.800E-08	3.519E+06	3.961E-02	549.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1891	500.	5.203E-01	8.277E-01	6.267E-01	1.224E+00

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HREF	H(.9TO)	H(.9TO)/ HREF
TOP 1(500)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(500)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(500)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(500)	3.17	1.50	3.601E-02	0.9090	5.326E-02	1.3444
TOP 5(500)	4.17	2.49	2.790E-02	0.7044	4.127E-02	1.0417
TOP 6(500)	5.16	3.49	2.359E-02	0.5954	3.488E-02	0.8806
TOP 7(500)	6.16	4.48	2.080E-02	0.5251	3.077E-02	0.7766
TOP 8(500)	7.15	5.48	1.882E-02	0.4750	2.783E-02	0.7025
TOP 9(500)	8.15	6.47	1.731E-02	0.4370	2.560E-02	0.6463
TOP 10(500)	9.14	7.47	1.612E-02	0.4068	2.383E-02	0.6017
TOP 11(500)	10.14	8.46	1.514E-02	0.3821	2.239E-02	0.5652
TOP 12(500)	11.13	9.46	1.432E-02	0.3615	2.118E-02	0.5346
TOP 13(500)	12.13	10.45	1.362E-02	0.3438	2.014E-02	0.5085
TOP 14(500)	13.12	11.45	1.302E-02	0.3286	1.925E-02	0.4859
TOP 15(500)	14.12	12.44	1.248E-02	0.3151	1.846E-02	0.4661
TOP 16(500)	15.11	13.44	1.201E-02	0.3032	1.777E-02	0.4485
TOP 17(500)	16.11	14.43	1.159E-02	0.2926	1.714E-02	0.4327
TOP 18(500)	17.10	15.43	1.121E-02	0.2830	1.658E-02	0.4186
TOP 19(500)	18.10	16.42	1.087E-02	0.2743	1.607E-02	0.4057
TOP 20(500)	19.09	17.42	1.055E-02	0.2663	1.560E-02	0.3939
TOP 21(500)	20.09	18.41	1.026E-02	0.2591	1.518E-02	0.3831
TOP 22(500)	21.08	19.41	9.996E-03	0.2523	1.478E-02	0.3732
TOP 23(500)	22.08	20.40	9.749E-03	0.2461	1.442E-02	0.3640

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
68	RCC NOVAMIDE	0.00	0.000	-10.01 -	40.01	0.0532	1 15 19

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
8.00	801.99	1337.67	96.93	0.0821	3861.	7.109E-05	7.800E-08	3.519E+06	3.961E-02	549.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	519.67	519.67	459.67	-15923.33	459.67	459.67
2.18	525.67	524.67	459.67	-15923.33	459.67	459.67
3.17	528.67	536.67	459.67	-15923.33	459.67	459.67
4.17	532.67	538.67	459.67	-15923.33	459.67	459.67
5.16	533.67	541.67	459.67	-15923.33	459.67	459.67
6.16	535.67	542.67	459.67	-15923.33	459.67	459.67
7.15	535.67	542.67	459.67	-15923.33	459.67	459.67
8.15	537.67	544.67	459.67	-15923.33	459.67	459.67
9.14	537.67	546.67	459.67	-15923.33	459.67	459.67
10.14	538.67	547.67	459.67	-15923.33	459.67	459.67
11.13	539.67	547.67	459.67	-15923.33	459.67	459.67
12.13	540.67	548.67	459.67	-15923.33	459.67	459.67
13.12	541.67	549.67	459.67	-15923.33	459.67	459.67
14.12	542.67	550.67	459.67	-15923.33	459.67	459.67
15.11	544.67	551.67	459.67	-15923.33	459.67	459.67
16.11	545.67	552.67	459.67	-15923.33	459.67	459.67
17.10	546.67	552.67	459.67	-15923.33	459.67	459.67
18.10	547.67	554.67	459.67	-15923.33	459.67	459.67
19.09	548.67	555.67	459.67	-15923.33	459.67	459.67
20.09	548.67	555.67	459.67	-15923.33	459.67	459.67
21.08	549.67	556.67	459.67	-15923.33	459.67	459.67
22.08	550.67	556.67	459.67	-15923.33	459.67	459.67

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

3/ 8/78

GROUP	***** MODEL DESCRIPTION ***** TIGE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
70	RCC NOVA4IDE	0.01	0.000	-0.04	30.04	0.0532	2	50	50

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.98	427.43	1299.67	94.62	0.0445	3805.	3.945E-05	7.614E-08	1.972E+06	2.894E-02	544.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1891	350.	3.510E-01	4.376E-01	4.240E-01	5.818E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HREF	H(.9TO)	H(.9TO)/ HREF
TOP 1(350)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(350)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(350)	2.19		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(350)	3.17	1.50	1.905E-02	0.6583	2.531E-02	0.8748
TOP 5(350)	4.17	2.49	1.476E-02	0.5101	1.962E-02	0.6779
TOP 6(350)	5.16	3.49	1.248E-02	0.4312	1.658E-02	0.5730
TOP 7(350)	6.16	4.48	1.100E-02	0.3803	1.462E-02	0.5054
TOP 8(350)	7.15	5.48	9.954E-03	0.3440	1.323E-02	0.4571
TOP 9(350)	8.15	6.47	9.157E-03	0.3164	1.217E-02	0.4205
TOP 10(350)	9.14	7.47	8.525E-03	0.2946	1.133E-02	0.3915
TOP 11(350)	10.14	8.46	8.008E-03	0.2767	1.064E-02	0.3678
TOP 12(350)	11.13	9.46	7.575E-03	0.2618	1.007E-02	0.3479
TOP 13(350)	12.13	10.45	7.205E-03	0.2490	9.575E-03	0.3309
TOP 14(350)	13.12	11.45	6.885E-03	0.2379	9.150E-03	0.3162
TOP 15(350)	14.12	12.44	6.604E-03	0.2282	8.776E-03	0.3033
TOP 16(350)	15.11	13.44	6.355E-03	0.2196	8.445E-03	0.2918
TOP 17(350)	16.11	14.43	6.132E-03	0.2119	8.149E-03	0.2816
TOP 18(350)	17.10	15.43	5.931E-03	0.2049	7.881E-03	0.2724
TOP 19(350)	18.10	16.42	5.748E-03	0.1986	7.639E-03	0.2640
TOP 20(350)	19.09	17.42	5.581E-03	0.1929	7.417E-03	0.2563
TOP 21(350)	20.09	18.41	5.429E-03	0.1876	7.214E-03	0.2493
TOP 22(350)	21.08	19.41	5.287E-03	0.1827	7.027E-03	0.2428
TOP 23(350)	22.08	20.40	5.157E-03	0.1782	6.853E-03	0.2368
TOP 24(350)	23.07	21.40	5.036E-03	0.1740	6.692E-03	0.2313

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
70	RCC NOVAMIDE	0.01	0.000	-0.04	30.04	0.0532	2 50 50

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.98	427.43	1299.67	94.62	0.0445	3805.	3.945E-05	7.614E-08	1.972E+06	2.894E-02	544.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	519.67	519.67	459.67	-15923.33	459.67	459.67
2.19	521.67	523.67	459.67	-15923.33	459.67	459.67
3.17	522.67	526.67	459.67	-15923.33	459.67	459.67
4.17	523.67	528.67	459.67	-15923.33	459.67	459.67
5.16	523.67	528.67	459.67	-15923.33	459.67	459.67
6.16	524.67	530.67	459.67	-15923.33	459.67	459.67
7.15	524.67	531.67	459.67	-15923.33	459.67	459.67
8.15	525.67	531.67	459.67	-15923.33	459.67	459.67
9.14	525.67	531.67	459.67	-15923.33	459.67	459.67
10.14	526.67	532.67	459.67	-15923.33	459.67	459.67
11.13	526.67	533.67	459.67	-15923.33	459.67	459.67
12.13	527.67	534.67	459.67	-15923.33	459.67	459.67
13.12	527.67	534.67	459.67	-15923.33	459.67	459.67
14.12	528.67	535.67	459.67	-15923.33	459.67	459.67
15.11	528.67	535.67	459.67	-15923.33	459.67	459.67
16.11	529.67	536.67	459.67	-15923.33	459.67	459.67
17.10	529.67	536.67	459.67	-15923.33	459.67	459.67
18.10	529.67	537.67	459.67	-15923.33	459.67	459.67
19.09	530.67	537.67	459.67	-15923.33	459.67	459.67
20.09	530.67	537.67	459.67	-15923.33	459.67	459.67
21.08	530.67	537.67	459.67	-15923.33	459.67	459.67
22.08	531.67	537.67	459.67	-15923.33	459.67	459.67
23.07	531.67	538.67	459.67	-15923.33	459.67	459.67

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
71	RCC NOVAMIDE	0.01	0.000	-10.01	40.01	0.0532	3	2	59

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.98	427.43	1296.67	94.40	0.0445	3801.	3.954E-05	7.596E-08	1.979E+06	2.893E-02	549.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1591	400.	4.150E-01	5.625E-01	5.022E-01	7.751E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF
TOP 1(400)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(400)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(400)	2.19		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(400)	3.17	1.50	2.147E-02	0.8461	3.372E-02	1.1659
TOP 5(400)	4.17	2.49	1.896E-02	0.6556	2.613E-02	0.9034
TOP 6(400)	5.16	3.49	1.503E-02	0.5542	2.209E-02	0.7636
TOP 7(400)	6.16	4.48	1.414E-02	0.4886	1.948E-02	0.6735
TOP 8(400)	7.15	5.48	1.279E-02	0.4421	1.762E-02	0.6093
TOP 9(400)	8.15	6.47	1.176E-02	0.4067	1.621E-02	0.5605
TOP 10(400)	9.14	7.47	1.095E-02	0.3786	1.509E-02	0.5218
TOP 11(400)	10.14	8.46	1.029E-02	0.3557	1.418E-02	0.4901
TOP 12(400)	11.13	9.46	9.732E-03	0.3364	1.341E-02	0.4636
TOP 13(400)	12.13	10.45	9.257E-03	0.3200	1.276E-02	0.4410
TOP 14(400)	13.12	11.45	8.846E-03	0.3058	1.219E-02	0.4214
TOP 15(400)	14.12	12.44	8.484E-03	0.2933	1.169E-02	0.4042
TOP 16(400)	15.11	13.44	8.164E-03	0.2822	1.125E-02	0.3889
TOP 17(400)	16.11	14.43	7.878E-03	0.2723	1.086E-02	0.3753
TOP 18(400)	17.10	15.43	7.619E-03	0.2634	1.050E-02	0.3630
TOP 19(400)	18.10	16.42	7.385E-03	0.2553	1.018E-02	0.3518
TOP 20(400)	19.09	17.42	7.171E-03	0.2479	9.882E-03	0.3416
TOP 21(400)	20.09	18.41	6.974E-03	0.2411	9.611E-03	0.3323
TOP 22(400)	21.08	19.41	6.793E-03	0.2349	9.361E-03	0.3236
TOP 23(400)	22.08	20.40	6.626E-03	0.2291	9.130E-03	0.3156
TOP 24(400)	23.07	21.40	6.470E-03	0.2237	8.915E-03	0.3082
TOP 25(400)	24.07	22.39	6.324E-03	0.2186	8.715E-03	0.3013
TOP 26(400)	25.06	23.39	6.188E-03	0.2139	8.527E-03	0.2948
TOP 27(400)	26.06	24.38	6.061E-03	0.2095	8.352E-03	0.2887
TOP 28(400)	27.05	25.38	5.941E-03	0.2054	8.186E-03	0.2830
TOP 29(400)	28.05	26.37	5.827E-03	0.2015	8.030E-03	0.2776
TOP 30(400)	29.04	27.37	5.721E-03	0.1978	7.883E-03	0.2725
TOP 31(400)	30.04	28.36	5.619E-03	0.1943	7.743E-03	0.2677
TOP 32(400)	31.03	29.36	5.523E-03	0.1909	7.611E-03	0.2631
TOP 33(400)	32.03	30.35	5.432E-03	0.1878	7.485E-03	0.2588

V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
71	RCC NOVAMIDE	0.01	0.000	-10.01	40.01	0.0532	3	2	59

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.98	427.43	1296.67	94.40	0.0445	3801.	3.954E-05	7.596E-09	1.979E+06	2.893E-02	549.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	519.67	519.67	459.67	-15923.33	459.67	459.67
2.18	521.67	521.67	459.67	-15923.33	459.67	459.67
3.17	523.67	526.67	459.67	-15923.33	459.67	459.67
4.17	524.67	528.67	459.67	-15923.33	459.67	459.67
5.16	524.67	528.67	459.67	-15923.33	459.67	459.67
6.16	525.67	530.67	459.67	-15923.33	459.67	459.67
7.15	526.67	531.67	459.67	-15923.33	459.67	459.67
8.15	527.67	532.67	459.67	-15923.33	459.67	459.67
9.14	527.67	533.67	459.67	-15923.33	459.67	459.67
10.14	528.67	534.67	459.67	-15923.33	459.67	459.67
11.13	529.67	534.67	459.67	-15923.33	459.67	459.67
12.13	529.67	535.67	459.67	-15923.33	459.67	459.67
13.12	530.67	535.67	459.67	-15923.33	459.67	459.67
14.12	530.67	536.67	459.67	-15923.33	459.67	459.67
15.11	531.67	536.67	459.67	-15923.33	459.67	459.67
16.11	531.67	536.67	459.67	-15923.33	459.67	459.67
17.10	531.67	537.67	459.67	-15923.33	459.67	459.67
18.10	532.67	537.67	459.67	-15923.33	459.67	459.67
19.09	532.67	537.67	459.67	-15923.33	459.67	459.67
20.09	532.67	537.67	459.67	-15923.33	459.67	459.67
21.08	532.67	538.67	459.67	-15923.33	459.67	459.67
22.08	533.67	538.67	459.67	-15923.33	459.67	459.67
23.07	533.67	538.67	459.67	-15923.33	459.67	459.67
24.07	533.67	538.67	459.67	-15923.33	459.67	459.67
25.06	533.67	538.67	459.67	-15923.33	459.67	459.67
26.06	533.67	538.67	459.67	-15923.33	459.67	459.67
27.05	533.67	538.67	459.67	-15923.33	459.67	459.67
28.05	534.67	539.67	459.67	-15923.33	459.67	459.67
29.04	534.67	539.67	459.67	-15923.33	459.67	459.67
30.04	534.67	539.67	459.67	-15923.33	459.67	459.67
31.03	534.67	539.67	459.67	-15923.33	459.67	459.67
32.03	534.67	539.67	459.67	-15923.33	459.67	459.67

NASA/RI 0H90 IRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
72	RCC NOVAMIDE	0.01	0.000	-0.05	30.05	0.0532	3 34 13

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	556.47	1320.67	95.92	0.0575	3836.	5.025E-05	7.719E-08	2.498E+06	3.302E-02	548.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1842	350.	3.381E-01	4.152E-01	4.079E-01	5.475E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(350)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(350)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(350)	2.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 4(350)	3.17		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.31					
TOP 5(350)	4.17	2.49	1.400E-02	0.4239	1.846E-02	0.5590
TOP 6(350)	5.16	3.49	1.183E-02	0.3583	1.560E-02	0.4725
TOP 7(350)	6.16	4.48	1.043E-02	0.3160	1.376E-02	0.4167
TOP 8(350)	7.15	5.48	9.439E-03	0.2859	1.245E-02	0.3770
TOP 9(350)	8.15	6.47	8.683E-03	0.2630	1.145E-02	0.3468
TOP 10(350)	9.14	7.47	8.084E-03	0.2448	1.066E-02	0.3228
TOP 11(350)	10.14	8.46	7.593E-03	0.2300	1.001E-02	0.3033
TOP 12(350)	11.13	9.46	7.183E-03	0.2175	9.472E-03	0.2869
TOP 13(350)	12.13	10.45	6.832E-03	0.2069	9.009E-03	0.2729
TOP 14(350)	13.12	11.45	6.529E-03	0.1977	8.609E-03	0.2607
TOP 15(350)	14.12	12.44	6.262E-03	0.1897	8.257E-03	0.2501
TOP 16(350)	15.11	13.44	6.026E-03	0.1825	7.946E-03	0.2407
TOP 17(350)	16.11	14.43	5.814E-03	0.1761	7.667E-03	0.2322
TOP 18(350)	17.10	15.43	5.624E-03	0.1703	7.416E-03	0.2246
TOP 19(350)	18.10	16.42	5.451E-03	0.1651	7.187E-03	0.2177
TOP 20(350)	19.09	17.42	5.293E-03	0.1603	6.979E-03	0.2114
TOP 21(350)	20.09	18.41	5.148E-03	0.1559	6.788E-03	0.2056

NASA/PI OH90 TRANSITION TEST
V418-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
72	RCC NOVAMIDE	0.01	0.000	-0.05	30.05	0.0532	3 34 13

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	556.47	1320.67	95.92	0.0575	3836.	5.025E-05	7.719E-08	2.498E+06	3.302E-02	548.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	519.67	519.67	459.67	-15923.33	459.67	459.67
2.18	522.67	523.67	459.67	-15923.33	459.67	459.67
3.17	524.67	529.67	459.67	-15923.33	459.67	459.67
4.17	524.67	531.67	459.67	-15923.33	459.67	459.67
5.16	525.67	531.67	459.67	-15923.33	459.67	459.67
6.16	526.67	533.67	459.67	-15923.33	459.67	459.67
7.15	526.67	533.67	459.67	-15923.33	459.67	459.67
8.15	526.67	534.67	459.67	-15923.33	459.67	459.67
9.14	526.67	535.67	459.67	-15923.33	459.67	459.67
10.14	527.67	535.67	459.67	-15923.33	459.67	459.67
11.13	527.67	535.67	459.67	-15923.33	459.67	459.67
12.13	528.67	536.67	459.67	-15923.33	459.67	459.67
13.12	528.67	536.67	459.67	-15923.33	459.67	459.67
14.12	529.67	537.67	459.67	-15923.33	459.67	459.67
15.11	529.67	538.67	459.67	-15923.33	459.67	459.67
16.11	530.67	538.67	459.67	-15923.33	459.67	459.67
17.10	530.67	538.67	459.67	-15923.33	459.67	459.67
18.10	531.67	539.67	459.67	-15923.33	459.67	459.67
19.09	531.67	539.67	459.67	-15923.33	459.67	459.67
20.09	532.67	540.67	459.67	-15923.33	459.67	459.67

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
73	RCC NOVAMIDE	0.01	0.000	0.03	29.97	0.0532	3 55 27

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	555.46	1316.67	95.78	0.0574	3833.	5.024E-05	7.707E-08	2.499E+06	3.298E-02	542.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1842	350.	3.441E-01	4.256E-01	4.145E-01	5.615E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(350)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(350)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(350)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(350)	3.17	1.50	1.852E-02	0.5614	2.443E-02	0.7407
TOP 5(350)	4.17	2.49	1.435E-02	0.4350	1.893E-02	0.5740
TOP 6(350)	5.16	3.49	1.213E-02	0.3677	1.600E-02	0.4852
TOP 7(350)	6.16	4.49	1.070E-02	0.3243	1.411E-02	0.4279
TOP 8(350)	7.15	5.48	9.676E-03	0.2934	1.277E-02	0.3871
TOP 9(350)	8.15	6.47	8.901E-03	0.2699	1.174E-02	0.3561
TOP 10(350)	9.14	7.47	8.286E-03	0.2513	1.093E-02	0.3315
TOP 11(350)	10.14	8.46	7.784E-03	0.2360	1.027E-02	0.3114
TOP 12(350)	11.13	9.46	7.363E-03	0.2233	9.714E-03	0.2946
TOP 13(350)	12.13	10.45	7.004E-03	0.2124	9.240E-03	0.2802
TOP 14(350)	13.12	11.45	6.692E-03	0.2029	8.829E-03	0.2677
TOP 15(350)	14.12	12.44	6.419E-03	0.1946	8.469E-03	0.2568
TOP 16(350)	15.11	13.44	6.177E-03	0.1873	8.149E-03	0.2471
TOP 17(350)	16.11	14.43	5.960E-03	0.1807	7.863E-03	0.2384

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
73	RCC NOVAMIDE	0.01	0.000	0.03	29.97	0.0532	3 55 27

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	555.46	1318.67	95.78	0.0574	3833.	5.024E-05	7.707E-08	2.499E+06	3.298E-02	542.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	519.67	519.67	459.67	-15923.33	459.67	459.67
2.18	520.67	521.67	459.67	-15923.33	459.67	459.67
3.17	523.67	529.67	459.67	-15923.33	459.67	459.67
4.17	524.67	530.67	459.67	-15923.33	459.67	459.67
5.16	525.67	531.67	459.67	-15923.33	459.67	459.67
6.16	526.67	532.67	459.67	-15923.33	459.67	459.67
7.15	527.67	534.67	459.67	-15923.33	459.67	459.67
8.15	527.67	534.67	459.67	-15923.33	459.67	459.67
9.14	529.67	535.67	459.67	-15923.33	459.67	459.67
10.14	529.67	536.67	459.67	-15923.33	459.67	459.67
11.13	529.67	537.67	459.67	-15923.33	459.67	459.67
12.13	530.67	537.67	459.67	-15923.33	459.67	459.67
13.12	531.67	538.67	459.67	-15923.33	459.67	459.67
14.12	531.67	538.67	459.67	-15923.33	459.67	459.67
15.11	531.67	538.67	459.67	-15923.33	459.67	459.67
16.11	532.67	539.67	459.67	-15923.33	459.67	459.67

V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
74	RCC NOVAMIDE	0.01	0.000	0.03	29.97	0.0532	4	13	13

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	321.00	1286.67	94.11	0.0340	3785.	3.028E-05	7.573E-08	1.514E+06	2.518E-02	546.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1842	250.	2.203E-01	2.375E-01	2.666E-01	3.018E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HREF	H(.9TO)	H(.9TO)/ HREF
TOP 1(250)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(250)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(250)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(250)	3.17	1.50	1.033E-02	0.4104	1.313E-02	0.5216
TOP 5(250)	4.17	2.49	8.007E-03	0.3180	1.017E-02	0.4042
TOP 6(250)	5.16	3.49	6.768E-03	0.2688	8.601E-03	0.3416
TOP 7(250)	6.16	4.48	5.969E-03	0.2371	7.586E-03	0.3013
TOP 8(250)	7.15	5.48	5.400E-03	0.2145	6.862E-03	0.2726
TOP 9(250)	8.15	6.47	4.967E-03	0.1973	6.312E-03	0.2507
TOP 10(250)	9.14	7.47	4.624E-03	0.1837	5.877E-03	0.2334
TOP 11(250)	10.14	8.46	4.344E-03	0.1725	5.520E-03	0.2193
TOP 12(250)	11.13	9.46	4.109E-03	0.1632	5.222E-03	0.2074
TOP 13(250)	12.13	10.45	3.906E-03	0.1552	4.967E-03	0.1973
TOP 14(250)	13.12	11.45	3.735E-03	0.1483	4.746E-03	0.1885
TOP 15(250)	14.12	12.44	3.582E-03	0.1423	4.552E-03	0.1808
TOP 16(250)	15.11	13.44	3.447E-03	0.1369	4.380E-03	0.1740
TOP 17(250)	16.11	14.43	3.326E-03	0.1321	4.227E-03	0.1679
TOP 18(250)	17.10	15.43	3.217E-03	0.1278	4.088E-03	0.1624
TOP 19(250)	18.10	16.42	3.118E-03	0.1239	3.962E-03	0.1574
TOP 20(250)	19.09	17.42	3.028E-03	0.1203	3.848E-03	0.1528

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
74	PCC NOVAMIDE	0.01	0.000	0.03	29.97	0.0532	4 13 13

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	321.00	1286.67	94.11	0.0340	3785.	3.028E-05	7.573E-08	1.514E+06	2.518E-02	546.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	519.67	519.67	459.67	-15923.33	459.67	459.67
2.18	521.67	522.67	459.67	-15923.33	459.67	459.67
3.17	522.67	525.67	459.67	-15923.33	459.67	459.67
4.17	522.67	527.67	459.67	-15923.33	459.67	459.67
5.16	522.67	527.67	459.67	-15923.33	459.67	459.67
6.16	523.67	529.67	459.67	-15923.33	459.67	459.67
7.15	524.67	529.67	459.67	-15923.33	459.67	459.67
8.15	525.67	530.67	459.67	-15923.33	459.67	459.67
9.14	525.67	531.67	459.67	-15923.33	459.67	459.67
10.14	526.67	532.67	459.67	-15923.33	459.67	459.67
11.13	526.67	532.67	459.67	-15923.33	459.67	459.67
12.13	527.67	533.67	459.67	-15923.33	459.67	459.67
13.12	527.67	533.67	459.67	-15923.33	459.67	459.67
14.12	527.67	533.67	459.67	-15923.33	459.67	459.67
15.11	528.67	533.67	459.67	-15923.33	459.67	459.67
16.11	528.67	534.67	459.67	-15923.33	459.67	459.67
17.10	528.67	534.67	459.67	-15923.33	459.67	459.67
18.10	528.67	534.67	459.67	-15923.33	459.67	459.67
19.09	529.67	534.67	459.67	-15923.33	459.67	459.67

NASA/RI 0H90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
75	RCC NOVAMIDE	0.01	0.000	-10.00	40.00	0.0532	4	30	58

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	319.99	1290.67	94.40	0.0339	3791.	3.009E-05	7.596E-08	1.502E+06	2.515E-02	546.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1842	250.	2.191E-01	2.359E-01	2.651E-01	2.995E-01

PTC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(250)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(250)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(250)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(250)	3.17	1.50	1.027E-02	0.4082	1.303E-02	0.5182
TOP 5(250)	4.17	2.49	7.954E-03	0.3163	1.010E-02	0.4015
TOP 6(250)	5.16	3.49	6.724E-03	0.2674	8.535E-03	0.3394
TOP 7(250)	6.16	4.48	5.930E-03	0.2359	7.528E-03	0.2993
TOP 8(250)	7.15	5.48	5.364E-03	0.2133	6.810E-03	0.2708
TOP 9(250)	8.15	6.47	4.935E-03	0.1962	6.264E-03	0.2491
TOP 10(250)	9.14	7.47	4.594E-03	0.1827	5.832E-03	0.2319
TOP 11(250)	10.14	8.46	4.316E-03	0.1716	5.476E-03	0.2178
TOP 12(250)	11.13	9.46	4.082E-03	0.1623	5.182E-03	0.2061
TOP 13(250)	12.13	10.45	3.883E-03	0.1544	4.929E-03	0.1960
TOP 14(250)	13.12	11.45	3.710E-03	0.1475	4.710E-03	0.1873
TOP 15(250)	14.12	12.44	3.559E-03	0.1415	4.516E-03	0.1796
TOP 16(250)	15.11	13.44	3.425E-03	0.1362	4.347E-03	0.1729
TOP 17(250)	16.11	14.43	3.304E-03	0.1314	4.195E-03	0.1668
TOP 18(250)	17.10	15.43	3.196E-03	0.1271	4.057E-03	0.1613
TOP 19(250)	18.10	16.42	3.098E-03	0.1232	3.932E-03	0.1564

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
75	RCC NOVAMIDE	0.01	0.000	-10.00	40.00	0.0532	4 30 58

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	319.99	1290.67	94.40	0.0339	3791.	3.009E-05	7.596E-08	1.502E+06	2.515E-02	546.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	519.67	519.67	459.67	-15923.33	459.67	459.67
2.18	519.67	521.67	459.67	-15923.33	459.67	459.67
3.17	522.67	524.67	459.67	-15923.33	459.67	459.67
4.17	523.67	526.67	459.67	-15923.33	459.67	459.67
5.16	523.67	526.67	459.67	-15923.33	459.67	459.67
6.16	524.67	528.67	459.67	-15923.33	459.67	459.67
7.15	525.67	529.67	459.67	-15923.33	459.67	459.67
8.15	525.67	530.67	459.67	-15923.33	459.67	459.67
9.14	526.67	530.67	459.67	-15923.33	459.67	459.67
10.14	526.67	531.67	459.67	-15923.33	459.67	459.67
11.13	527.67	531.67	459.67	-15923.33	459.67	459.67
12.13	527.67	532.67	459.67	-15923.33	459.67	459.67
13.12	528.67	532.67	459.67	-15923.33	459.67	459.67
14.12	528.67	533.67	459.67	-15923.33	459.67	459.67
15.11	529.67	533.67	459.67	-15923.33	459.67	459.67
16.11	529.67	533.67	459.67	-15923.33	459.67	459.67
17.10	529.67	534.67	459.67	-15923.33	459.67	459.67
18.10	529.67	534.67	459.67	-15923.33	459.67	459.67

V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION *****			ALPHA-SECTOR	ALPHA-MODEL	PCK1/2	HR	MIN	SEC
	TILE TYPE	GAP	HEIGHT	DEG	DEG				
76	RCC NOVAMIDE	0.01	0.000	-0.04	30.04	0.0532	5	2	31

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	211.45	1276.67	93.81	0.0227	3770.	2.034E-05	7.549E-08	1.016E+06	2.052E-02	537.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1842	175.	1.313E-01	1.299E-01	1.587E-01	1.611E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(175)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(175)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(175)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(175)	3.17	1.50	5.652E-03	0.2755	7.009E-03	0.3416
TOP 5(175)	4.17	2.49	4.380E-03	0.2134	5.431E-03	0.2647
TOP 6(175)	5.16	3.49	3.702E-03	0.1804	4.591E-03	0.2237
TOP 7(175)	6.16	4.48	3.265E-03	0.1591	4.049E-03	0.1973
TOP 8(175)	7.15	5.48	2.954E-03	0.1439	3.663E-03	0.1785
TOP 9(175)	8.15	6.47	2.717E-03	0.1324	3.369E-03	0.1642
TOP 10(175)	9.14	7.47	2.530E-03	0.1233	3.137E-03	0.1529
TOP 11(175)	10.14	8.46	2.376E-03	0.1158	2.947E-03	0.1436
TOP 12(175)	11.13	9.46	2.248E-03	0.1095	2.787E-03	0.1358
TOP 13(175)	12.13	10.45	2.138E-03	0.1042	2.651E-03	0.1292
TOP 14(175)	13.12	11.45	2.043E-03	0.0996	2.533E-03	0.1235
TOP 15(175)	14.12	12.44	1.960E-03	0.0955	2.430E-03	0.1184
TOP 16(175)	15.11	13.44	1.886E-03	0.0919	2.338E-03	0.1139
TOP 17(175)	16.11	14.43	1.819E-03	0.0887	2.256E-03	0.1099
TOP 18(175)	17.10	15.43	1.760E-03	0.0858	2.182E-03	0.1063
TOP 19(175)	18.10	16.42	1.706E-03	0.0831	2.115E-03	0.1031

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
76	RCC NOVAMIDE	0.01	0.000	-0.04 -	30.04	0.0532	5 2 31

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	211.45	1276.67	93.81	0.0227	3770.	2.034E-05	7.549E-08	1.016E+06	2.052E-02	537.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	518.67	519.67	459.67	-15923.33	459.67	459.67
2.18	519.67	520.67	459.67	-15923.33	459.67	459.67
3.17	520.67	522.67	459.67	-15923.33	459.67	459.67
4.17	521.67	525.67	459.67	-15923.33	459.67	459.67
5.16	521.67	525.67	459.67	-15923.33	459.67	459.67
6.16	522.67	526.67	459.67	-15923.33	459.67	459.67
7.15	522.67	526.67	459.67	-15923.33	459.67	459.67
8.15	522.67	527.67	459.67	-15923.33	459.67	459.67
9.14	523.67	527.67	459.67	-15923.33	459.67	459.67
10.14	523.67	528.67	459.67	-15923.33	459.67	459.67
11.13	524.67	528.67	459.67	-15923.33	459.67	459.67
12.13	524.67	529.67	459.67	-15923.33	459.67	459.67
13.12	524.67	529.67	459.67	-15923.33	459.67	459.67
14.12	525.67	529.67	459.67	-15923.33	459.67	459.67
15.11	525.67	530.67	459.67	-15923.33	459.67	459.67
16.11	525.67	530.67	459.67	-15923.33	459.67	459.67
17.10	525.67	530.67	459.67	-15923.33	459.67	459.67
18.10	526.67	531.67	459.67	-15923.33	459.67	459.67

NASA/RI 0H90 TRANSITION TEST
V418-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
77	RCC NOVAMIDE	0.01	0.000	-10.01	40.01	0.0532	5 21 13

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	212.16	1277.67	93.89	0.0228	3772.	2.039E-05	7.555E-08	1.018E+06	2.056E-02	533.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1942	225.	2.030E-01	2.151E-01	2.450E-01	2.710E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HREF	H(.9TO)	H(.9TO)/HREF
TOP 1(225)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(225)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(225)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(225)	3.17	1.50	9.357E-03	0.4552	1.179E-02	0.5736
TOP 5(225)	4.17	2.49	7.250E-03	0.3527	9.137E-03	0.4445
TOP 6(225)	5.16	3.49	6.129E-03	0.2981	7.723E-03	0.3757
TOP 7(225)	6.16	4.48	5.405E-03	0.2629	6.812E-03	0.3314
TOP 8(225)	7.15	5.48	4.890E-03	0.2379	6.162E-03	0.2997
TOP 9(225)	8.15	6.47	4.498E-03	0.2188	5.668E-03	0.2757
TOP 10(225)	9.14	7.47	4.188E-03	0.2037	5.277E-03	0.2567
TOP 11(225)	10.14	8.46	3.934E-03	0.1913	4.957E-03	0.2411
TOP 12(225)	11.13	9.46	3.721E-03	0.1810	4.689E-03	0.2281
TOP 13(225)	12.13	10.45	3.539E-03	0.1722	4.460E-03	0.2170
TOP 14(225)	13.12	11.45	3.382E-03	0.1645	4.262E-03	0.2073
TOP 15(225)	14.12	12.44	3.244E-03	0.1578	4.086E-03	0.1989
TOP 16(225)	15.11	13.44	3.121E-03	0.1518	3.934E-03	0.1914
TOP 17(225)	16.11	14.43	3.012E-03	0.1465	3.796E-03	0.1846
TOP 18(225)	17.10	15.43	2.913E-03	0.1417	3.671E-03	0.1786
TOP 19(225)	18.10	16.42	2.824E-03	0.1373	3.558E-03	0.1731
TOP 20(225)	19.09	17.42	2.742E-03	0.1334	3.455E-03	0.1681
TOP 21(225)	20.09	18.41	2.667E-03	0.1297	3.360E-03	0.1635
TOP 22(225)	21.08	19.41	2.597E-03	0.1263	3.273E-03	0.1592
TOP 23(225)	22.08	20.40	2.533E-03	0.1232	3.192E-03	0.1553
TOP 24(225)	23.07	21.40	2.474E-03	0.1203	3.117E-03	0.1516
TOP 25(225)	24.07	22.39	2.418E-03	0.1176	3.047E-03	0.1482
TOP 26(225)	25.06	23.39	2.366E-03	0.1151	2.982E-03	0.1450
TOP 27(225)	26.06	24.38	2.317E-03	0.1127	2.920E-03	0.1420
TOP 28(225)	27.05	25.38	2.271E-03	0.1105	2.862E-03	0.1392
TOP 29(225)	28.05	26.37	2.228E-03	0.1084	2.809E-03	0.1366
TOP 30(225)	29.04	27.37	2.187E-03	0.1064	2.756E-03	0.1341
TOP 31(225)	30.04	28.36	2.148E-03	0.1045	2.707E-03	0.1317
TOP 32(225)	31.03	29.36	2.112E-03	0.1027	2.661E-03	0.1295
TOP 33(225)	32.03	30.35	2.077E-03	0.1010	2.617E-03	0.1273

GROUP	***** MODEL DESCRIPTION ***** FILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
77	RCC NOVAMIDE	0.01	0.000	-10.01	40.01	0.0532	5 21 13

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	212.16	1277.67	93.89	0.0228	3772.	2.039E-05	7.555E-08	1.018E+06	2.056E-02	533.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	518.67	519.67	459.67	-15923.33	459.67	459.67
2.18	520.67	520.67	459.67	-15923.33	459.67	459.67
3.17	521.67	522.67	459.67	-15923.33	459.67	459.67
4.17	521.67	524.67	459.67	-15923.33	459.67	459.67
5.16	522.67	524.67	459.67	-15923.33	459.67	459.67
6.16	522.67	526.67	459.67	-15923.33	459.67	459.67
7.15	523.67	526.67	459.67	-15923.33	459.67	459.67
8.15	523.67	527.67	459.67	-15923.33	459.67	459.67
9.14	524.67	528.67	459.67	-15923.33	459.67	459.67
10.14	524.67	528.67	459.67	-15923.33	459.67	459.67
11.13	525.67	528.67	459.67	-15923.33	459.67	459.67
12.13	525.67	529.67	459.67	-15923.33	459.67	459.67
13.12	525.67	529.67	459.67	-15923.33	459.67	459.67
14.12	526.67	530.67	459.67	-15923.33	459.67	459.67
15.11	526.67	530.67	459.67	-15923.33	459.67	459.67
16.11	526.67	530.67	459.67	-15923.33	459.67	459.67
17.10	527.67	530.67	459.67	-15923.33	459.67	459.67
18.10	527.67	531.67	459.67	-15923.33	459.67	459.67
19.09	527.67	531.67	459.67	-15923.33	459.67	459.67
20.09	527.67	531.67	459.67	-15923.33	459.67	459.67
21.08	527.67	531.67	459.67	-15923.33	459.67	459.67
22.08	527.67	531.67	459.67	-15923.33	459.67	459.67
23.07	528.67	531.67	459.67	-15923.33	459.67	459.67
24.07	528.67	531.67	459.67	-15923.33	459.67	459.67
25.06	528.67	532.67	459.67	-15923.33	459.67	459.67
26.06	528.67	532.67	459.67	-15923.33	459.67	459.67
27.05	528.67	532.67	459.67	-15923.33	459.67	459.67
28.05	528.67	532.67	459.67	-15923.33	459.67	459.67
29.04	528.67	532.67	459.67	-15923.33	459.67	459.67
30.04	528.67	532.67	459.67	-15923.33	459.67	459.67
31.03	528.67	532.67	459.67	-15923.33	459.67	459.67
32.03	529.67	532.67	459.67	-15923.33	459.67	459.67

V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
78	PCC NOVAMIDE	0.01	0.010	-0.05	30.05	0.0532	5	51	3

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	212.46	1276.67	93.81	0.0229	3770.	2.043E-05	7.549E-08	1.020E+06	2.057E-02	536.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1842	200.	1.662E-01	1.700E-01	2.009E-01	2.124E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(200)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(200)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(200)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(200)	3.17	1.50	7.395E-03	0.3595	9.242E-03	0.4493
TOP 5(200)	4.17	2.49	5.730E-03	0.2786	7.162E-03	0.3482
TOP 6(200)	5.16	3.49	4.844E-03	0.2355	6.054E-03	0.2943
TOP 7(200)	6.16	4.48	4.272E-03	0.2077	5.339E-03	0.2596
TOP 8(200)	7.15	5.48	3.864E-03	0.1879	4.830E-03	0.2348
TOP 9(200)	8.15	6.47	3.555E-03	0.1728	4.443E-03	0.2160
TOP 10(200)	9.14	7.47	3.310E-03	0.1609	4.136E-03	0.2011
TOP 11(200)	10.14	8.46	3.109E-03	0.1511	3.885E-03	0.1889
TOP 12(200)	11.13	9.46	2.941E-03	0.1430	3.675E-03	0.1787
TOP 13(200)	12.13	10.45	2.797E-03	0.1360	3.496E-03	0.1700
TOP 14(200)	13.12	11.45	2.673E-03	0.1299	3.341E-03	0.1624
TOP 15(200)	14.12	12.44	2.564E-03	0.1246	3.204E-03	0.1558
TOP 16(200)	15.11	13.44	2.467E-03	0.1199	3.083E-03	0.1499
TOP 17(200)	16.11	14.43	2.380E-03	0.1157	2.975E-03	0.1446
TOP 18(200)	17.10	15.43	2.302E-03	0.1119	2.877E-03	0.1399
TOP 19(200)	18.10	16.42	2.232E-03	0.1085	2.789E-03	0.1356
TOP 20(200)	19.09	17.42	2.167E-03	0.1053	2.708E-03	0.1317
TOP 21(200)	20.09	18.41	2.107E-03	0.1025	2.634E-03	0.1281
TOP 22(200)	21.08	19.41	2.053E-03	0.0998	2.565E-03	0.1247

NASA/RI 0H90 TRANSITION TEST
V418-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
78	RCC NOVAMIDE	0.01	0.010	-0.05	30.05	0.0532	5 51 3

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	212.46	1276.67	93.81	0.0229	3770.	2.043E-05	7.549E-08	1.020E+06	2.057E-02	536.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	518.67	518.67	459.67	-15923.33	459.67	459.67
2.18	519.67	521.67	459.67	-15923.33	459.67	459.67
3.17	520.67	523.67	459.67	-15923.33	459.67	459.67
4.17	520.67	524.67	459.67	-15923.33	459.67	459.67
5.16	521.67	525.67	459.67	-15923.33	459.67	459.67
6.16	521.67	526.67	459.67	-15923.33	459.67	459.67
7.15	522.67	526.67	459.67	-15923.33	459.67	459.67
8.15	522.67	527.67	459.67	-15923.33	459.67	459.67
9.14	522.67	527.67	459.67	-15923.33	459.67	459.67
10.14	523.67	528.67	459.67	-15923.33	459.67	459.67
11.13	523.67	529.67	459.67	-15923.33	459.67	459.67
12.13	523.67	529.67	459.67	-15923.33	459.67	459.67
13.12	524.67	530.67	459.67	-15923.33	459.67	459.67
14.12	524.67	530.67	459.67	-15923.33	459.67	459.67
15.11	525.67	531.67	459.67	-15923.33	459.67	459.67
16.11	525.67	531.67	459.67	-15923.33	459.67	459.67
17.10	525.67	531.67	459.67	-15923.33	459.67	459.67
18.10	525.67	531.67	459.67	-15923.33	459.67	459.67
19.09	526.67	532.67	459.67	-15923.33	459.67	459.67
20.09	526.67	532.67	459.67	-15923.33	459.67	459.67
21.08	526.67	532.67	459.67	-15923.33	459.67	459.67

V418-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
79	RCC NOVAMIDE	0.01	0.010	-10.00	40.00	0.0532	6 11 49

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	212.96	1275.67	93.74	0.0229	3769.	2.050E-05	7.543E-08	1.024E+06	2.059E-02	535.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1842	225.	2.014E-01	2.130E-01	2.433E-01	2.686E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(225)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(225)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(225)	2.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 4(225)	3.17		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.31					
TOP 5(225)	4.17	2.49	7.181E-03	0.3487	9.056E-03	0.4398
TOP 6(225)	5.16	3.49	6.070E-03	0.2948	7.655E-03	0.3718
TOP 7(225)	6.16	4.48	5.354E-03	0.2600	6.752E-03	0.3279
TOP 8(225)	7.15	5.48	4.843E-03	0.2352	6.107E-03	0.2966
TOP 9(225)	8.15	6.47	4.455E-03	0.2164	5.618E-03	0.2728
TOP 10(225)	9.14	7.47	4.147E-03	0.2014	5.230E-03	0.2540
TOP 11(225)	10.14	8.46	3.896E-03	0.1892	4.913E-03	0.2386
TOP 12(225)	11.13	9.46	3.685E-03	0.1790	4.647E-03	0.2257
TOP 13(225)	12.13	10.45	3.505E-03	0.1702	4.421E-03	0.2147
TOP 14(225)	13.12	11.45	3.350E-03	0.1627	4.224E-03	0.2051
TOP 15(225)	14.12	12.44	3.213E-03	0.1560	4.052E-03	0.1968
TOP 16(225)	15.11	13.44	3.092E-03	0.1501	3.899E-03	0.1893
TOP 17(225)	16.11	14.43	2.983E-03	0.1449	3.762E-03	0.1827
TOP 18(225)	17.10	15.43	2.885E-03	0.1401	3.639E-03	0.1767
TOP 19(225)	18.10	16.42	2.796E-03	0.1358	3.527E-03	0.1713
TOP 20(225)	19.09	17.42	2.715E-03	0.1319	3.424E-03	0.1663
TOP 21(225)	20.09	18.41	2.641E-03	0.1283	3.331E-03	0.1618
TOP 22(225)	21.08	19.41	2.572E-03	0.1249	3.244E-03	0.1576
TOP 23(225)	22.08	20.40	2.509E-03	0.1218	3.164E-03	0.1537
TOP 24(225)	23.07	21.40	2.450E-03	0.1190	3.090E-03	0.1500
TOP 25(225)	24.07	22.39	2.395E-03	0.1163	3.020E-03	0.1467
TOP 26(225)	25.06	23.39	2.343E-03	0.1138	2.955E-03	0.1435
TOP 27(225)	26.06	24.38	2.295E-03	0.1115	2.894E-03	0.1406
TOP 28(225)	27.05	25.38	2.250E-03	0.1092	2.837E-03	0.1378

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
79	RCC NOVAMIDE	0.01	0.010	-10.00	40.00	0.0532	6 11 49

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	212.96	1275.67	93.74	0.0229	3769.	2.050E-05	7.543E-08	1.024E+06	2.059E-02	535.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	518.67	518.67	459.67	-15923.33	459.67	459.67
2.18	518.67	519.67	459.67	-15923.33	459.67	459.67
3.17	520.67	523.67	459.67	-15923.33	459.67	459.67
4.17	521.67	523.67	459.67	-15923.33	459.67	459.67
5.16	521.67	524.67	459.67	-15923.33	459.67	459.67
6.16	521.67	525.67	459.67	-15923.33	459.67	459.67
7.15	521.67	525.67	459.67	-15923.33	459.67	459.67
8.15	522.67	525.67	459.67	-15923.33	459.67	459.67
9.14	522.67	526.67	459.67	-15923.33	459.67	459.67
10.14	522.67	526.67	459.67	-15923.33	459.67	459.67
11.13	522.67	526.67	459.67	-15923.33	459.67	459.67
12.13	523.67	527.67	459.67	-15923.33	459.67	459.67
13.12	523.67	527.67	459.67	-15923.33	459.67	459.67
14.12	524.67	528.67	459.67	-15923.33	459.67	459.67
15.11	524.67	528.67	459.67	-15923.33	459.67	459.67
16.11	524.67	528.67	459.67	-15923.33	459.67	459.67
17.10	525.67	529.67	459.67	-15923.33	459.67	459.67
18.10	525.67	529.67	459.67	-15923.33	459.67	459.67
19.09	525.67	529.67	459.67	-15923.33	459.67	459.67
20.09	526.67	530.67	459.67	-15923.33	459.67	459.67
21.08	526.67	530.67	459.67	-15923.33	459.67	459.67
22.08	526.67	530.67	459.67	-15923.33	459.67	459.67
23.07	526.67	531.67	459.67	-15923.33	459.67	459.67
24.07	526.67	531.67	459.67	-15923.33	459.67	459.67
25.06	527.67	531.67	459.67	-15923.33	459.67	459.67
26.06	527.67	531.67	459.67	-15923.33	459.67	459.67
27.05	527.67	531.67	459.67	-15923.33	459.67	459.67

V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
80	RCC NOVAMIDE	0.01	0.010	-0.02	30.02	0.0532	6	28	15

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.90	105.32	1263.67	93.73	0.0117	3749.	1.048E-05	7.542E-08	5.208E+05	1.462E-02	538.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1842	150.	9.793E-02	9.410E-02	1.186E-01	1.161E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(150)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(150)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(150)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(150)	3.17	1.50	4.094E-03	0.2800	5.050E-03	0.3454
TOP 5(150)	4.17	2.49	3.172E-03	0.2170	3.913E-03	0.2676
TOP 6(150)	5.16	3.49	2.682E-03	0.1834	3.308E-03	0.2262
TOP 7(150)	6.16	4.48	2.365E-03	0.1618	2.917E-03	0.1995
TOP 8(150)	7.15	5.48	2.139E-03	0.1463	2.639E-03	0.1805
TOP 9(150)	8.15	6.47	1.968E-03	0.1346	2.428E-03	0.1660
TOP 10(150)	9.14	7.47	1.832E-03	0.1253	2.260E-03	0.1546
TOP 11(150)	10.14	8.46	1.721E-03	0.1177	2.123E-03	0.1452
TOP 12(150)	11.13	9.46	1.628E-03	0.1113	2.008E-03	0.1373
TOP 13(150)	12.13	10.45	1.549E-03	0.1059	1.910E-03	0.1306
TOP 14(150)	13.12	11.45	1.480E-03	0.1012	1.825E-03	0.1248
TOP 15(150)	14.12	12.44	1.419E-03	0.0971	1.751E-03	0.1197
TOP 16(150)	15.11	13.44	1.366E-03	0.0934	1.685E-03	0.1152
TOP 17(150)	16.11	14.43	1.318E-03	0.0901	1.626E-03	0.1112
TOP 18(150)	17.10	15.43	1.275E-03	0.0872	1.572E-03	0.1075
TOP 19(150)	18.10	16.42	1.235E-03	0.0845	1.524E-03	0.1042
TOP 20(150)	19.09	17.42	1.200E-03	0.0820	1.480E-03	0.1012
TOP 21(150)	20.09	18.41	1.167E-03	0.0798	1.439E-03	0.0984
TOP 22(150)	21.08	19.41	1.136E-03	0.0777	1.402E-03	0.0959
TOP 23(150)	22.08	20.40	1.108E-03	0.0758	1.367E-03	0.0935
TOP 24(150)	23.07	21.40	1.082E-03	0.0740	1.335E-03	0.0913
TOP 25(150)	24.07	22.39	1.058E-03	0.0724	1.305E-03	0.0893

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
80	RCC NOVAMIDE	0.01	0.010	-0.02	30.02	0.0532	6 28 15

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.90	105.32	1263.67	93.73	0.0117	3749.	1.048E-05	7.542E-08	5.208E+05	1.462E-02	538.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	518.67	518.67	459.67	-15923.33	459.67	459.67
2.18	518.67	519.67	459.67	-15923.33	459.67	459.67
3.17	519.67	521.67	459.67	-15923.33	459.67	459.67
4.17	519.67	522.67	459.67	-15923.33	459.67	459.67
5.16	520.67	522.67	459.67	-15923.33	459.67	459.67
6.16	520.67	523.67	459.67	-15923.33	459.67	459.67
7.15	520.67	523.67	459.67	-15923.33	459.67	459.67
8.15	520.67	524.67	459.67	-15923.33	459.67	459.67
9.14	520.67	524.67	459.67	-15923.33	459.67	459.67
10.14	521.67	524.67	459.67	-15923.33	459.67	459.67
11.13	521.67	525.67	459.67	-15923.33	459.67	459.67
12.13	521.67	525.67	459.67	-15923.33	459.67	459.67
13.12	522.67	525.67	459.67	-15923.33	459.67	459.67
14.12	522.67	526.67	459.67	-15923.33	459.67	459.67
15.11	522.67	526.67	459.67	-15923.33	459.67	459.67
16.11	522.67	526.67	459.67	-15923.33	459.67	459.67
17.10	523.67	526.67	459.67	-15923.33	459.67	459.67
18.10	523.67	527.67	459.67	-15923.33	459.67	459.67
19.09	523.67	527.67	459.67	-15923.33	459.67	459.67
20.09	523.67	527.67	459.67	-15923.33	459.67	459.67
21.08	523.67	527.67	459.67	-15923.33	459.67	459.67
22.08	523.67	527.67	459.67	-15923.33	459.67	459.67
23.07	523.67	528.67	459.67	-15923.33	459.67	459.67
24.07	523.67	528.67	459.67	-15923.33	459.67	459.67

V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION *****			ALPHA-SECTOR	ALPHA-MODEL	PCK1/2	HR	MIN	SEC
	TILE TYPE	GAP	HEIGHT	DEG	DEG				
81	RCC NOVAMIDE	0.01	0.010	-10.02	40.02	0.0532	6	48	22

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.90	106.83	1262.67	93.66	0.0119	3748.	1.063E-05	7.536E-08	5.289E+05	1.472E-02	536.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1842	150.	1.006E-01	9.685E-02	1.217E-01	1.194E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(150)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(150)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(150)	2.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 4(150)	3.17		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.31					
TOP 5(150)	4.17	2.49	3.265E-03	0.2217	4.027E-03	0.2735
TOP 6(150)	5.16	3.49	2.760E-03	0.1874	3.404E-03	0.2312
TOP 7(150)	6.16	4.48	2.434E-03	0.1653	3.002E-03	0.2039
TOP 8(150)	7.15	5.48	2.202E-03	0.1495	2.716E-03	0.1844
TOP 9(150)	8.15	6.47	2.026E-03	0.1376	2.498E-03	0.1697
TOP 10(150)	9.14	7.47	1.886E-03	0.1281	2.326E-03	0.1580
TOP 11(150)	10.14	8.46	1.771E-03	0.1203	2.185E-03	0.1484
TOP 12(150)	11.13	9.46	1.676E-03	0.1138	2.067E-03	0.1404
TOP 13(150)	12.13	10.45	1.594E-03	0.1082	1.966E-03	0.1335
TOP 14(150)	13.12	11.45	1.523E-03	0.1034	1.878E-03	0.1276
TOP 15(150)	14.12	12.44	1.461E-03	0.0992	1.802E-03	0.1224
TOP 16(150)	15.11	13.44	1.406E-03	0.0955	1.734E-03	0.1177
TOP 17(150)	16.11	14.43	1.356E-03	0.0921	1.673E-03	0.1136
TOP 18(150)	17.10	15.43	1.312E-03	0.0891	1.618E-03	0.1099
TOP 19(150)	18.10	16.42	1.271E-03	0.0864	1.568E-03	0.1065
TOP 20(150)	19.09	17.42	1.235E-03	0.0839	1.523E-03	0.1034
TOP 21(150)	20.09	18.41	1.201E-03	0.0816	1.481E-03	0.1006
TOP 22(150)	21.08	19.41	1.170E-03	0.0794	1.443E-03	0.0980
TOP 23(150)	22.08	20.40	1.141E-03	0.0775	1.407E-03	0.0956
TOP 24(150)	23.07	21.40	1.114E-03	0.0757	1.374E-03	0.0933

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
81	RCC NOVAMIDE	0.01	0.010	-10.02	40.02	0.0532	6 48 22

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.90	106.83	1262.67	93.66	0.0119	3748.	1.063E-05	7.536E-08	5.289E+05	1.472E-02	536.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	518.67	518.67	459.67	-15923.33	459.67	459.67
2.18	519.67	518.67	459.67	-15923.33	459.67	459.67
3.17	519.67	521.67	459.67	-15923.33	459.67	459.67
4.17	520.67	522.67	459.67	-15923.33	459.67	459.67
5.16	520.67	522.67	459.67	-15923.33	459.67	459.67
6.16	520.67	523.67	459.67	-15923.33	459.67	459.67
7.15	520.67	523.67	459.67	-15923.33	459.67	459.67
8.15	520.67	523.67	459.67	-15923.33	459.67	459.67
9.14	521.67	523.67	459.67	-15923.33	459.67	459.67
10.14	521.67	524.67	459.67	-15923.33	459.67	459.67
11.13	521.67	524.67	459.67	-15923.33	459.67	459.67
12.13	521.67	524.67	459.67	-15923.33	459.67	459.67
13.12	521.67	524.67	459.67	-15923.33	459.67	459.67
14.12	521.67	525.67	459.67	-15923.33	459.67	459.67
15.11	522.67	525.67	459.67	-15923.33	459.67	459.67
16.11	522.67	525.67	459.67	-15923.33	459.67	459.67
17.10	522.67	525.67	459.67	-15923.33	459.67	459.67
18.10	523.67	526.67	459.67	-15923.33	459.67	459.67
19.09	523.67	526.67	459.67	-15923.33	459.67	459.67
20.09	523.67	526.67	459.67	-15923.33	459.67	459.67
21.08	523.67	526.67	459.67	-15923.33	459.67	459.67
22.08	523.67	527.67	459.67	-15923.33	459.67	459.67
23.07	524.67	527.67	459.67	-15923.33	459.67	459.67

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
82	RCC NOVAMIDE	0.01	0.010	-0.05	30.05	0.0532	7 1 40

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.93	157.38	1269.67	93.52	0.0171	3759.	1.531E-05	7.525E-08	7.648E+05	1.774E-02	536.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1842	200.	1.678E-01	1.719E-01	2.030E-01	2.151E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(200)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(200)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(200)	2.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 4(200)	3.17		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.31					
TOP 5(200)	4.17	1.93	6.579E-03	0.3709	8.232E-03	0.4641
TOP 6(200)	5.16	2.93	5.345E-03	0.3013	6.688E-03	0.3771
TOP 7(200)	6.16	3.92	4.617E-03	0.2603	5.778E-03	0.3257
TOP 8(200)	7.15	4.92	4.123E-03	0.2325	5.160E-03	0.2909
TOP 9(200)	8.15	5.91	3.760E-03	0.2120	4.706E-03	0.2653
TOP 10(200)	9.14	6.91	3.479E-03	0.1961	4.354E-03	0.2455
TOP 11(200)	10.14	7.90	3.253E-03	0.1834	4.070E-03	0.2295
TOP 12(200)	11.13	8.90	3.065E-03	0.1728	3.836E-03	0.2163
TOP 13(200)	12.13	9.89	2.907E-03	0.1639	3.638E-03	0.2051
TOP 14(200)	13.12	10.89	2.771E-03	0.1562	3.468E-03	0.1955
TOP 15(200)	14.12	11.88	2.652E-03	0.1495	3.319E-03	0.1871
TOP 16(200)	15.11	12.88	2.548E-03	0.1437	3.188E-03	0.1798
TOP 17(200)	16.11	13.87	2.455E-03	0.1384	3.072E-03	0.1732
TOP 18(200)	17.10	14.87	2.371E-03	0.1337	2.967E-03	0.1673
TOP 19(200)	18.10	15.86	2.296E-03	0.1294	2.873E-03	0.1620
TOP 20(200)	19.09	16.86	2.227E-03	0.1256	2.787E-03	0.1571
TOP 21(200)	20.09	17.85	2.164E-03	0.1220	2.708E-03	0.1527
TOP 22(200)	21.08	18.85	2.106E-03	0.1187	2.635E-03	0.1486
TOP 23(200)	22.08	19.84	2.053E-03	0.1157	2.569E-03	0.1448
TOP 24(200)	23.07	20.84	2.003E-03	0.1129	2.506E-03	0.1413
TOP 25(200)	24.07	21.83	1.957E-03	0.1103	2.449E-03	0.1381
TOP 26(200)	25.06	22.83	1.914E-03	0.1079	2.395E-03	0.1350
TOP 27(200)	26.06	23.82	1.873E-03	0.1056	2.344E-03	0.1322
TOP 28(200)	27.05	24.82	1.835E-03	0.1035	2.297E-03	0.1295
TOP 29(200)	28.05	25.81	1.800E-03	0.1015	2.252E-03	0.1270
TOP 30(200)	29.04	26.81	1.766E-03	0.0996	2.210E-03	0.1246

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
82	RCC NOVAMIDE	0.01	0.010	-0.05	30.05	0.0532	7	1	40

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.93	157.38	1269.67	93.52	0.0171	3759.	1.531E-05	7.525E-08	7.648E+05	1.774E-02	536.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	518.67	518.67	459.67	-15923.33	459.67	459.67
2.18	519.67	518.67	459.67	-15923.33	459.67	459.67
3.17	519.67	522.67	459.67	-15923.33	459.67	459.67
4.17	520.67	523.67	459.67	-15923.33	459.67	459.67
5.16	520.67	524.67	459.67	-15923.33	459.67	459.67
6.16	521.67	525.67	459.67	-15923.33	459.67	459.67
7.15	521.67	525.67	459.67	-15923.33	459.67	459.67
8.15	521.67	526.67	459.67	-15923.33	459.67	459.67
9.14	522.67	526.67	459.67	-15923.33	459.67	459.67
10.14	522.67	527.67	459.67	-15923.33	459.67	459.67
11.13	522.67	527.67	459.67	-15923.33	459.67	459.67
12.13	523.67	528.67	459.67	-15923.33	459.67	459.67
13.12	523.67	528.67	459.67	-15923.33	459.67	459.67
14.12	523.67	528.67	459.67	-15923.33	459.67	459.67
15.11	524.67	529.67	459.67	-15923.33	459.67	459.67
16.11	524.67	529.67	459.67	-15923.33	459.67	459.67
17.10	524.67	529.67	459.67	-15923.33	459.67	459.67
18.10	524.67	529.67	459.67	-15923.33	459.67	459.67
19.09	524.67	530.67	459.67	-15923.33	459.67	459.67
20.09	525.67	530.67	459.67	-15923.33	459.67	459.67
21.08	525.67	530.67	459.67	-15923.33	459.67	459.67
22.08	525.67	530.67	459.67	-15923.33	459.67	459.67
23.07	525.67	530.67	459.67	-15923.33	459.67	459.67
24.07	525.67	531.67	459.67	-15923.33	459.67	459.67
25.06	525.67	531.67	459.67	-15923.33	459.67	459.67
26.06	525.67	531.67	459.67	-15923.33	459.67	459.67
27.05	525.67	531.67	459.67	-15923.33	459.67	459.67
28.05	526.67	531.67	459.67	-15923.33	459.67	459.67
29.04	526.67	531.67	459.67	-15923.33	459.67	459.67

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
83	RCC NOVAMIDE	0.01	0.010	-9.99	39.99	0.0532	7 14 26

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.93	157.18	1259.67	92.78	0.0170	3744.	1.541E-05	7.466E-08	7.729E+05	1.770E-02	537.7

CAMEPA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1842	200.	1.690E-01	1.732E-01	2.047E-01	2.173E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(200)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(200)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(200)	2.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 4(200)	3.17		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.31					
TOP 5(200)	4.17	1.93	6.631E-03	0.3746	8.318E-03	0.4699
TOP 6(200)	5.16	2.93	5.387E-03	0.3043	6.757E-03	0.3817
TOP 7(200)	6.16	3.92	4.654E-03	0.2629	5.838E-03	0.3298
TOP 8(200)	7.15	4.92	4.156E-03	0.2348	5.213E-03	0.2945
TOP 9(200)	8.15	5.91	3.790E-03	0.2141	4.755E-03	0.2686
TOP 10(200)	9.14	6.91	3.507E-03	0.1981	4.399E-03	0.2485
TOP 11(200)	10.14	7.90	3.279E-03	0.1852	4.112E-03	0.2323
TOP 12(200)	11.13	8.90	3.090E-03	0.1746	3.876E-03	0.2189
TOP 13(200)	12.13	9.89	2.930E-03	0.1655	3.676E-03	0.2076
TOP 14(200)	13.12	10.89	2.793E-03	0.1578	3.504E-03	0.1979
TOP 15(200)	14.12	11.88	2.674E-03	0.1510	3.354E-03	0.1895
TOP 16(200)	15.11	12.88	2.568E-03	0.1451	3.222E-03	0.1820
TOP 17(200)	16.11	13.87	2.474E-03	0.1398	3.104E-03	0.1753
TOP 18(200)	17.10	14.87	2.390E-03	0.1350	2.998E-03	0.1694
TOP 19(200)	18.10	15.86	2.314E-03	0.1307	2.903E-03	0.1640
TOP 20(200)	19.09	16.86	2.245E-03	0.1268	2.816E-03	0.1591
TOP 21(200)	20.09	17.85	2.181E-03	0.1232	2.736E-03	0.1546
TOP 22(200)	21.08	18.85	2.123E-03	0.1199	2.663E-03	0.1504
TOP 23(200)	22.08	19.84	2.069E-03	0.1169	2.595E-03	0.1466
TOP 24(200)	23.07	20.84	2.019E-03	0.1141	2.532E-03	0.1431
TOP 25(200)	24.07	21.83	1.972E-03	0.1114	2.474E-03	0.1398
TOP 26(200)	25.06	22.83	1.929E-03	0.1090	2.420E-03	0.1367
TOP 27(200)	26.06	23.82	1.888E-03	0.1067	2.369E-03	0.1338
TOP 28(200)	27.05	24.82	1.850E-03	0.1045	2.321E-03	0.1311

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
83	RCC NOVAMIDE	0.01	0.010	-9.99	39.99	0.0532	7 14 26

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.93	157.18	1259.67	92.78	0.0170	3744.	1.541E-05	7.466E-08	7.729E+05	1.770E-02	537.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	518.67	518.67	459.67	-15923.33	459.67	459.67
2.18	518.67	518.67	459.67	-15923.33	459.67	459.67
3.17	520.67	521.67	459.67	-15923.33	459.67	459.67
4.17	520.67	522.67	459.67	-15923.33	459.67	459.67
5.16	520.67	523.67	459.67	-15923.33	459.67	459.67
6.16	520.67	524.67	459.67	-15923.33	459.67	459.67
7.15	521.67	525.67	459.67	-15923.33	459.67	459.67
8.15	522.67	525.67	459.67	-15923.33	459.67	459.67
9.14	522.67	526.67	459.67	-15923.33	459.67	459.67
10.14	522.67	526.67	459.67	-15923.33	459.67	459.67
11.13	523.67	527.67	459.67	-15923.33	459.67	459.67
12.13	523.67	527.67	459.67	-15923.33	459.67	459.67
13.12	524.67	528.67	459.67	-15923.33	459.67	459.67
14.12	524.67	528.67	459.67	-15923.33	459.67	459.67
15.11	524.67	528.67	459.67	-15923.33	459.67	459.67
16.11	524.67	529.67	459.67	-15923.33	459.67	459.67
17.10	525.67	529.67	459.67	-15923.33	459.67	459.67
18.10	525.67	529.67	459.67	-15923.33	459.67	459.67
19.09	525.67	529.67	459.67	-15923.33	459.67	459.67
20.09	525.67	529.67	459.67	-15923.33	459.67	459.67
21.08	525.67	530.67	459.67	-15923.33	459.67	459.67
22.08	525.67	530.67	459.67	-15923.33	459.67	459.67
23.07	526.67	530.67	459.67	-15923.33	459.67	459.67
24.07	526.67	530.67	459.67	-15923.33	459.67	459.67
25.06	526.67	530.67	459.67	-15923.33	459.67	459.67
26.06	526.67	530.67	459.67	-15923.33	459.67	459.67
27.05	526.67	530.67	459.67	-15923.33	459.67	459.67

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
84	RCC NOVAMIDE	0.01	0.010	-0.04	30.04	0.0532	7 27 57

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	321.10	1288.67	94.25	0.0340	3788.	3.024E-05	7.585E-08	1.510E+06	2.519E-02	539.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1842	300.	2.937E-01	3.426E-01	3.548E-01	4.446E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(300)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(300)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(300)	2.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 4(300)	3.17		MODEL HAS NOT REACHED CENTERLINE			
TOP 5(300)	4.17		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	4.45					
TOP 6(300)	5.16	2.93	1.065E-02	0.4230	1.383E-02	0.5489
TOP 7(300)	6.16	3.92	9.202E-03	0.3654	1.194E-02	0.4742
TOP 8(300)	7.15	4.92	8.219E-03	0.3263	1.067E-02	0.4235
TOP 9(300)	8.15	5.91	7.495E-03	0.2976	9.728E-03	0.3862
TOP 10(300)	9.14	6.91	6.934E-03	0.2753	9.000E-03	0.3573
TOP 11(300)	10.14	7.90	6.483E-03	0.2574	8.414E-03	0.3341
TOP 12(300)	11.13	8.90	6.110E-03	0.2426	7.929E-03	0.3148
TOP 13(300)	12.13	9.89	5.794E-03	0.2301	7.520E-03	0.2986
TOP 14(300)	13.12	10.89	5.523E-03	0.2193	7.168E-03	0.2846
TOP 15(300)	14.12	11.88	5.287E-03	0.2099	6.861E-03	0.2724
TOP 16(300)	15.11	12.88	5.078E-03	0.2016	6.591E-03	0.2617
TOP 17(300)	16.11	13.87	4.893E-03	0.1943	6.350E-03	0.2521
TOP 18(300)	17.10	14.87	4.726E-03	0.1877	6.134E-03	0.2436
TOP 19(300)	18.10	15.86	4.576E-03	0.1817	5.939E-03	0.2358
TOP 20(300)	19.09	16.86	4.439E-03	0.1762	5.761E-03	0.2287
TOP 21(300)	20.09	17.85	4.313E-03	0.1713	5.598E-03	0.2223
TOP 22(300)	21.08	18.85	4.198E-03	0.1667	5.448E-03	0.2163

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
84	RCC NOVAMIDE	0.01	0.010	-0.04	30.04	0.0532	7 27 57

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	321.10	1288.67	94.25	0.0340	3788.	3.024E-05	7.585E-08	1.510E+06	2.519E-02	539.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	518.67	518.67	459.67	-15923.33	459.67	459.67
2.18	518.67	519.67	459.67	-15923.33	459.67	459.67
3.17	521.67	523.67	459.67	-15923.33	459.67	459.67
4.17	522.67	527.67	459.67	-15923.33	459.67	459.67
5.16	522.67	529.67	459.67	-15923.33	459.67	459.67
6.16	523.67	530.67	459.67	-15923.33	459.67	459.67
7.15	523.67	531.67	459.67	-15923.33	459.67	459.67
8.15	524.67	532.67	459.67	-15923.33	459.67	459.67
9.14	524.67	532.67	459.67	-15923.33	459.67	459.67
10.14	525.67	533.67	459.67	-15923.33	459.67	459.67
11.13	526.67	534.67	459.67	-15923.33	459.67	459.67
12.13	526.67	534.67	459.67	-15923.33	459.67	459.67
13.12	527.67	535.67	459.67	-15923.33	459.67	459.67
14.12	527.67	535.67	459.67	-15923.33	459.67	459.67
15.11	527.67	536.67	459.67	-15923.33	459.67	459.67
16.11	528.67	536.67	459.67	-15923.33	459.67	459.67
17.10	528.67	537.67	459.67	-15923.33	459.67	459.67
18.10	528.67	537.67	459.67	-15923.33	459.67	459.67
19.09	528.67	537.67	459.67	-15923.33	459.67	459.67
20.09	529.67	537.67	459.67	-15923.33	459.67	459.67
21.08	529.67	537.67	459.67	-15923.33	459.67	459.67

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
85	RSI AFT	0.01	0.000	-0.00	30.00	0.0532	22	26	8

MACH	P0(PSIA)	T0(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	320.57	1301.67	95.20	0.0339	3807.	2.989E-05	7.661E-08	1.485E+06	2.521E-02	529.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(T0)	BETA(T0)	TBAR(.9T0)	BETA(.9T0)
TOP	1840	250.	2.332E-01	2.547E-01	2.804E-01	3.222E-01

PIC	NO	TIME	DELTIME	H(T0)	H(T0)/ HRFR	H(.9T0)	H(.9T0)/ HRFR
TOP	1(250)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP	2(250)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP	3(250)	2.18		MODEL HAS NOT REACHED CENTERLINE			
TOP	4(250)	3.17		MODEL HAS NOT REACHED CENTERLINE			
TOP	5(250)	4.17		MODEL HAS NOT REACHED CENTERLINE			
TOP	6(250)	5.16		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =		5.59					
TOP	7(250)	6.16	4.48	6.402E-03	0.2540	8.099E-03	0.3213
TOP	8(250)	7.15	5.48	5.791E-03	0.2297	7.326E-03	0.2906
TOP	9(250)	8.15	6.47	5.327E-03	0.2113	6.740E-03	0.2673
TOP	10(250)	9.14	7.47	4.960E-03	0.1967	6.274E-03	0.2489
TOP	11(250)	10.14	8.46	4.659E-03	0.1848	5.894E-03	0.2338
TOP	12(250)	11.13	9.46	4.407E-03	0.1748	5.575E-03	0.2212
TOP	13(250)	12.13	10.45	4.192E-03	0.1663	5.303E-03	0.2104
TOP	14(250)	13.12	11.45	4.006E-03	0.1589	5.067E-03	0.2010
TOP	15(250)	14.12	12.44	3.842E-03	0.1524	4.860E-03	0.1928

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
86	RSI AFT	0.01	0.000	-0.00	30.00	0.0532	22 37 12

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	321.37	1290.67	94.40	0.0340	3791.	3.022E-05	7.596E-08	1.508E+06	2.520E-02	532.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1840	200.	1.675E-01	1.715E-01	2.019E-01	2.137E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(200)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(200)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(200)	2.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 4(200)	3.17		MODEL HAS NOT REACHED CENTERLINE			
TOP 5(200)	4.17		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	5.16					
TOP 6(200)	5.16	4.04	4.538E-03	0.1800	5.655E-03	0.2244
TOP 7(200)	6.16	5.04	4.065E-03	0.1613	5.066E-03	0.2010
TOP 8(200)	7.15	6.03	3.715E-03	0.1474	4.629E-03	0.1837
TOP 9(200)	8.15	7.03	3.442E-03	0.1366	4.289E-03	0.1702
TOP 10(200)	9.14	8.02	3.221E-03	0.1278	4.014E-03	0.1593
TOP 11(200)	10.14	9.02	3.038E-03	0.1206	3.786E-03	0.1502
TOP 12(200)	11.13	10.01	2.884E-03	0.1144	3.593E-03	0.1426
TOP 13(200)	12.13	11.01	2.750E-03	0.1091	3.427E-03	0.1360
TOP 14(200)	13.12	12.00	2.634E-03	0.1045	3.282E-03	0.1302
TOP 15(200)	14.12	13.00	2.531E-03	0.1004	3.154E-03	0.1251
TOP 16(200)	15.11	13.99	2.439E-03	0.0968	3.040E-03	0.1206
TOP 17(200)	16.11	14.99	2.357E-03	0.0935	2.937E-03	0.1165
TOP 18(200)	17.10	15.98	2.282E-03	0.0906	2.844E-03	0.1129

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NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
87	RSI AFT	0.01	0.000	-10.10	40.10	0.0532	22	48	28

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	321.27	1298.67	94.99	0.0340	3803.	3.002E-05	7.643E-08	1.494E+06	2.523E-02	532.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1840	200.	1.658E-01	1.695E-01	1.996E-01	2.109E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(200)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(200)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(200)	2.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 4(200)	3.17		MODEL HAS NOT REACHED CENTERLINE			
TOP 5(200)	4.17		MODEL HAS NOT REACHED CENTERLINE			
TOP 6(200)	5.16		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	5.59					
TOP 7(200)	6.16	4.48	4.259E-03	0.1688	5.300E-03	0.2101
TOP 8(200)	7.15	5.48	3.853E-03	0.1527	4.795E-03	0.1901
TOP 9(200)	8.15	6.47	3.544E-03	0.1405	4.411E-03	0.1748
TOP 10(200)	9.14	7.47	3.300E-03	0.1308	4.106E-03	0.1628
TOP 11(200)	10.14	8.46	3.099E-03	0.1229	3.857E-03	0.1529
TOP 12(200)	11.13	9.46	2.932E-03	0.1162	3.649E-03	0.1446
TOP 13(200)	12.13	10.45	2.789E-03	0.1105	3.471E-03	0.1376
TOP 14(200)	13.12	11.45	2.665E-03	0.1056	3.316E-03	0.1315
TOP 15(200)	14.12	12.44	2.556E-03	0.1013	3.181E-03	0.1261
TOP 16(200)	15.11	13.44	2.460E-03	0.0975	3.061E-03	0.1213

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
88	RSI AFT	0.01	0.000	-0.06	30.06	0.0532	23	10	15

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	210.36	1273.67	93.59	0.0226	3766.	2.028E-05	7.531E-08	1.014E+06	2.046E-02	531.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1840	150.	1.051E-01	1.017E-01	1.269E-01	1.251E-01

PIC NO		TIME	DELTIME	H(TO)	H(TO)/ HREF	H(.9TO)	H(.9TO)/ HREF
TOP	1(150)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP	2(150)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP	3(150)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =		3.17					
TOP	4(150)	3.17	2.61	3.346E-03	0.1635	4.118E-03	0.2013
TOP	5(150)	4.17	3.61	2.847E-03	0.1392	3.504E-03	0.1713
TOP	6(150)	5.16	4.60	2.521E-03	0.1232	3.103E-03	0.1516
TOP	7(150)	6.16	5.60	2.286E-03	0.1117	2.813E-03	0.1375
TOP	8(150)	7.15	6.59	2.106E-03	0.1029	2.592E-03	0.1267
TOP	9(150)	8.15	7.59	1.963E-03	0.0960	2.416E-03	0.1181
TOP	10(150)	9.14	8.58	1.846E-03	0.0902	2.272E-03	0.1110
TOP	11(150)	10.14	9.58	1.747E-03	0.0854	2.151E-03	0.1051
TOP	12(150)	11.13	10.57	1.663E-03	0.0813	2.047E-03	0.1001
TOP	13(150)	12.13	11.57	1.590E-03	0.0777	1.957E-03	0.0957
TOP	14(150)	13.12	12.56	1.526E-03	0.0746	1.878E-03	0.0918
TOP	15(150)	14.12	13.56	1.469E-03	0.0718	1.808E-03	0.0884
TOP	16(150)	15.11	14.55	1.418E-03	0.0693	1.745E-03	0.0853
TOP	17(150)	16.11	15.55	1.372E-03	0.0670	1.688E-03	0.0825
TOP	18(150)	17.10	16.54	1.330E-03	0.0650	1.636E-03	0.0800
TOP	19(150)	18.10	17.54	1.291E-03	0.0631	1.589E-03	0.0777
TOP	20(150)	19.09	18.53	1.256E-03	0.0614	1.546E-03	0.0756
TOP	21(150)	20.09	19.53	1.224E-03	0.0598	1.506E-03	0.0736
TOP	22(150)	21.08	20.52	1.194E-03	0.0583	1.469E-03	0.0718

NASA/FI OH90 TRANSITION TEST
V416-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
92	RSI AFT	0.01	0.000	-10.00	40.00	0.0532	23 46 36

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	211.27	1280.67	94.11	0.0227	3776.	2.026E-05	7.573E-08	1.010E+06	2.052E-02	539.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1840	150.	9.447E-02	9.049E-02	1.142E-01	1.113E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(150)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(150)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(150)	2.16		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(150)	3.17	1.50	3.937E-03	0.1918	4.843E-03	0.2360
TOP 5(150)	4.17	2.49	3.051E-03	0.1487	3.753E-03	0.1829
TOP 6(150)	5.16	3.49	2.579E-03	0.1257	3.172E-03	0.1546
TOP 7(150)	6.16	4.48	2.274E-03	0.1108	2.796E-03	0.1363
TOP 8(150)	7.15	5.48	2.057E-03	0.1003	2.531E-03	0.1233
TOP 9(150)	8.15	6.47	1.893E-03	0.0922	2.328E-03	0.1134
TOP 10(150)	9.14	7.47	1.762E-03	0.0859	2.168E-03	0.1056
TOP 11(150)	10.14	8.46	1.655E-03	0.0807	2.036E-03	0.0992
TOP 12(150)	11.13	9.46	1.566E-03	0.0763	1.926E-03	0.0938
TOP 13(150)	12.13	10.45	1.489E-03	0.0726	1.832E-03	0.0893

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
92	RSI AFT	0.01	0.000	-10.00	40.00	0.0532	23 46 36

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	211.27	1280.67	94.11	0.0227	3776.	2.026E-05	7.573E-08	1.010E+06	2.052E-02	539.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	459.67	459.67	459.67	-15923.33	459.67	459.67
2.18	459.67	459.67	459.67	-15923.33	459.67	459.67
3.17	459.67	459.67	459.67	-15923.33	459.67	459.67
4.17	459.67	459.67	459.67	-15923.33	459.67	459.67
5.16	459.67	459.67	459.67	-15923.33	459.67	459.67
6.16	459.67	459.67	459.67	-15923.33	459.67	459.67
7.15	459.67	459.67	459.67	-15923.33	459.67	459.67
8.15	459.67	459.67	459.67	-15923.33	459.67	459.67
9.14	459.67	459.67	459.67	-15923.33	459.67	459.67
10.14	459.67	459.67	459.67	-15923.33	459.67	459.67
11.13	459.67	459.67	459.67	-15923.33	459.67	459.67
12.13	459.67	459.67	459.67	-15923.33	459.67	459.67

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
93	RSI AFT	0.01	0.000	-0.06	30.06	0.0532	0	0	9

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.98	426.65	1308.67	95.27	0.0444	3818.	3.911E-05	7.667E-08	1.948E+06	2.895E-02	542.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1840	250.	2.180E-01	2.345E-01	2.629E-01	2.964E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(250)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(250)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(250)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(250)	3.17	1.50	1.020E-02	0.3525	1.290E-02	0.4455
TOP 5(250)	4.17	2.49	7.906E-03	0.2731	9.993E-03	0.3452
TOP 6(250)	5.16	3.49	6.683E-03	0.2309	8.447E-03	0.2918
TOP 7(250)	6.16	4.48	5.894E-03	0.2036	7.451E-03	0.2574
TOP 8(250)	7.15	5.48	5.332E-03	0.1842	6.740E-03	0.2328
TOP 9(250)	8.15	6.47	4.905E-03	0.1694	6.200E-03	0.2142
TOP 10(250)	9.14	7.47	4.566E-03	0.1578	5.772E-03	0.1994
TOP 11(250)	10.14	8.46	4.289E-03	0.1482	5.422E-03	0.1873
TOP 12(250)	11.13	9.46	4.057E-03	0.1402	5.129E-03	0.1772
TOP 13(250)	12.13	10.45	3.859E-03	0.1333	4.878E-03	0.1685
TOP 14(250)	13.12	11.45	3.688E-03	0.1274	4.661E-03	0.1610
TOP 15(250)	14.12	12.44	3.537E-03	0.1222	4.471E-03	0.1545
TOP 16(250)	15.11	13.44	3.404E-03	0.1176	4.302E-03	0.1486
TOP 17(250)	16.11	14.43	3.284E-03	0.1135	4.151E-03	0.1434
TOP 18(250)	17.10	15.43	3.177E-03	0.1097	4.015E-03	0.1387
TOP 19(250)	18.10	16.42	3.079E-03	0.1064	3.892E-03	0.1344
TOP 20(250)	19.09	17.42	2.990E-03	0.1033	3.779E-03	0.1306
TOP 21(250)	20.09	18.41	2.908E-03	0.1005	3.675E-03	0.1270

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
93	RSI AFT	0.01	0.000	-0.06	30.06	0.0532	0 0 9

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.98	426.65	1308.67	95.27	0.0444	3818.	3.911E-05	7.667E-08	1.948E+06	2.895E-02	542.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	459.67	459.67	459.67	-15923.33	459.67	459.67
2.18	459.67	459.67	459.67	-15923.33	459.67	459.67
3.17	459.67	459.67	459.67	-15923.33	459.67	459.67
4.17	459.67	459.67	459.67	-15923.33	459.67	459.67
5.16	459.67	459.67	459.67	-15923.33	459.67	459.67
6.16	459.67	459.67	459.67	-15923.33	459.67	459.67
7.15	459.67	459.67	459.67	-15923.33	459.67	459.67
8.15	459.67	459.67	459.67	-15923.33	459.67	459.67
9.14	459.67	459.67	459.67	-15923.33	459.67	459.67
10.14	459.67	459.67	459.67	-15923.33	459.67	459.67
11.13	459.67	459.67	459.67	-15923.33	459.67	459.67
12.13	459.67	459.67	459.67	-15923.33	459.67	459.67
13.12	459.67	459.67	459.67	-15923.33	459.67	459.67
14.12	459.67	459.67	459.67	-15923.33	459.67	459.67
15.11	459.67	459.67	459.67	-15923.33	459.67	459.67
16.11	459.67	459.67	459.67	-15923.33	459.67	459.67
17.10	459.67	459.67	459.67	-15923.33	459.67	459.67
18.10	459.67	459.67	459.67	-15923.33	459.67	459.67
19.09	459.67	459.67	459.67	-15923.33	459.67	459.67
20.09	459.67	459.67	459.67	-15923.33	459.67	459.67

NASA/RI CH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
94	RSI AFT	0.01	0.000	-10.00	40.00	0.0532	0 14 8

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.98	425.25	1302.67	94.84	0.0443	3810.	3.916E-05	7.631E-08	1.955E+06	2.888E-02	535.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1840	250.	2.269E-01	2.462E-01	2.733E-01	3.115E-01

PIC NO		TIME	DELTIME	H(TO)	H(TO)/ HREF	H(.9TO)	H(.9TO)/ HREF
TOP	1(250)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP	2(250)	1.16		MODEL HAS NOT REACHED CENTERLINE			
TOP	3(250)	2.16		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =		3.17					
TOP	4(250)	3.17	1.50	1.071E-02	0.3710	1.355E-02	0.4694
TOP	5(250)	4.17	2.49	8.302E-03	0.2875	1.050E-02	0.3637
TOP	6(250)	5.16	3.49	7.017E-03	0.2430	8.878E-03	0.3075
TOP	7(250)	6.16	4.48	6.189E-03	0.2143	7.830E-03	0.2712
TOP	8(250)	7.15	5.48	5.599E-03	0.1939	7.083E-03	0.2453
TOP	9(250)	8.15	6.47	5.150E-03	0.1784	6.516E-03	0.2256
TOP	10(250)	9.14	7.47	4.795E-03	0.1660	6.066E-03	0.2101
TOP	11(250)	10.14	8.46	4.504E-03	0.1560	5.698E-03	0.1973
TOP	12(250)	11.13	9.46	4.260E-03	0.1475	5.390E-03	0.1867
TOP	13(250)	12.13	10.45	4.052E-03	0.1403	5.127E-03	0.1776
TOP	14(250)	13.12	11.45	3.872E-03	0.1341	4.899E-03	0.1697
TOP	15(250)	14.12	12.44	3.714E-03	0.1286	4.699E-03	0.1627
TOP	16(250)	15.11	13.44	3.574E-03	0.1238	4.522E-03	0.1566
TOP	17(250)	16.11	14.43	3.449E-03	0.1194	4.363E-03	0.1511
TOP	18(250)	17.10	15.43	3.336E-03	0.1155	4.220E-03	0.1461
TOP	19(250)	18.10	16.42	3.233E-03	0.1120	4.090E-03	0.1416
TOP	20(250)	19.09	17.42	3.139E-03	0.1087	3.972E-03	0.1375
TOP	21(250)	20.09	18.41	3.053E-03	0.1057	3.863E-03	0.1338

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
94	RSI AFT	0.01	0.000	-10.00	40.00	0.0532	0 14 8

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.98	425.25	1302.67	94.84	0.0443	3810.	3.916E-05	7.631E-08	1.955E+06	2.888E-02	535.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	459.67	459.67	459.67	-15923.33	459.67	459.67
2.18	459.67	459.67	459.67	-15923.33	459.67	459.67
3.17	459.67	459.67	459.67	-15923.33	459.67	459.67
4.17	459.67	459.67	459.67	-15923.33	459.67	459.67
5.16	459.67	459.67	459.67	-15923.33	459.67	459.67
6.16	459.67	459.67	459.67	-15923.33	459.67	459.67
7.15	459.67	459.67	459.67	-15923.33	459.67	459.67
8.15	459.67	459.67	459.67	-15923.33	459.67	459.67
9.14	459.67	459.67	459.67	-15923.33	459.67	459.67
10.14	459.67	459.67	459.67	-15923.33	459.67	459.67
11.13	459.67	459.67	459.67	-15923.33	459.67	459.67
12.13	459.67	459.67	459.67	-15923.33	459.67	459.67
13.12	459.67	459.67	459.67	-15923.33	459.67	459.67
14.12	459.67	459.67	459.67	-15923.33	459.67	459.67
15.11	459.67	459.67	459.67	-15923.33	459.67	459.67
16.11	459.67	459.67	459.67	-15923.33	459.67	459.67
17.10	459.67	459.67	459.67	-15923.33	459.67	459.67
18.10	459.67	459.67	459.67	-15923.33	459.67	459.67
19.09	459.67	459.67	459.67	-15923.33	459.67	459.67
20.09	459.67	459.67	459.67	-15923.33	459.67	459.67

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
95	RSI AFT	0.01	0.000	-10.00	40.00	0.0532	0 22 29

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.98	426.75	1301.67	94.76	0.0444	3808.	3.933E-05	7.626E-08	1.964E+06	2.892E-02	553.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1840	350.	3.422E-01	4.224E-01	4.144E-01	5.611E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(350)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(350)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(350)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	2.32					
TOP 4(350)	3.17	2.05	1.568E-02	0.5421	2.083E-02	0.7202
TOP 5(350)	4.17	3.05	1.287E-02	0.4449	1.710E-02	0.5911
TOP 6(350)	5.16	4.04	1.117E-02	0.3863	1.485E-02	0.5133
TOP 7(350)	6.16	5.04	1.001E-02	0.3461	1.330E-02	0.4598
TOP 8(350)	7.15	6.03	9.148E-03	0.3163	1.215E-02	0.4202
TOP 9(350)	8.15	7.03	8.476E-03	0.2930	1.126E-02	0.3893
TOP 10(350)	9.14	8.02	7.933E-03	0.2743	1.054E-02	0.3644
TOP 11(350)	10.14	9.02	7.482E-03	0.2587	9.940E-03	0.3437
TOP 12(350)	11.13	10.01	7.101E-03	0.2455	9.434E-03	0.3262
TOP 13(350)	12.13	11.01	6.772E-03	0.2342	8.997E-03	0.3111
TOP 14(350)	13.12	12.00	6.486E-03	0.2242	8.616E-03	0.2979
TOP 15(350)	14.12	13.00	6.232E-03	0.2155	8.280E-03	0.2863
TOP 16(350)	15.11	13.99	6.007E-03	0.2077	7.980E-03	0.2759
TOP 17(350)	16.11	14.99	5.804E-03	0.2007	7.711E-03	0.2666
TOP 18(350)	17.10	15.98	5.620E-03	0.1943	7.467E-03	0.2582
TOP 19(350)	18.10	16.98	5.453E-03	0.1885	7.245E-03	0.2505
TOP 20(350)	19.09	17.97	5.300E-03	0.1833	7.041E-03	0.2435
TOP 21(350)	20.09	18.97	5.159E-03	0.1784	6.854E-03	0.2370
TOP 22(350)	21.08	19.96	5.029E-03	0.1739	6.681E-03	0.2310
TOP 23(350)	22.08	20.96	4.908E-03	0.1697	6.521E-03	0.2255
TOP 24(350)	23.07	21.95	4.796E-03	0.1658	6.371E-03	0.2203
TOP 25(350)	24.07	22.95	4.691E-03	0.1622	6.232E-03	0.2155

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
98	RSI AFT	0.01	0.000	0.02	29.98	0.0532	1 17 41

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	553.94	1329.67	96.58	0.0572	3849.	4.969E-05	7.772E-08	2.461E+06	3.298E-02	537.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1840	250.	2.172E-01	2.334E-01	2.610E-01	2.936E-01

	PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP	1(250)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP	2(250)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP	3(250)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT	TIME =	3.17					
TOP	4(250)	3.17	1.50	1.016E-02	0.3079	1.277E-02	0.3873
TOP	5(250)	4.17	2.49	7.870E-03	0.2386	9.899E-03	0.3001
TOP	6(250)	5.16	3.49	6.652E-03	0.2017	8.367E-03	0.2537
TOP	7(250)	6.16	4.48	5.867E-03	0.1779	7.380E-03	0.2238
TOP	8(250)	7.15	5.48	5.307E-03	0.1609	6.676E-03	0.2024
TOP	9(250)	8.15	6.47	4.882E-03	0.1480	6.141E-03	0.1862
TOP	10(250)	9.14	7.47	4.545E-03	0.1378	5.717E-03	0.1733
TOP	11(250)	10.14	8.46	4.270E-03	0.1295	5.371E-03	0.1628
TOP	12(250)	11.13	9.46	4.039E-03	0.1225	5.080E-03	0.1540
TOP	13(250)	12.13	10.45	3.842E-03	0.1165	4.832E-03	0.1465
TOP	14(250)	13.12	11.45	3.671E-03	0.1113	4.617E-03	0.1400
TOP	15(250)	14.12	12.44	3.521E-03	0.1068	4.429E-03	0.1343
TOP	16(250)	15.11	13.44	3.388E-03	0.1027	4.262E-03	0.1292
TOP	17(250)	16.11	14.43	3.269E-03	0.0991	4.112E-03	0.1247
TOP	18(250)	17.10	15.43	3.162E-03	0.0959	3.977E-03	0.1206
TOP	19(250)	18.10	16.42	3.065E-03	0.0929	3.855E-03	0.1169

V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
98	RSI AFT	0.01	0.000	0.02	29.98	0.0532	1 17 41

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	553.94	1329.67	96.58	0.0572	3849.	4.969E-05	7.772E-08	2.461E+06	3.298E-02	537.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	459.67	459.67	459.67	-15923.33	459.67	459.67
2.18	459.67	459.67	459.67	-15923.33	459.67	459.67
3.17	459.67	459.67	459.67	-15923.33	459.67	459.67
4.17	459.67	459.67	459.67	-15923.33	459.67	459.67
5.16	459.67	459.67	459.67	-15923.33	459.67	459.67
6.16	459.67	459.67	459.67	-15923.33	459.67	459.67
7.15	459.67	459.67	459.67	-15923.33	459.67	459.67
8.15	459.67	459.67	459.67	-15923.33	459.67	459.67
9.14	459.67	459.67	459.67	-15923.33	459.67	459.67
10.14	459.67	459.67	459.67	-15923.33	459.67	459.67
11.13	459.67	459.67	459.67	-15923.33	459.67	459.67
12.13	459.67	459.67	459.67	-15923.33	459.67	459.67
13.12	459.67	459.67	459.67	-15923.33	459.67	459.67
14.12	459.67	459.67	459.67	-15923.33	459.67	459.67
15.11	459.67	459.67	459.67	-15923.33	459.67	459.67
16.11	459.67	459.67	459.67	-15923.33	459.67	459.67
17.10	459.67	459.67	459.67	-15923.33	459.67	459.67
18.10	459.67	459.67	459.67	-15923.33	459.67	459.67

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
100	RSI AFT	0.01	0.000	-9.97	39.97	0.0532	1 46 52

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	554.54	1325.67	96.29	0.0573	3843.	4.989E-05	7.748E-08	2.475E+06	3.298E-02	542.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1840	350.	3.410E-01	4.202E-01	4.105E-01	5.530E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HREF	H(.9TO)	H(.9TO)/ HREF
TOP 1(350)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(350)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(350)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	2.97					
TOP 4(350)	3.17	1.50	1.828E-02	0.5543	2.406E-02	0.7295
TOP 5(350)	4.17	1.93	1.608E-02	0.4877	2.117E-02	0.6418
TOP 6(350)	5.16	2.37	1.453E-02	0.4405	1.912E-02	0.5797
TOP 7(350)	6.16	2.80	1.335E-02	0.4047	1.757E-02	0.5327
TOP 8(350)	7.15	3.80	1.147E-02	0.3477	1.509E-02	0.4576
TOP 9(350)	8.15	4.79	1.021E-02	0.3095	1.344E-02	0.4074
TOP 10(350)	9.14	5.79	9.291E-03	0.2817	1.223E-02	0.3707
TOP 11(350)	10.14	6.78	8.582E-03	0.2602	1.129E-02	0.3425
TOP 12(350)	11.13	7.78	8.015E-03	0.2430	1.055E-02	0.3198
TOP 13(350)	12.13	8.77	7.547E-03	0.2288	9.932E-03	0.3011
TOP 14(350)	13.12	9.77	7.152E-03	0.2169	9.413E-03	0.2854
TOP 15(350)	14.12	10.76	6.814E-03	0.2066	8.967E-03	0.2719
TOP 16(350)	15.11	11.76	6.519E-03	0.1977	8.579E-03	0.2601
TOP 17(350)	16.11	12.75	6.259E-03	0.1898	8.238E-03	0.2498
TOP 18(350)	17.10	13.75	6.029E-03	0.1828	7.934E-03	0.2406
TOP 19(350)	18.10	14.74	5.822E-03	0.1765	7.662E-03	0.2323
TOP 20(350)	19.09	15.74	5.635E-03	0.1708	7.416E-03	0.2248
TOP 21(350)	20.09	16.73	5.465E-03	0.1657	7.192E-03	0.2181
TOP 22(350)	21.08	17.73	5.309E-03	0.1610	6.987E-03	0.2118
TOP 23(350)	22.08	18.72	5.166E-03	0.1566	6.799E-03	0.2061
TOP 24(350)	23.07	19.72	5.034E-03	0.1526	6.625E-03	0.2009
TOP 25(350)	24.07	20.71	4.912E-03	0.1489	6.464E-03	0.1960
TOP 26(350)	25.06	21.71	4.798E-03	0.1455	6.314E-03	0.1914
TOP 27(350)	26.06	22.70	4.691E-03	0.1422	6.174E-03	0.1872
TOP 28(350)	27.05	23.70	4.592E-03	0.1392	6.043E-03	0.1832
TOP 29(350)	28.05	24.69	4.498E-03	0.1364	5.920E-03	0.1795
TOP 30(350)	29.04	25.69	4.411E-03	0.1337	5.805E-03	0.1760

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
100	RSI AFT	0.01	0.000	-9.97	39.97	0.0532	1 46 52

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	554.54	1325.67	96.29	0.0573	3843.	4.989E-05	7.748E-08	2.475E+06.	3.298E-02	542.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1840	350.	3.410E-01	4.202E-01	4.105E-01	5.530E-01

PIC NO		TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP	31(350)	30.04	26.68	4.328E-03	0.1312	5.695E-03	0.1727
TOP	32(350)	31.03	27.68	4.249E-03	0.1288	5.592E-03	0.1695
TOP	33(350)	32.03	28.67	4.175E-03	0.1266	5.494E-03	0.1666
TOP	34(350)	33.02	29.67	4.104E-03	0.1244	5.401E-03	0.1638
TOP	35(350)	34.02	30.66	4.037E-03	0.1224	5.313E-03	0.1611
TOP	36(350)	35.01	31.66	3.973E-03	0.1205	5.229E-03	0.1585
TOP	37(350)	36.01	32.65	3.912E-03	0.1186	5.148E-03	0.1561
TOP	38(350)	37.00	33.65	3.854E-03	0.1168	5.072E-03	0.1538
TOP	39(350)	38.00	34.64	3.798E-03	0.1152	4.998E-03	0.1515

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
102	RSI AFT	0.01	0.000	-10.06	40.06	0.0532	2	13	39

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	554.24	1321.67	96.00	0.0572	3838.	5.001E-05	7.725E-08	2.485E+06	3.296E-02	536.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
IOP	1840	350.	3.478E-01	4.321E-01	4.182E-01	5.693E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/HRFR	H(.9TO)	H(.9TO)/HRFR
TOP 1(350)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(350)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(350)	2.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 4(350)	3.17		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.31					
TOP 5(350)	4.17	2.49	1.457E-02	0.4420	1.919E-02	0.5823
TOP 6(350)	5.16	3.49	1.231E-02	0.3736	1.622E-02	0.4922
TOP 7(350)	6.16	4.48	1.086E-02	0.3295	1.431E-02	0.4342
TOP 8(350)	7.15	5.48	9.824E-03	0.2981	1.294E-02	0.3927
TOP 9(350)	8.15	6.47	9.037E-03	0.2742	1.191E-02	0.3613
TOP 10(350)	9.14	7.47	8.413E-03	0.2553	1.108E-02	0.3363
TOP 11(350)	10.14	8.46	7.903E-03	0.2398	1.041E-02	0.3159
TOP 12(350)	11.13	9.46	7.476E-03	0.2268	9.849E-03	0.2989
TOP 13(350)	12.13	10.45	7.111E-03	0.2158	9.368E-03	0.2843
TOP 14(350)	13.12	11.45	6.795E-03	0.2062	8.952E-03	0.2716
TOP 15(350)	14.12	12.44	6.518E-03	0.1978	8.586E-03	0.2605
TOP 16(350)	15.11	13.44	6.272E-03	0.1903	8.262E-03	0.2507
TOP 17(350)	16.11	14.43	6.051E-03	0.1836	7.972E-03	0.2419
TOP 18(350)	17.10	15.43	5.853E-03	0.1776	7.711E-03	0.2340
TOP 19(350)	18.10	16.42	5.673E-03	0.1721	7.474E-03	0.2268
TOP 20(350)	19.09	17.42	5.508E-03	0.1671	7.257E-03	0.2202

V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
103	RSI AFT	0.01	0.000	0.03 -	29.97	0.0532	2 37 13

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	670.07	1329.67	96.58	0.0692	3849.	6.010E-05	7.772E-08	2.977E+06	3.627E-02	534.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1840	300.	2.830E-01	3.261E-01	3.399E-01	4.183E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(300)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(300)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(300)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(300)	3.17	1.50	1.419E-02	0.3912	1.820E-02	0.5017
TOP 5(300)	4.17	2.49	1.099E-02	0.3031	1.410E-02	0.3887
TOP 6(300)	5.16	3.49	9.294E-03	0.2562	1.192E-02	0.3286
TOP 7(300)	6.16	4.48	8.197E-03	0.2260	1.051E-02	0.2898
TOP 8(300)	7.15	5.48	7.415E-03	0.2044	9.509E-03	0.2622
TOP 9(300)	8.15	6.47	6.821E-03	0.1880	8.748E-03	0.2412
TOP 10(300)	9.14	7.47	6.350E-03	0.1751	8.144E-03	0.2245
TOP 11(300)	10.14	8.46	5.965E-03	0.1644	7.650E-03	0.2109
TOP 12(300)	11.13	9.46	5.642E-03	0.1556	7.236E-03	0.1995
TOP 13(300)	12.13	10.45	5.367E-03	0.1480	6.883E-03	0.1898
TOP 14(300)	13.12	11.45	5.128E-03	0.1414	6.577E-03	0.1813
TOP 15(300)	14.12	12.44	4.919E-03	0.1356	6.309E-03	0.1739
TOP 16(300)	15.11	13.44	4.733E-03	0.1305	6.071E-03	0.1674

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
103	PSI AFT	0.01	0.000	0.03	29.97	0.0532	2 37 13

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	670.07	1329.67	96.58	0.0692	3849.	6.010E-05	7.772E-08	2.977E+06	3.627E-02	534.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	459.67	459.67	459.67	-15923.33	459.67	459.67
2.18	459.67	459.67	459.67	-15923.33	459.67	459.67
3.17	459.67	459.67	459.67	-15923.33	459.67	459.67
4.17	459.67	459.67	459.67	-15923.33	459.67	459.67
5.16	459.67	459.67	459.67	-15923.33	459.67	459.67
6.16	459.67	459.67	459.67	-15923.33	459.67	459.67
7.15	459.67	459.67	459.67	-15923.33	459.67	459.67
8.15	459.67	459.67	459.67	-15923.33	459.67	459.67
9.14	459.67	459.67	459.67	-15923.33	459.67	459.67
10.14	459.67	459.67	459.67	-15923.33	459.67	459.67
11.13	459.67	459.67	459.67	-15923.33	459.67	459.67
12.13	459.67	459.67	459.67	-15923.33	459.67	459.67
13.12	459.67	459.67	459.67	-15923.33	459.67	459.67
14.12	459.67	459.67	459.67	-15923.33	459.67	459.67
15.11	459.67	459.67	459.67	-15923.33	459.67	459.67

V418-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
104	RSI AFT	0.02	0.010	0.06	29.94	0.0532	3	8	46

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	211.47	1273.67	93.59	0.0227	3766.	2.039E-05	7.531E-08	1.019E+06	2.051E-02	533.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1838	150.	1.027E-01	9.913E-02	1.241E-01	1.220E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(150)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(150)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(150)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(150)	3.17	1.50	4.313E-03	0.2103	5.309E-03	0.2588
TOP 5(150)	4.17	2.49	3.342E-03	0.1629	4.114E-03	0.2005
TOP 6(150)	5.16	3.49	2.825E-03	0.1377	3.477E-03	0.1695
TOP 7(150)	6.16	4.48	2.492E-03	0.1215	3.067E-03	0.1495
TOP 8(150)	7.15	5.48	2.254E-03	0.1099	2.774E-03	0.1352
TOP 9(150)	8.15	6.47	2.073E-03	0.1011	2.552E-03	0.1244
TOP 10(150)	9.14	7.47	1.930E-03	0.0941	2.376E-03	0.1158
TOP 11(150)	10.14	8.46	1.813E-03	0.0884	2.232E-03	0.1088
TOP 12(150)	11.13	9.46	1.715E-03	0.0836	2.111E-03	0.1029
TOP 13(150)	12.13	10.45	1.631E-03	0.0795	2.008E-03	0.0979
TOP 14(150)	13.12	11.45	1.559E-03	0.0760	1.919E-03	0.0935
TOP 15(150)	14.12	12.44	1.495E-03	0.0729	1.841E-03	0.0897
TOP 16(150)	15.11	13.44	1.439E-03	0.0701	1.771E-03	0.0863
TOP 17(150)	16.11	14.43	1.388E-03	0.0677	1.709E-03	0.0833
TOP 18(150)	17.10	15.43	1.343E-03	0.0655	1.653E-03	0.0806
TOP 19(150)	18.10	16.42	1.302E-03	0.0634	1.602E-03	0.0781
TOP 20(150)	19.09	17.42	1.264E-03	0.0616	1.556E-03	0.0758
TOP 21(150)	20.09	18.41	1.229E-03	0.0599	1.513E-03	0.0738

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
104	RSI AFT	0.02	0.010	0.06	29.94	0.0532	3 8 46

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	211.47	1273.67	93.59	0.0227	3766.	2.039E-05	7.531E-08	1.019E+06	2.051E-02	533.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	459.67	459.67	459.67	-15923.33	459.67	459.67
2.18	459.67	459.67	459.67	-15923.33	459.67	459.67
3.17	459.67	459.67	459.67	-15923.33	459.67	459.67
4.17	459.67	459.67	459.67	-15923.33	459.67	459.67
5.16	459.67	459.67	459.67	-15923.33	459.67	459.67
6.16	459.67	459.67	459.67	-15923.33	459.67	459.67
7.15	459.67	459.67	459.67	-15923.33	459.67	459.67
8.15	459.67	459.67	459.67	-15923.33	459.67	459.67
9.14	459.67	459.67	459.67	-15923.33	459.67	459.67
10.14	459.67	459.67	459.67	-15923.33	459.67	459.67
11.13	459.67	459.67	459.67	-15923.33	459.67	459.67
12.13	459.67	459.67	459.67	-15923.33	459.67	459.67
13.12	459.67	459.67	459.67	-15923.33	459.67	459.67
14.12	459.67	459.67	459.67	-15923.33	459.67	459.67
15.11	459.67	459.67	459.67	-15923.33	459.67	459.67
16.11	459.67	459.67	459.67	-15923.33	459.67	459.67
17.10	459.67	459.67	459.67	-15923.33	459.67	459.67
18.10	459.67	459.67	459.67	-15923.33	459.67	459.67
19.09	459.67	459.67	459.67	-15923.33	459.67	459.67
20.09	459.67	459.67	459.67	-15923.33	459.67	459.67

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
105	RSI AFT	0.02	0.010	-10.11	40.11	0.0532	3 25 2

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	211.37	1273.67	93.59	0.0227	3766.	2.038E-05	7.531E-08	1.019E+06	2.051E-02	534.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1838	200.	1.691E-01	1.735E-01	2.044E-01	2.169E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HREF	H(.9TO)	H(.9TO)/ HREF
TOP 1(200)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(200)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(200)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(200)	3.17	1.50	7.547E-03	0.3680	9.436E-03	0.4601
TOP 5(200)	4.17	2.49	5.848E-03	0.2852	7.312E-03	0.3565
TOP 6(200)	5.16	3.49	4.943E-03	0.2410	6.181E-03	0.3014
TOP 7(200)	6.16	4.48	4.360E-03	0.2126	5.451E-03	0.2658
TOP 8(200)	7.15	5.48	3.944E-03	0.1923	4.931E-03	0.2405
TOP 9(200)	8.15	6.47	3.628E-03	0.1769	4.536E-03	0.2212
TOP 10(200)	9.14	7.47	3.376E-03	0.1647	4.223E-03	0.2059
TOP 11(200)	10.14	8.46	3.173E-03	0.1547	3.967E-03	0.1934
TOP 12(200)	11.13	9.46	3.001E-03	0.1463	3.753E-03	0.1830
TOP 13(200)	12.13	10.45	2.855E-03	0.1392	3.569E-03	0.1740
TOP 14(200)	13.12	11.45	2.728E-03	0.1330	3.411E-03	0.1663
TOP 15(200)	14.12	12.44	2.616E-03	0.1276	3.271E-03	0.1595
TOP 16(200)	15.11	13.44	2.518E-03	0.1228	3.148E-03	0.1535
TOP 17(200)	16.11	14.43	2.429E-03	0.1185	3.038E-03	0.1481
TOP 18(200)	17.10	15.43	2.350E-03	0.1146	2.938E-03	0.1433
TOP 19(200)	18.10	16.42	2.277E-03	0.1110	2.848E-03	0.1388

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
105	RSI AFT	0.02	0.010	-10.11	40.11	0.0532	3 25 2

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	211.37	1273.67	93.59	0.0227	3766.	2.038E-05	7.531E-08	1.019E+06	2.051E-02	534.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	459.67	459.67	459.67	-15923.33	459.67	459.67
2.18	459.67	459.67	459.67	-15923.33	459.67	459.67
3.17	459.67	459.67	459.67	-15923.33	459.67	459.67
4.17	459.67	459.67	459.67	-15923.33	459.67	459.67
5.16	459.67	459.67	459.67	-15923.33	459.67	459.67
6.16	459.67	459.67	459.67	-15923.33	459.67	459.67
7.15	459.67	459.67	459.67	-15923.33	459.67	459.67
8.15	459.67	459.67	459.67	-15923.33	459.67	459.67
9.14	459.67	459.67	459.67	-15923.33	459.67	459.67
10.14	459.67	459.67	459.67	-15923.33	459.67	459.67
11.13	459.67	459.67	459.67	-15923.33	459.67	459.67
12.13	459.67	459.67	459.67	-15923.33	459.67	459.67
13.12	459.67	459.67	459.67	-15923.33	459.67	459.67
14.12	459.67	459.67	459.67	-15923.33	459.67	459.67
15.11	459.67	459.67	459.67	-15923.33	459.67	459.67
16.11	459.67	459.67	459.67	-15923.33	459.67	459.67
17.10	459.67	459.67	459.67	-15923.33	459.67	459.67
18.10	459.67	459.67	459.67	-15923.33	459.67	459.67

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
106	RSI AFT	0.02	0.010	-0.07	30.07	0.0532	3 48 48

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.93	156.22	1285.67	94.69	0.0169	3783.	1.501E-05	7.620E-08	7.450E+05	1.771E-02	532.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1838	150.	1.023E-01	9.862E-02	1.233E-01	1.212E-01

PIC	NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP	1(150)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP	2(150)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP	3(150)	2.18		MODEL HAS NOT REACHED CENTERLINE			
TOP	4(150)	3.17		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =		3.31					
TOP	5(150)	4.17	2.49	3.325E-03	0.1877	4.087E-03	0.2308
TOP	6(150)	5.16	3.49	2.810E-03	0.1587	3.454E-03	0.1951
TOP	7(150)	6.16	4.48	2.479E-03	0.1400	3.047E-03	0.1720
TOP	8(150)	7.15	5.48	2.242E-03	0.1266	2.756E-03	0.1556
TOP	9(150)	8.15	6.47	2.063E-03	0.1165	2.535E-03	0.1432
TOP	10(150)	9.14	7.47	1.920E-03	0.1084	2.360E-03	0.1333
TOP	11(150)	10.14	8.46	1.804E-03	0.1019	2.217E-03	0.1252
TOP	12(150)	11.13	9.46	1.706E-03	0.0963	2.097E-03	0.1184
TOP	13(150)	12.13	10.45	1.623E-03	0.0916	1.995E-03	0.1126
TOP	14(150)	13.12	11.45	1.551E-03	0.0876	1.906E-03	0.1076
TOP	15(150)	14.12	12.44	1.488E-03	0.0840	1.828E-03	0.1032
TOP	16(150)	15.11	13.44	1.431E-03	0.0808	1.759E-03	0.0994
TOP	17(150)	16.11	14.43	1.381E-03	0.0780	1.698E-03	0.0959
TOP	18(150)	17.10	15.43	1.336E-03	0.0754	1.642E-03	0.0927
TOP	19(150)	18.10	16.42	1.295E-03	0.0731	1.591E-03	0.0899
TOP	20(150)	19.09	17.42	1.257E-03	0.0710	1.545E-03	0.0873
TOP	21(150)	20.09	18.41	1.223E-03	0.0690	1.503E-03	0.0849
TOP	22(150)	21.08	19.41	1.191E-03	0.0673	1.464E-03	0.0827
TOP	23(150)	22.08	20.40	1.162E-03	0.0656	1.428E-03	0.0806
TOP	24(150)	23.07	21.40	1.134E-03	0.0640	1.394E-03	0.0787
TOP	25(150)	24.07	22.39	1.109E-03	0.0626	1.363E-03	0.0770
TOP	26(150)	25.06	23.39	1.085E-03	0.0613	1.334E-03	0.0753
TOP	27(150)	26.06	24.38	1.063E-03	0.0600	1.306E-03	0.0738
TOP	28(150)	27.05	25.38	1.042E-03	0.0588	1.280E-03	0.0723
TOP	29(150)	28.05	26.37	1.022E-03	0.0577	1.256E-03	0.0709

NASA/RI OH90 TRANSITION TEST
V416-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL 8

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
107	RSI AFT	0.02	0.010	-10.10	40.10	0.0532	4	2	52

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.93	157.92	1275.67	93.96	0.0171	3768.	1.529E-05	7.561E-08	7.620E+05	1.778E-02	533.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1838	150.	1.024E-01	9.885E-02	1.237E-01	1.216E-01

PIC	NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP	1(150)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP	2(150)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP	3(150)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =		3.17					
TOP	4(150)	3.17	1.50	4.301E-03	0.2419	5.291E-03	0.2976
TOP	5(150)	4.17	2.49	3.332E-03	0.1874	4.100E-03	0.2306
TOP	6(150)	5.16	3.49	2.817E-03	0.1584	3.466E-03	0.1949
TOP	7(150)	6.16	4.48	2.484E-03	0.1397	3.057E-03	0.1719
TOP	8(150)	7.15	5.48	2.247E-03	0.1264	2.765E-03	0.1555
TOP	9(150)	8.15	6.47	2.067E-03	0.1163	2.544E-03	0.1431
TOP	10(150)	9.14	7.47	1.925E-03	0.1082	2.368E-03	0.1332
TOP	11(150)	10.14	8.46	1.808E-03	0.1017	2.225E-03	0.1251
TOP	12(150)	11.13	9.46	1.710E-03	0.0962	2.104E-03	0.1183
TOP	13(150)	12.13	10.45	1.627E-03	0.0915	2.002E-03	0.1126
TOP	14(150)	13.12	11.45	1.554E-03	0.0874	1.913E-03	0.1076
TOP	15(150)	14.12	12.44	1.491E-03	0.0838	1.834E-03	0.1032
TOP	16(150)	15.11	13.44	1.435E-03	0.0807	1.765E-03	0.0993
TOP	17(150)	16.11	14.43	1.384E-03	0.0779	1.703E-03	0.0958
TOP	18(150)	17.10	15.43	1.339E-03	0.0753	1.647E-03	0.0926
TOP	19(150)	18.10	16.42	1.298E-03	0.0730	1.597E-03	0.0898
TOP	20(150)	19.09	17.42	1.260E-03	0.0709	1.550E-03	0.0872
TOP	21(150)	20.09	18.41	1.226E-03	0.0689	1.508E-03	0.0848
TOP	22(150)	21.08	19.41	1.194E-03	0.0671	1.469E-03	0.0826
TOP	23(150)	22.08	20.40	1.164E-03	0.0655	1.433E-03	0.0806
TOP	24(150)	23.07	21.40	1.137E-03	0.0639	1.399E-03	0.0787
TOP	25(150)	24.07	22.39	1.111E-03	0.0625	1.367E-03	0.0769
TOP	26(150)	25.06	23.39	1.087E-03	0.0612	1.338E-03	0.0752

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
107	RSI AFT	0.02	0.010	-10.10	40.10	0.0532	4	2	52

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.93	157.92	1275.67	93.96	0.0171	3768.	1.529E-05	7.561E-08	7.620E+05	1.778E-02	533.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.19	459.67	459.67	459.67	-15923.33	459.67	459.67
2.18	459.67	459.67	459.67	-15923.33	459.67	459.67
3.17	459.67	459.67	459.67	-15923.33	459.67	459.67
4.17	459.67	459.67	459.67	-15923.33	459.67	459.67
5.16	459.67	459.67	459.67	-15923.33	459.67	459.67
6.16	459.67	459.67	459.67	-15923.33	459.67	459.67
7.15	459.67	459.67	459.67	-15923.33	459.67	459.67
8.15	459.67	459.67	459.67	-15923.33	459.67	459.67
9.14	459.67	459.67	459.67	-15923.33	459.67	459.67
10.14	459.67	459.67	459.67	-15923.33	459.67	459.67
11.13	459.67	459.67	459.67	-15923.33	459.67	459.67
12.13	459.67	459.67	459.67	-15923.33	459.67	459.67
13.12	459.67	459.67	459.67	-15923.33	459.67	459.67
14.12	459.67	459.67	459.67	-15923.33	459.67	459.67
15.11	459.67	459.67	459.67	-15923.33	459.67	459.67
16.11	459.67	459.67	459.67	-15923.33	459.67	459.67
17.10	459.67	459.67	459.67	-15923.33	459.67	459.67
18.10	459.67	459.67	459.67	-15923.33	459.67	459.67
19.09	459.67	459.67	459.67	-15923.33	459.67	459.67
20.09	459.67	459.67	459.67	-15923.33	459.67	459.67
21.08	459.67	459.67	459.67	-15923.33	459.67	459.67
22.08	459.67	459.67	459.67	-15923.33	459.67	459.67
23.07	459.67	459.67	459.67	-15923.33	459.67	459.67
24.07	459.67	459.67	459.67	-15923.33	459.67	459.67
25.06	459.67	459.67	459.67	-15923.33	459.67	459.67

NASA/RI 0H90 TRANSITION TEST
V416-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
108	RSI AFT	0.02	0.010	-0.07	30.07	0.0532	4	13	33

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	321.27	1291.67	94.47	0.0340	3793.	3.019E-05	7.602E-08	1.506E+06	2.520E-02	534.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	IBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1838	200.	1.651E-01	1.687E-01	1.991E-01	2.101E-01

PIC NO		TIME	DELTIME	H(TO)	H(TO)/ HREF	H(.9TO)	H(.9TO)/ HREF
TOP	1(200)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP	2(200)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP	3(200)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =		3.17					
TOP	4(200)	3.17	1.50	7.338E-03	0.2912	9.143E-03	0.3628
TOP	5(200)	4.17	2.49	5.686E-03	0.2256	7.084E-03	0.2811
TOP	6(200)	5.16	3.49	4.809E-03	0.1907	5.988E-03	0.2376
TOP	7(200)	6.16	4.48	4.239E-03	0.1682	5.282E-03	0.2096
TOP	8(200)	7.15	5.48	3.835E-03	0.1521	4.778E-03	0.1896
TOP	9(200)	8.15	6.47	3.527E-03	0.1400	4.395E-03	0.1744
TOP	10(200)	9.14	7.47	3.284E-03	0.1303	4.092E-03	0.1624
TOP	11(200)	10.14	8.46	3.085E-03	0.1224	3.844E-03	0.1525
TOP	12(200)	11.13	9.46	2.918E-03	0.1158	3.636E-03	0.1443
TOP	13(200)	12.13	10.45	2.776E-03	0.1101	3.458E-03	0.1372
TOP	14(200)	13.12	11.45	2.652E-03	0.1052	3.305E-03	0.1311
TOP	15(200)	14.12	12.44	2.544E-03	0.1009	3.170E-03	0.1258
TOP	16(200)	15.11	13.44	2.448E-03	0.0971	3.050E-03	0.1210
TOP	17(200)	16.11	14.43	2.362E-03	0.0937	2.943E-03	0.1168
TOP	18(200)	17.10	15.43	2.285E-03	0.0906	2.846E-03	0.1129
TOP	19(200)	18.10	16.42	2.214E-03	0.0879	2.759E-03	0.1095
TOP	20(200)	19.09	17.42	2.150E-03	0.0853	2.679E-03	0.1063
TOP	21(200)	20.09	18.41	2.091E-03	0.0830	2.606E-03	0.1034
TOP	22(200)	21.08	19.41	2.037E-03	0.0808	2.538E-03	0.1007

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
108	RSI AFT	0.02	0.010	-0.07	30.07	0.0532	4 13 33

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	321.27	1291.67	94.47	0.0340	3793.	3.019E-05	7.602E-08	1.506E+06	2.520E-02	534.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	459.67	459.67	459.67	-15923.33	459.67	459.67
2.18	459.67	459.67	459.67	-15923.33	459.67	459.67
3.17	459.67	459.67	459.67	-15923.33	459.67	459.67
4.17	459.67	459.67	459.67	-15923.33	459.67	459.67
5.16	459.67	459.67	459.67	-15923.33	459.67	459.67
6.16	459.67	459.67	459.67	-15923.33	459.67	459.67
7.15	459.67	459.67	459.67	-15923.33	459.67	459.67
8.15	459.67	459.67	459.67	-15923.33	459.67	459.67
9.14	459.67	459.67	459.67	-15923.33	459.67	459.67
10.14	459.67	459.67	459.67	-15923.33	459.67	459.67
11.13	459.67	459.67	459.67	-15923.33	459.67	459.67
12.13	459.67	459.67	459.67	-15923.33	459.67	459.67
13.12	459.67	459.67	459.67	-15923.33	459.67	459.67
14.12	459.67	459.67	459.67	-15923.33	459.67	459.67
15.11	459.67	459.67	459.67	-15923.33	459.67	459.67
16.11	459.67	459.67	459.67	-15923.33	459.67	459.67
17.10	459.67	459.67	459.67	-15923.33	459.67	459.67
18.10	459.67	459.67	459.67	-15923.33	459.67	459.67
19.09	459.67	459.67	459.67	-15923.33	459.67	459.67
20.09	459.67	459.67	459.67	-15923.33	459.67	459.67
21.08	459.67	459.67	459.67	-15923.33	459.67	459.67

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
109	RSI AFT	0.02	0.010	-10.00	40.00	0.0532	4 25 32

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	320.97	1293.67	94.62	0.0340	3796.	3.011E-05	7.614E-08	1.501E+06	2.520E-02	537.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1838	200.	1.614E-01	1.643E-01	1.947E-01	2.046E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HREF	H(.9TO)	H(.9TO)/ HREF
TOP 1(200)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(200)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(200)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(200)	3.17	1.50	7.146E-03	0.2836	8.904E-03	0.3534
TOP 5(200)	4.17	2.49	5.537E-03	0.2198	6.899E-03	0.2738
TOP 6(200)	5.16	3.49	4.681E-03	0.1858	5.832E-03	0.2314
TOP 7(200)	6.16	4.48	4.128E-03	0.1638	5.144E-03	0.2041
TOP 8(200)	7.15	5.48	3.734E-03	0.1482	4.653E-03	0.1847
TOP 9(200)	8.15	6.47	3.435E-03	0.1363	4.280E-03	0.1699
TOP 10(200)	9.14	7.47	3.198E-03	0.1269	3.985E-03	0.1581
TOP 11(200)	10.14	8.46	3.004E-03	0.1192	3.743E-03	0.1485
TOP 12(200)	11.13	9.46	2.842E-03	0.1128	3.541E-03	0.1405
TOP 13(200)	12.13	10.45	2.703E-03	0.1073	3.368E-03	0.1337

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
109	PSI AFT	0.02	0.010	-10.00	40.00	0.0532	4 25 32

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	320.97	1293.67	94.62	0.0340	3796.	3.011E-05	7.614E-08	1.501E+06	2.520E-02	537.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.16	459.67	459.67	459.67	-15923.33	459.67	459.67
2.18	459.67	459.67	459.67	-15923.33	459.67	459.67
3.17	459.67	459.67	459.67	-15923.33	459.67	459.67
4.17	459.67	459.67	459.67	-15923.33	459.67	459.67
5.16	459.67	459.67	459.67	-15923.33	459.67	459.67
6.16	459.67	459.67	459.67	-15923.33	459.67	459.67
7.15	459.67	459.67	459.67	-15923.33	459.67	459.67
8.15	459.67	459.67	459.67	-15923.33	459.67	459.67
9.14	459.67	459.67	459.67	-15923.33	459.67	459.67
10.14	459.67	459.67	459.67	-15923.33	459.67	459.67
11.13	459.67	459.67	459.67	-15923.33	459.67	459.67
12.13	459.67	459.67	459.67	-15923.33	459.67	459.67

V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
113	RSI AFT	0.02	0.010	0.02	29.98	0.0532	5 2 58

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.98	425.45	1301.67	94.76	0.0443	3808.	3.921E-05	7.626E-08	1.958E+06	2.888E-02	538.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1838	250.	2.241E-01	2.426E-01	2.702E-01	3.070E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(250)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(250)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(250)	2.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 4(250)	3.17		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.31					
TOP 5(250)	4.17	2.49	8.178E-03	0.2832	1.035E-02	0.3584
TOP 6(250)	5.16	3.49	6.913E-03	0.2394	8.749E-03	0.3030
TOP 7(250)	6.16	4.48	6.097E-03	0.2111	7.717E-03	0.2672
TOP 8(250)	7.15	5.48	5.515E-03	0.1910	6.980E-03	0.2417
TOP 9(250)	8.15	6.47	5.074E-03	0.1757	6.421E-03	0.2224
TOP 10(250)	9.14	7.47	4.723E-03	0.1636	5.978E-03	0.2070
TOP 11(250)	10.14	8.46	4.437E-03	0.1536	5.615E-03	0.1945
TOP 12(250)	11.13	9.46	4.197E-03	0.1453	5.312E-03	0.1839
TOP 13(250)	12.13	10.45	3.992E-03	0.1382	5.053E-03	0.1750
TOP 14(250)	13.12	11.45	3.815E-03	0.1321	4.828E-03	0.1672
TOP 15(250)	14.12	12.44	3.659E-03	0.1267	4.631E-03	0.1604
TOP 16(250)	15.11	13.44	3.521E-03	0.1219	4.456E-03	0.1543
TOP 17(250)	16.11	14.43	3.397E-03	0.1176	4.300E-03	0.1489
TOP 18(250)	17.10	15.43	3.286E-03	0.1138	4.159E-03	0.1440

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
115	RSI AFT	0.02	0.010	0.02	29.98	0.0532	5 25 20

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	557.95	1303.67	94.69	0.0576	3811.	5.105E-05	7.620E-08	2.553E+06	3.299E-02	549.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1838	300.	2.785E-01	3.194E-01	3.367E-01	4.128E-01

PIC NO		TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP	1(300)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP	2(300)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP	3(300)	2.18		MODEL HAS NOT REACHED CENTERLINE			
TOP	4(300)	3.17		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =		3.31					
TOP	5(300)	4.17	2.49	1.077E-02	0.3264	1.392E-02	0.4219
TOP	6(300)	5.16	3.49	9.101E-03	0.2759	1.176E-02	0.3566
TOP	7(300)	6.16	4.48	8.027E-03	0.2433	1.038E-02	0.3145
TOP	8(300)	7.15	5.48	7.261E-03	0.2201	9.386E-03	0.2845
TOP	9(300)	8.15	6.47	6.680E-03	0.2025	8.634E-03	0.2617
TOP	10(300)	9.14	7.47	6.219E-03	0.1885	8.038E-03	0.2437
TOP	11(300)	10.14	8.46	5.841E-03	0.1771	7.551E-03	0.2289
TOP	12(300)	11.13	9.46	5.526E-03	0.1675	7.142E-03	0.2165
TOP	13(300)	12.13	10.45	5.256E-03	0.1593	6.794E-03	0.2060

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
117	PSI AFT	0.02	0.015	0.01	29.99	0.0532	5 52 24

MACH	P0(PSIA)	T0(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	426.55	1301.67	94.54	0.0440	3809.	3.908E-05	7.608E-08	1.957E+06	2.883E-02	537.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1838	250.	2.251E-01	2.440E-01	2.714E-01	3.087E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(250)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(250)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(250)	2.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 4(250)	3.17		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.31					
TOP 5(250)	4.17	2.49	8.225E-03	0.2852	1.041E-02	0.3610
TOP 6(250)	5.16	3.49	6.952E-03	0.2411	8.798E-03	0.3051
TOP 7(250)	6.16	4.48	6.132E-03	0.2127	7.760E-03	0.2691
TOP 8(250)	7.15	5.48	5.547E-03	0.1924	7.019E-03	0.2434
TOP 9(250)	8.15	6.47	5.102E-03	0.1770	6.457E-03	0.2239
TOP 10(250)	9.14	7.47	4.750E-03	0.1647	6.011E-03	0.2085
TOP 11(250)	10.14	8.46	4.462E-03	0.1547	5.647E-03	0.1958
TOP 12(250)	11.13	9.46	4.221E-03	0.1464	5.341E-03	0.1852
TOP 13(250)	12.13	10.45	4.015E-03	0.1392	5.081E-03	0.1762
TOP 14(250)	13.12	11.45	3.836E-03	0.1330	4.855E-03	0.1684
TOP 15(250)	14.12	12.44	3.680E-03	0.1276	4.657E-03	0.1615
TOP 16(250)	15.11	13.44	3.541E-03	0.1228	4.481E-03	0.1554
TOP 17(250)	16.11	14.43	3.417E-03	0.1185	4.324E-03	0.1499
TOP 18(250)	17.10	15.43	3.305E-03	0.1146	4.182E-03	0.1450
TOP 19(250)	18.10	16.42	3.203E-03	0.1111	4.053E-03	0.1406
TOP 20(250)	19.09	17.42	3.110E-03	0.1079	3.936E-03	0.1365
TOP 21(250)	20.09	18.41	3.025E-03	0.1049	3.828E-03	0.1328
TOP 22(250)	21.08	19.41	2.946E-03	0.1022	3.729E-03	0.1293
TOP 23(250)	22.08	20.40	2.874E-03	0.0997	3.636E-03	0.1261

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

3/10/78

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
117	RSI AFT	0.02	0.015	0.01	29.99	0.0532	5 52 24

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.99	426.55	1301.67	94.54	0.0440	3809.	3.908E-05	7.608E-08	1.957E+06	2.883E-02	537.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1838	250.	2.251E-01	2.440E-01	2.714E-01	3.087E-01

PIC NO		TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP	1(250)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP	2(250)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP	3(250)	2.18		MODEL HAS NOT REACHED CENTERLINE			
TOP	4(250)	3.17		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =		3.31					
TOP	5(250)	4.17	2.49	8.225E-03	0.2852	1.041E-02	0.3610
TOP	6(250)	5.16	3.49	6.952E-03	0.2411	8.798E-03	0.3051
TOP	7(250)	6.16	4.48	6.132E-03	0.2127	7.760E-03	0.2691
TOP	8(250)	7.15	5.48	5.547E-03	0.1924	7.019E-03	0.2434
TOP	9(250)	8.15	6.47	5.102E-03	0.1770	6.457E-03	0.2239
TOP	10(250)	9.14	7.47	4.750E-03	0.1647	6.011E-03	0.2085
TOP	11(250)	10.14	8.46	4.462E-03	0.1547	5.647E-03	0.1958
TOP	12(250)	11.13	9.46	4.221E-03	0.1464	5.341E-03	0.1852
TOP	13(250)	12.13	10.45	4.015E-03	0.1392	5.081E-03	0.1762
TOP	14(250)	13.12	11.45	3.836E-03	0.1330	4.855E-03	0.1684
TOP	15(250)	14.12	12.44	3.680E-03	0.1276	4.657E-03	0.1615
TOP	16(250)	15.11	13.44	3.541E-03	0.1228	4.481E-03	0.1554
TOP	17(250)	16.11	14.43	3.417E-03	0.1185	4.324E-03	0.1499
TOP	18(250)	17.10	15.43	3.305E-03	0.1146	4.182E-03	0.1450
TOP	19(250)	18.10	16.42	3.203E-03	0.1111	4.053E-03	0.1406
TOP	20(250)	19.09	17.42	3.110E-03	0.1079	3.936E-03	0.1365
TOP	21(250)	20.09	18.41	3.025E-03	0.1049	3.828E-03	0.1328
TOP	22(250)	21.08	19.41	2.946E-03	0.1022	3.729E-03	0.1293
TOP	23(250)	22.08	20.40	2.874E-03	0.0997	3.636E-03	0.1261

NASA/RI OH90 TRANSITION TEST
V41b-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
118	PSI AFT	0.02	0.015	0.02	29.98	0.0532	6	5	18

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	321.87	1289.67	94.33	0.0341	3790.	3.029E-05	7.591E-08	1.512E+06	2.522E-02	542.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1838	200.	1.566E-01	1.587E-01	1.893E-01	1.960E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(200)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(200)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(200)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(200)	3.17	1.50	6.905E-03	0.2738	8.612E-03	0.3415
TOP 5(200)	4.17	2.49	5.350E-03	0.2121	6.674E-03	0.2646
TOP 6(200)	5.16	3.49	4.522E-03	0.1793	5.641E-03	0.2237
TOP 7(200)	6.16	4.48	3.989E-03	0.1582	4.975E-03	0.1973
TOP 8(200)	7.15	5.48	3.608E-03	0.1431	4.501E-03	0.1785
TOP 9(200)	8.15	6.47	3.319E-03	0.1316	4.140E-03	0.1642
TOP 10(200)	9.14	7.47	3.090E-03	0.1225	3.854E-03	0.1528
TOP 11(200)	10.14	8.46	2.903E-03	0.1151	3.621E-03	0.1436
TOP 12(200)	11.13	9.46	2.746E-03	0.1089	3.425E-03	0.1358
TOP 13(200)	12.13	10.45	2.612E-03	0.1036	3.258E-03	0.1292
TOP 14(200)	13.12	11.45	2.496E-03	0.0990	3.113E-03	0.1234
TOP 15(200)	14.12	12.44	2.394E-03	0.0949	2.986E-03	0.1184
TOP 16(200)	15.11	13.44	2.303E-03	0.0913	2.873E-03	0.1139
TOP 17(200)	16.11	14.43	2.223E-03	0.0881	2.772E-03	0.1099
TOP 18(200)	17.10	15.43	2.150E-03	0.0852	2.681E-03	0.1063
TOP 19(200)	18.10	16.42	2.084E-03	0.0826	2.599E-03	0.1031

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
118	RSI AFT	0.02	0.015	0.02	29.98	0.0532	6	5	18

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	321.87	1289.67	94.33	0.0341	3790.	3.029E-05	7.591E-08	1.512E+06	2.522E-02	542.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	459.67	459.67	459.67	-15923.33	459.67	459.67
2.18	459.67	459.67	459.67	-15923.33	459.67	459.67
3.17	459.67	459.67	459.67	-15923.33	459.67	459.67
4.17	459.67	459.67	459.67	-15923.33	459.67	459.67
5.16	459.67	459.67	459.67	-15923.33	459.67	459.67
6.16	459.67	459.67	459.67	-15923.33	459.67	459.67
7.15	459.67	459.67	459.67	-15923.33	459.67	459.67
8.15	459.67	459.67	459.67	-15923.33	459.67	459.67
9.14	459.67	459.67	459.67	-15923.33	459.67	459.67
10.14	459.67	459.67	459.67	-15923.33	459.67	459.67
11.13	459.67	459.67	459.67	-15923.33	459.67	459.67
12.13	459.67	459.67	459.67	-15923.33	459.67	459.67
13.12	459.67	459.67	459.67	-15923.33	459.67	459.67
14.12	459.67	459.67	459.67	-15923.33	459.67	459.67
15.11	459.67	459.67	459.67	-15923.33	459.67	459.67
16.11	459.67	459.67	459.67	-15923.33	459.67	459.67
17.10	459.67	459.67	459.67	-15923.33	459.67	459.67
18.10	459.67	459.67	459.67	-15923.33	459.67	459.67

V416-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VAF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL 8

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
120	RSI AFT	0.02	0.015	0.01	29.99	0.0532	6 23 2

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	210.56	1271.67	93.01	0.0223	3763.	2.010E-05	7.485E-08	1.010E+06	2.035E-02	542.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1838	200.	1.605E-01	1.632E-01	1.944E-01	2.042E-01

PIC	NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP	1(200)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP	2(200)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP	3(200)	2.18		MODEL HAS NOT REACHED CENTERLINE			
TOP	4(200)	3.17		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =		3.31					
TOP	5(200)	4.17	1.93	6.248E-03	0.3070	7.818E-03	0.3842
TOP	6(200)	5.16	2.93	5.076E-03	0.2494	6.352E-03	0.3121
TOP	7(200)	6.16	3.92	4.385E-03	0.2155	5.487E-03	0.2697
TOP	8(200)	7.15	4.92	3.916E-03	0.1925	4.900E-03	0.2408
TOP	9(200)	8.15	5.91	3.571E-03	0.1755	4.469E-03	0.2196
TOP	10(200)	9.14	6.91	3.304E-03	0.1624	4.135E-03	0.2032
TOP	11(200)	10.14	7.90	3.089E-03	0.1518	3.866E-03	0.1900
TOP	12(200)	11.13	8.90	2.911E-03	0.1431	3.643E-03	0.1790
TOP	13(200)	12.13	9.89	2.761E-03	0.1357	3.455E-03	0.1698
TOP	14(200)	13.12	10.89	2.632E-03	0.1293	3.293E-03	0.1618
TOP	15(200)	14.12	11.88	2.519E-03	0.1238	3.152E-03	0.1549
TOP	16(200)	15.11	12.88	2.420E-03	0.1189	3.028E-03	0.1488
TOP	17(200)	16.11	13.87	2.331E-03	0.1146	2.917E-03	0.1434
TOP	18(200)	17.10	14.87	2.252E-03	0.1107	2.818E-03	0.1385
TOP	19(200)	18.10	15.86	2.180E-03	0.1071	2.728E-03	0.1341
TOP	20(200)	19.09	16.86	2.115E-03	0.1039	2.647E-03	0.1301
TOP	21(200)	20.09	17.85	2.055E-03	0.1010	2.572E-03	0.1264
TOP	22(200)	21.08	18.85	2.000E-03	0.0983	2.503E-03	0.1230
TOP	23(200)	22.08	19.84	1.949E-03	0.0958	2.439E-03	0.1199
TOP	24(200)	23.07	20.84	1.902E-03	0.0935	2.380E-03	0.1170
TOP	25(200)	24.07	21.83	1.858E-03	0.0913	2.326E-03	0.1143
TOP	26(200)	25.06	22.83	1.817E-03	0.0893	2.274E-03	0.1118

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
120	RSI AFT	0.02	0.015	0.01	29.99	0.0532	6 23 2

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.96	210.56	1271.67	93.01	0.0223	3763.	2.010E-05	7.485E-08	1.010E+06	2.035E-02	542.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	459.67	459.67	459.67	-15923.33	459.67	459.67
2.18	459.67	459.67	459.67	-15923.33	459.67	459.67
3.17	459.67	459.67	459.67	-15923.33	459.67	459.67
4.17	459.67	459.67	459.67	-15923.33	459.67	459.67
5.16	459.67	459.67	459.67	-15923.33	459.67	459.67
6.16	459.67	459.67	459.67	-15923.33	459.67	459.67
7.15	459.67	459.67	459.67	-15923.33	459.67	459.67
8.15	459.67	459.67	459.67	-15923.33	459.67	459.67
9.14	459.67	459.67	459.67	-15923.33	459.67	459.67
10.14	459.67	459.67	459.67	-15923.33	459.67	459.67
11.13	459.67	459.67	459.67	-15923.33	459.67	459.67
12.13	459.67	459.67	459.67	-15923.33	459.67	459.67
13.12	459.67	459.67	459.67	-15923.33	459.67	459.67
14.12	459.67	459.67	459.67	-15923.33	459.67	459.67
15.11	459.67	459.67	459.67	-15923.33	459.67	459.67
16.11	459.67	459.67	459.67	-15923.33	459.67	459.67
17.10	459.67	459.67	459.67	-15923.33	459.67	459.67
18.10	459.67	459.67	459.67	-15923.33	459.67	459.67
19.09	459.67	459.67	459.67	-15923.33	459.67	459.67
20.09	459.67	459.67	459.67	-15923.33	459.67	459.67
21.08	459.67	459.67	459.67	-15923.33	459.67	459.67
22.08	459.67	459.67	459.67	-15923.33	459.67	459.67
23.07	459.67	459.67	459.67	-15923.33	459.67	459.67
24.07	459.67	459.67	459.67	-15923.33	459.67	459.67
25.06	459.67	459.67	459.67	-15923.33	459.67	459.67

V418-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
121	RSI AFT	0.02	0.015	-10.00	40.00	0.0532	6 32 7

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	210.36	1273.67	93.59	0.0226	3766.	2.028E-05	7.531E-08	1.014E+06	2.046E-02	536.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1838	250.	2.347E-01	2.569E-01	2.838E-01	3.273E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HREF	H(.9TO)	H(.9TO)/ HREF
TOP 1(250)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(250)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(250)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(250)	3.17	1.50	1.118E-02	0.5463	1.424E-02	0.6960
TOP 5(250)	4.17	2.49	8.660E-03	0.4233	1.103E-02	0.5393
TOP 6(250)	5.16	3.49	7.321E-03	0.3578	9.326E-03	0.4558
TOP 7(250)	6.16	4.48	6.457E-03	0.3156	8.226E-03	0.4021
TOP 8(250)	7.15	5.48	5.841E-03	0.2855	7.441E-03	0.3637
TOP 9(250)	8.15	6.47	5.373E-03	0.2626	6.845E-03	0.3346
TOP 10(250)	9.14	7.47	5.002E-03	0.2445	6.372E-03	0.3115
TOP 11(250)	10.14	8.46	4.699E-03	0.2297	5.986E-03	0.2926
TOP 12(250)	11.13	9.46	4.445E-03	0.2172	5.662E-03	0.2768
TOP 13(250)	12.13	10.45	4.228E-03	0.2066	5.386E-03	0.2632
TOP 14(250)	13.12	11.45	4.040E-03	0.1975	5.146E-03	0.2515
TOP 15(250)	14.12	12.44	3.875E-03	0.1894	4.936E-03	0.2413
TOP 16(250)	15.11	13.44	3.729E-03	0.1822	4.750E-03	0.2322
TOP 17(250)	16.11	14.43	3.598E-03	0.1758	4.583E-03	0.2240
TOP 18(250)	17.10	15.43	3.480E-03	0.1701	4.433E-03	0.2167
TOP 19(250)	18.10	16.42	3.373E-03	0.1648	4.297E-03	0.2100
TOP 20(250)	19.09	17.42	3.275E-03	0.1601	4.172E-03	0.2039
TOP 21(250)	20.09	18.41	3.185E-03	0.1557	4.058E-03	0.1983
TOP 22(250)	21.08	19.41	3.102E-03	0.1516	3.952E-03	0.1932

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
121	RSI AFT	0.02	0.015	-10.00	40.00	0.0532	6 32 7

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.94	210.36	1273.67	93.59	0.0226	3766.	2.028E-05	7.531E-08	1.014E+06	2.046E-02	536.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	459.67	459.67	459.67	-15923.33	459.67	459.67
2.18	459.67	459.67	459.67	-15923.33	459.67	459.67
3.17	459.67	459.67	459.67	-15923.33	459.67	459.67
4.17	459.67	459.67	459.67	-15923.33	459.67	459.67
5.16	459.67	459.67	459.67	-15923.33	459.67	459.67
6.16	459.67	459.67	459.67	-15923.33	459.67	459.67
7.15	459.67	459.67	459.67	-15923.33	459.67	459.67
8.15	459.67	459.67	459.67	-15923.33	459.67	459.67
9.14	459.67	459.67	459.67	-15923.33	459.67	459.67
10.14	459.67	459.67	459.67	-15923.33	459.67	459.67
11.13	459.67	459.67	459.67	-15923.33	459.67	459.67
12.13	459.67	459.67	459.67	-15923.33	459.67	459.67
13.12	459.67	459.67	459.67	-15923.33	459.67	459.67
14.12	459.67	459.67	459.67	-15923.33	459.67	459.67
15.11	459.67	459.67	459.67	-15923.33	459.67	459.67
16.11	459.67	459.67	459.67	-15923.33	459.67	459.67
17.10	459.67	459.67	459.67	-15923.33	459.67	459.67
18.10	459.67	459.67	459.67	-15923.33	459.67	459.67
19.09	459.67	459.67	459.67	-15923.33	459.67	459.67
20.09	459.67	459.67	459.67	-15923.33	459.67	459.67
21.08	459.67	459.67	459.67	-15923.33	459.67	459.67

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
123	RSI AFT	0.02	0.015	0.02	29.98	0.0532	6 52 53

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.93	156.52	1266.67	93.30	0.0170	3755.	1.526E-05	7.507E-08	7.633E+05	1.768E-02	545.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1838	200.	1.581E-01	1.605E-01	1.918E-01	2.010E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(200)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(200)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(200)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(200)	3.17	1.50	6.982E-03	0.3949	8.747E-03	0.4947
TOP 5(200)	4.17	2.49	5.410E-03	0.3060	6.778E-03	0.3833
TOP 6(200)	5.16	3.49	4.573E-03	0.2586	5.729E-03	0.3240
TOP 7(200)	6.16	4.48	4.033E-03	0.2281	5.053E-03	0.2858
TOP 8(200)	7.15	5.48	3.649E-03	0.2064	4.571E-03	0.2585
TOP 9(200)	8.15	6.47	3.356E-03	0.1898	4.205E-03	0.2378
TOP 10(200)	9.14	7.47	3.125E-03	0.1767	3.915E-03	0.2214
TOP 11(200)	10.14	8.46	2.935E-03	0.1660	3.677E-03	0.2080
TOP 12(200)	11.13	9.46	2.776E-03	0.1570	3.478E-03	0.1967
TOP 13(200)	12.13	10.45	2.641E-03	0.1494	3.309E-03	0.1871
TOP 14(200)	13.12	11.45	2.524E-03	0.1427	3.161E-03	0.1788
TOP 15(200)	14.12	12.44	2.420E-03	0.1369	3.032E-03	0.1715
TOP 16(200)	15.11	13.44	2.329E-03	0.1317	2.918E-03	0.1650
TOP 17(200)	16.11	14.43	2.247E-03	0.1271	2.816E-03	0.1592
TOP 18(200)	17.10	15.43	2.174E-03	0.1229	2.723E-03	0.1540
TOP 19(200)	18.10	16.42	2.107E-03	0.1192	2.639E-03	0.1493
TOP 20(200)	19.09	17.42	2.046E-03	0.1157	2.563E-03	0.1450
TOP 21(200)	20.09	18.41	1.990E-03	0.1125	2.493E-03	0.1410
TOP 22(200)	21.08	19.41	1.938E-03	0.1096	2.428E-03	0.1373
TOP 23(200)	22.08	20.40	1.890E-03	0.1069	2.368E-03	0.1339
TOP 24(200)	23.07	21.40	1.846E-03	0.1044	2.312E-03	0.1308
TOP 25(200)	24.07	22.39	1.804E-03	0.1020	2.260E-03	0.1278
TOP 26(200)	25.06	23.39	1.765E-03	0.0999	2.212E-03	0.1251
TOP 27(200)	26.06	24.38	1.729E-03	0.0978	2.166E-03	0.1225
TOP 28(200)	27.05	25.38	1.695E-03	0.0959	2.123E-03	0.1201
TOP 29(200)	28.05	26.37	1.662E-03	0.0940	2.083E-03	0.1178
TOP 30(200)	29.04	27.37	1.632E-03	0.0923	2.045E-03	0.1156
TOP 31(200)	30.04	28.36	1.603E-03	0.0907	2.008E-03	0.1136
TOP 32(200)	31.03	29.36	1.576E-03	0.0891	1.974E-03	0.1117

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
123	RSI AFT	0.02	0.015	0.02	29.98	0.0532	6 52 53

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.93	156.52	1266.67	93.30	0.0170	3755.	1.526E-05	7.507E-08	7.633E+05	1.768E-02	545.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	459.67	459.67	459.67	-15923.33	459.67	459.67
2.18	459.67	459.67	459.67	-15923.33	459.67	459.67
3.17	459.67	459.67	459.67	-15923.33	459.67	459.67
4.17	459.67	459.67	459.67	-15923.33	459.67	459.67
5.16	459.67	459.67	459.67	-15923.33	459.67	459.67
6.16	459.67	459.67	459.67	-15923.33	459.67	459.67
7.15	459.67	459.67	459.67	-15923.33	459.67	459.67
8.15	459.67	459.67	459.67	-15923.33	459.67	459.67
9.14	459.67	459.67	459.67	-15923.33	459.67	459.67
10.14	459.67	459.67	459.67	-15923.33	459.67	459.67
11.13	459.67	459.67	459.67	-15923.33	459.67	459.67
12.13	459.67	459.67	459.67	-15923.33	459.67	459.67
13.12	459.67	459.67	459.67	-15923.33	459.67	459.67
14.12	459.67	459.67	459.67	-15923.33	459.67	459.67
15.11	459.67	459.67	459.67	-15923.33	459.67	459.67
16.11	459.67	459.67	459.67	-15923.33	459.67	459.67
17.10	459.67	459.67	459.67	-15923.33	459.67	459.67
18.10	459.67	459.67	459.67	-15923.33	459.67	459.67
19.09	459.67	459.67	459.67	-15923.33	459.67	459.67
20.09	459.67	459.67	459.67	-15923.33	459.67	459.67
21.08	459.67	459.67	459.67	-15923.33	459.67	459.67
22.08	459.67	459.67	459.67	-15923.33	459.67	459.67
23.07	459.67	459.67	459.67	-15923.33	459.67	459.67
24.07	459.67	459.67	459.67	-15923.33	459.67	459.67
25.06	459.67	459.67	459.67	-15923.33	459.67	459.67
26.06	459.67	459.67	459.67	-15923.33	459.67	459.67
27.05	459.67	459.67	459.67	-15923.33	459.67	459.67
28.05	459.67	459.67	459.67	-15923.33	459.67	459.67
29.04	459.67	459.67	459.67	-15923.33	459.67	459.67
30.04	459.67	459.67	459.67	-15923.33	459.67	459.67
31.03	459.67	459.67	459.67	-15923.33	459.67	459.67

V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
124	RSI AFT	0.02	0.015	-9.98	39.98	0.0532	7 2 18

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.93	157.32	1261.67	92.93	0.0171	3747.	1.540E-05	7.478E-08	7.718E+05	1.771E-02	537.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1838	200.	1.685E-01	1.727E-01	2.041E-01	2.165E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HREF	H(.9TO)	H(.9TO)/ HREF
TOP 1(200)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(200)	1.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	2.13					
TOP 3(200)	2.18	1.62	7.223E-03	0.4077	9.056E-03	0.5113
TOP 4(200)	3.17	2.05	6.410E-03	0.3618	8.037E-03	0.4537
TOP 5(200)	4.17	3.05	5.261E-03	0.2970	6.596E-03	0.3724
TOP 6(200)	5.16	4.04	4.568E-03	0.2579	5.727E-03	0.3233
TOP 7(200)	6.16	5.04	4.092E-03	0.2310	5.131E-03	0.2897
TOP 8(200)	7.15	6.03	3.740E-03	0.2111	4.689E-03	0.2647
TOP 9(200)	8.15	7.03	3.465E-03	0.1956	4.344E-03	0.2452
TOP 10(200)	9.14	8.02	3.243E-03	0.1831	4.066E-03	0.2295
TOP 11(200)	10.14	9.02	3.059E-03	0.1727	3.835E-03	0.2165
TOP 12(200)	11.13	10.01	2.903E-03	0.1639	3.640E-03	0.2055
TOP 13(200)	12.13	11.01	2.766E-03	0.1563	3.471E-03	0.1960
TOP 14(200)	13.12	12.00	2.651E-03	0.1497	3.324E-03	0.1877
TOP 15(200)	14.12	13.00	2.548E-03	0.1438	3.195E-03	0.1803
TOP 16(200)	15.11	13.99	2.456E-03	0.1386	3.079E-03	0.1738
TOP 17(200)	16.11	14.99	2.373E-03	0.1339	2.975E-03	0.1679
TOP 18(200)	17.10	15.98	2.296E-03	0.1297	2.881E-03	0.1626
TOP 19(200)	18.10	16.98	2.229E-03	0.1258	2.795E-03	0.1578
TOP 20(200)	19.09	17.97	2.167E-03	0.1223	2.717E-03	0.1534
TOP 21(200)	20.09	18.97	2.109E-03	0.1191	2.644E-03	0.1493

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
124	RSI AFT	0.02	0.015	-9.98	39.98	0.0532	7 2 18

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.93	157.32	1261.67	92.93	0.0171	3747.	1.540E-05	7.478E-08	7.718E+05	1.771E-02	537.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	459.67	459.67	459.67	-15923.33	459.67	459.67
2.18	459.67	459.67	459.67	-15923.33	459.67	459.67
3.17	459.67	459.67	459.67	-15923.33	459.67	459.67
4.17	459.67	459.67	459.67	-15923.33	459.67	459.67
5.16	459.67	459.67	459.67	-15923.33	459.67	459.67
6.16	459.67	459.67	459.67	-15923.33	459.67	459.67
7.15	459.67	459.67	459.67	-15923.33	459.67	459.67
8.15	459.67	459.67	459.67	-15923.33	459.67	459.67
9.14	459.67	459.67	459.67	-15923.33	459.67	459.67
10.14	459.67	459.67	459.67	-15923.33	459.67	459.67
11.13	459.67	459.67	459.67	-15923.33	459.67	459.67
12.13	459.67	459.67	459.67	-15923.33	459.67	459.67
13.12	459.67	459.67	459.67	-15923.33	459.67	459.67
14.12	459.67	459.67	459.67	-15923.33	459.67	459.67
15.11	459.67	459.67	459.67	-15923.33	459.67	459.67
16.11	459.67	459.67	459.67	-15923.33	459.67	459.67
17.10	459.67	459.67	459.67	-15923.33	459.67	459.67
18.10	459.67	459.67	459.67	-15923.33	459.67	459.67
19.09	459.67	459.67	459.67	-15923.33	459.67	459.67
20.09	459.67	459.67	459.67	-15923.33	459.67	459.67

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
125	PSI AFT	0.02	0.015	-0.05	30.05	0.0532	7 15 8

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.90	105.99	1254.67	93.06	0.0118	3736.	1.062E-05	7.489E-08	5.297E+05	1.465E-02	533.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1838	131.	7.906E-02	7.476E-02	9.571E-02	9.181E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(131)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(131)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(131)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(131)	3.17	1.50	3.253E-03	0.2220	3.994E-03	0.2727
TOP 5(131)	4.17	2.49	2.520E-03	0.1720	3.095E-03	0.2113
TOP 6(131)	5.16	3.49	2.130E-03	0.1454	2.616E-03	0.1786
TOP 7(131)	6.16	4.48	1.879E-03	0.1283	2.308E-03	0.1575
TOP 8(131)	7.15	5.48	1.700E-03	0.1160	2.087E-03	0.1425
TOP 9(131)	8.15	6.47	1.564E-03	0.1067	1.920E-03	0.1311
TOP 10(131)	9.14	7.47	1.456E-03	0.0994	1.788E-03	0.1220
TOP 11(131)	10.14	8.46	1.367E-03	0.0933	1.679E-03	0.1146
TOP 12(131)	11.13	9.46	1.293E-03	0.0883	1.588E-03	0.1084
TOP 13(131)	12.13	10.45	1.230E-03	0.0840	1.511E-03	0.1031
TOP 14(131)	13.12	11.45	1.176E-03	0.0803	1.444E-03	0.0986
TOP 15(131)	14.12	12.44	1.128E-03	0.0770	1.385E-03	0.0945
TOP 16(131)	15.11	13.44	1.085E-03	0.0741	1.333E-03	0.0910
TOP 17(131)	16.11	14.43	1.047E-03	0.0715	1.286E-03	0.0878
TOP 18(131)	17.10	15.43	1.013E-03	0.0691	1.244E-03	0.0849
TOP 19(131)	18.10	16.42	9.815E-04	0.0670	1.205E-03	0.0823
TOP 20(131)	19.09	17.42	9.530E-04	0.0651	1.170E-03	0.0799
TOP 21(131)	20.09	18.41	9.269E-04	0.0633	1.138E-03	0.0777
TOP 22(131)	21.08	19.41	9.028E-04	0.0616	1.109E-03	0.0757
TOP 23(131)	22.08	20.40	8.806E-04	0.0601	1.081E-03	0.0738

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GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
125	RSI AFT	0.02	0.015	-0.05	30.05	0.0532	7 15 8

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HREF BTU/FT2-SEC R	INITIAL TEMP DEG R
7.90	105.99	1254.67	93.06	0.0118	3736.	1.062E-05	7.489E-08	5.297E+05	1.465E-02	533.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	459.67	459.67	459.67	-15923.33	459.67	459.67
2.18	459.67	459.67	459.67	-15923.33	459.67	459.67
3.17	459.67	459.67	459.67	-15923.33	459.67	459.67
4.17	459.67	459.67	459.67	-15923.33	459.67	459.67
5.16	459.67	459.67	459.67	-15923.33	459.67	459.67
6.16	459.67	459.67	459.67	-15923.33	459.67	459.67
7.15	459.67	459.67	459.67	-15923.33	459.67	459.67
8.15	459.67	459.67	459.67	-15923.33	459.67	459.67
9.14	459.67	459.67	459.67	-15923.33	459.67	459.67
10.14	459.67	459.67	459.67	-15923.33	459.67	459.67
11.13	459.67	459.67	459.67	-15923.33	459.67	459.67
12.13	459.67	459.67	459.67	-15923.33	459.67	459.67
13.12	459.67	459.67	459.67	-15923.33	459.67	459.67
14.12	459.67	459.67	459.67	-15923.33	459.67	459.67
15.11	459.67	459.67	459.67	-15923.33	459.67	459.67
16.11	459.67	459.67	459.67	-15923.33	459.67	459.67
17.10	459.67	459.67	459.67	-15923.33	459.67	459.67
18.10	459.67	459.67	459.67	-15923.33	459.67	459.67
19.09	459.67	459.67	459.67	-15923.33	459.67	459.67
20.09	459.67	459.67	459.67	-15923.33	459.67	459.67
21.08	459.67	459.67	459.67	-15923.33	459.67	459.67
22.08	459.67	459.67	459.67	-15923.33	459.67	459.67

V41B-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
126	RSI AFT	0.02	0.015	-10.00	40.00	0.0532	7 23 34

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.90	105.78	1255.67	93.14	0.0118	3738.	1.059E-05	7.495E-08	5.281E+05	1.464E-02	537.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1838	131.	7.382E-02	6.949E-02	8.946E-02	8.534E-02

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HPFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(131)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(131)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(131)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	3.17					
TOP 4(131)	3.17	1.50	3.023E-03	0.2066	3.713E-03	0.2537
TOP 5(131)	4.17	2.49	2.343E-03	0.1601	2.877E-03	0.1966
TOP 6(131)	5.16	3.49	1.980E-03	0.1353	2.432E-03	0.1662
TOP 7(131)	6.16	4.48	1.747E-03	0.1193	2.145E-03	0.1465
TOP 8(131)	7.15	5.48	1.580E-03	0.1079	1.940E-03	0.1326
TOP 9(131)	8.15	6.47	1.453E-03	0.0993	1.785E-03	0.1219
TOP 10(131)	9.14	7.47	1.353E-03	0.0924	1.662E-03	0.1135
TOP 11(131)	10.14	8.46	1.271E-03	0.0868	1.561E-03	0.1066
TOP 12(131)	11.13	9.46	1.202E-03	0.0821	1.477E-03	0.1009
TOP 13(131)	12.13	10.45	1.144E-03	0.0781	1.405E-03	0.0960
TOP 14(131)	13.12	11.45	1.093E-03	0.0747	1.342E-03	0.0917
TOP 15(131)	14.12	12.44	1.046E-03	0.0716	1.287E-03	0.0879
TOP 16(131)	15.11	13.44	1.009E-03	0.0689	1.239E-03	0.0846
TOP 17(131)	16.11	14.43	9.732E-04	0.0665	1.195E-03	0.0817
TOP 18(131)	17.10	15.43	9.413E-04	0.0643	1.156E-03	0.0790
TOP 19(131)	18.10	16.42	9.124E-04	0.0623	1.120E-03	0.0765

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
126	RSI AFT	0.02	0.015	-10.00	40.00	0.0532	7 23 34

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.90	105.78	1255.67	93.14	0.0118	3738.	1.059E-05	7.495E-08	5.281E+05	1.464E-02	537.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	459.67	459.67	459.67	-15923.33	459.67	459.67
2.18	459.67	459.67	459.67	-15923.33	459.67	459.67
3.17	459.67	459.67	459.67	-15923.33	459.67	459.67
4.17	459.67	459.67	459.67	-15923.33	459.67	459.67
5.16	459.67	459.67	459.67	-15923.33	459.67	459.67
6.16	459.67	459.67	459.67	-15923.33	459.67	459.67
7.15	459.67	459.67	459.67	-15923.33	459.67	459.67
8.15	459.67	459.67	459.67	-15923.33	459.67	459.67
9.14	459.67	459.67	459.67	-15923.33	459.67	459.67
10.14	459.67	459.67	459.67	-15923.33	459.67	459.67
11.13	459.67	459.67	459.67	-15923.33	459.67	459.67
12.13	459.67	459.67	459.67	-15923.33	459.67	459.67
13.12	459.67	459.67	459.67	-15923.33	459.67	459.67
14.12	459.67	459.67	459.67	-15923.33	459.67	459.67
15.11	459.67	459.67	459.67	-15923.33	459.67	459.67
16.11	459.67	459.67	459.67	-15923.33	459.67	459.67
17.10	459.67	459.67	459.67	-15923.33	459.67	459.67
18.10	459.67	459.67	459.67	-15923.33	459.67	459.67

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO,INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
127	RSI AFT	0.02	0.015	-9.98	39.98	0.0532	7 31 31

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.90	106.49	1262.67	93.66	0.0118	3748.	1.060E-05	7.536E-08	5.272E+05	1.470E-02	534.7

CAMERA	ROLL NO	PAINT TEMP(DEG F)	TBAR(TO)	BETA(TO)	TBAR(.9TO)	BETA(.9TO)
TOP	1838	150.	1.030E-01	9.948E-02	1.246E-01	1.227E-01

PIC NO	TIME	DELTIME	H(TO)	H(TO)/ HRFR	H(.9TO)	H(.9TO)/ HRFR
TOP 1(150)	0.19		MODEL HAS NOT REACHED CENTERLINE			
TOP 2(150)	1.18		MODEL HAS NOT REACHED CENTERLINE			
TOP 3(150)	2.18		MODEL HAS NOT REACHED CENTERLINE			
INJECT TIME =	2.56					
TOP 4(150)	3.17	1.50	4.326E-03	0.2944	5.336E-03	0.3630
TOP 5(150)	4.17	2.49	3.354E-03	0.2281	4.135E-03	0.2813
TOP 6(150)	5.16	3.49	2.835E-03	0.1928	3.495E-03	0.2378
TOP 7(150)	6.16	4.48	2.500E-03	0.1701	3.083E-03	0.2097
TOP 8(150)	7.15	5.48	2.262E-03	0.1539	2.789E-03	0.1897
TOP 9(150)	8.15	6.47	2.081E-03	0.1415	2.565E-03	0.1745
TOP 10(150)	9.14	7.47	1.937E-03	0.1318	2.388E-03	0.1625
TOP 11(150)	10.14	8.46	1.819E-03	0.1238	2.243E-03	0.1526
TOP 12(150)	11.13	9.46	1.721E-03	0.1171	2.122E-03	0.1444
TOP 13(150)	12.13	10.45	1.637E-03	0.1114	2.018E-03	0.1373
TOP 14(150)	13.12	11.45	1.564E-03	0.1064	1.929E-03	0.1312
TOP 15(150)	14.12	12.44	1.500E-03	0.1021	1.850E-03	0.1258
TOP 16(150)	15.11	13.44	1.444E-03	0.0982	1.780E-03	0.1211
TOP 17(150)	16.11	14.43	1.393E-03	0.0948	1.718E-03	0.1168
TOP 18(150)	17.10	15.43	1.347E-03	0.0917	1.661E-03	0.1130
TOP 19(150)	18.10	16.42	1.306E-03	0.0888	1.610E-03	0.1095
TOP 20(150)	19.09	17.42	1.268E-03	0.0863	1.564E-03	0.1064
TOP 21(150)	20.09	18.41	1.233E-03	0.0839	1.521E-03	0.1035
TOP 22(150)	21.08	19.41	1.201E-03	0.0817	1.481E-03	0.1008
TOP 23(150)	22.08	20.40	1.172E-03	0.0797	1.445E-03	0.0983

GROUP	***** MODEL DESCRIPTION ***** TILE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR MIN SEC
127	PSI AFT	0.02	0.015	-9.98	39.98	0.0532	7 31 31

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/FT	HRFR BTU/FT2-SEC R	INITIAL TEMP DEG R
7.90	106.49	1262.67	93.66	0.0118	3748.	1.060E-05	7.536E-08	5.272E+05	1.470E-02	534.7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
1.18	459.67	459.67	459.67	-15923.33	459.67	459.67
2.18	459.67	459.67	459.67	-15923.33	459.67	459.67
3.17	459.67	459.67	459.67	-15923.33	459.67	459.67
4.17	459.67	459.67	459.67	-15923.33	459.67	459.67
5.16	459.67	459.67	459.67	-15923.33	459.67	459.67
6.16	459.67	459.67	459.67	-15923.33	459.67	459.67
7.15	459.67	459.67	459.67	-15923.33	459.67	459.67
8.15	459.67	459.67	459.67	-15923.33	459.67	459.67
9.14	459.67	459.67	459.67	-15923.33	459.67	459.67
10.14	459.67	459.67	459.67	-15923.33	459.67	459.67
11.13	459.67	459.67	459.67	-15923.33	459.67	459.67
12.13	459.67	459.67	459.67	-15923.33	459.67	459.67
13.12	459.67	459.67	459.67	-15923.33	459.67	459.67
14.12	459.67	459.67	459.67	-15923.33	459.67	459.67
15.11	459.67	459.67	459.67	-15923.33	459.67	459.67
16.11	459.67	459.67	459.67	-15923.33	459.67	459.67
17.10	459.67	459.67	459.67	-15923.33	459.67	459.67
18.10	459.67	459.67	459.67	-15923.33	459.67	459.67
19.09	459.67	459.67	459.67	-15923.33	459.67	459.67
20.09	459.67	459.67	459.67	-15923.33	459.67	459.67
21.08	459.67	459.67	459.67	-15923.33	459.67	459.67
22.08	459.67	459.67	459.67	-15923.33	459.67	459.67

APPENDIX B

SOURCE DATA: IR DATA TABULATIONS

NOMENCLATURE

ALPHA-MODEL	Model angle-of-attack in the pitch plane (positive direction, nose down), deg
ALPHA-SECTOR	Tunnel sector angle, deg
b	Model wing span, in.
BETA(TO), β, BETA (0.9TO)	Semi-infinite slab parameter $\beta = \frac{H(TAW)\sqrt{\Delta t}}{\sqrt{\rho c k}}$ for this test, data were reduced with TAW defined as either TO or 0.9TO
c	Specific heat of model material, $\frac{Btu}{lbm-°R}$
CAMERA	Denotes location of camera recording paint pictures TOP - Camera on top of tunnel
DELTIME, Δt	Time model was exposed to flow before taking phase-change paint picture or IR digitizing, sec
GROUP	Identification number for each tunnel injection
H(TO)	Model heat-transfer coefficient based on tunnel stilling chamber temperature, TO, $Btu/ft^2-sec-°R$
H(TO)/HRFR	H(TO) divided by HRFR
H(0.9TO)	Model heat-transfer coefficient based on 0.9TO, $Btu/ft^2-sec-°R$
H(0.9TO)/HRFR	H(0.9TO) divided by HRFR
HRFR	Reference heat-transfer coefficient based on Fay-Riddell theory, $Btu/ft^2-sec-°R$ $= \left[\frac{8.172(PO1)^{0.5}(MU-0)^{0.4}(1-(P-INF)/PO1)^{0.25}}{(RN)^{0.5}(TO)^{0.15}}\right] x$ $0.2235 + 0.0000135\ (TO + 560)$ where PO1 - stagnation pressure downstream of a normal shock, psia MU-0 = air viscosity based on TO, $lbf-sec/ft^2$ RN = reference nose radius = 0.04 ft

INITIAL TEMP, T_i	Model temperature measured prior to a run, °R
INJECT TIME	Time required for model to reach centerline, sec
k	Model material thermal conductivity, Btu/ft-sec-°R
MACH, M_∞	Free-stream Mach number
MU-INF	Free-stream viscosity
PAINT TEMP, T_{pc}	Denotes the rated melting temperature of the selected paint, °F
PCK½, $\sqrt{\rho ck}$	See $\sqrt{\rho ck}$
PIC NO	Denotes the frame number for each picture for a selected group. The number in brackets is the paint melt temperature in °F
P-INF, p_∞	Free-stream pressure, psia
PO, P_o	Tunnel stilling chamber pressure, psia
Q-INF, q_∞	Free-stream dynamic pressure, psia
RE/FT, Re_∞	Free-stream unit Reynolds number, ft^{-1}
RHO-INF	Free-stream density, $slugs/ft^3$
ROLL NO	Identification number for each roll of paint film
T	Temperature, °R
TAW, T_{aw}	Adiabatic wall temperature, °R
TBAR (TO)	$\frac{TW-T_i}{TO - T_i}$, where TW is the phase-change paint temperature
TBAR (0.9TO)	$\frac{TW - T_i}{0.9TO - T_i}$, where TW is the phase-change paint temperature
T-INF, T_∞	Free-stream temperature, °R
T_i	Initial model surface temperature, °R
TIME, t	Time, sec
TO, T_o	Tunnel stilling chamber temperature, °R

TW, T_w	Measured model surface temperature, °R
V-INF	Free-stream velocity, ft/sec
y	Spanwise distance from model centerline, in.
β	Semi-infinite slab parameter, $\frac{H(TAW)\sqrt{\Delta t}}{\sqrt{\rho ck}}$
ρ	Model material density, lbm/ft^3
$\sqrt{\rho ck}$	Square root of the product of the model density, specific heat and thermal conductivity, $Btu/ft^2\text{-}sec^{\frac{1}{2}}\text{-}°R$

VKF TUNNEL B TEST LOG

Table 2 OH-90A Run Log

Sverdrup ARO, Inc

USER	PROJECT TITLE	PROJECT	DATE
Rockwell International	NASA/RI OH-90 Transition Test	V41B-P4A	March 3, 1978

REPRESENTATIVE(S)
J. Cummings
L. Johnson

MODEL
94-0 Orbiter (0.025 scale)

ARO TEST PERSONNEL
D. W. Stallings

Data Group	Configuration	Data Type	M_∞	P_0 psia	T_0 °F	Alpha Model deg	Re/ft x10^{-6}	Tile Gap, in.	Tile Height, in.			Time	Remarks
1	RSI Forward	IR	7.99	555	860	30	2.5	0.01	0.000				Transmission error-no da
2		↓											
3		Paint				↓							
4		IR				40							
5		Paint											DEC-10 fault-no data
6		↓	↓	↓	↓		↓						
7		IR	8.00	800	875	↓	3.5						Model rolled - Data questionable
8						30							Frame size error-no data
9						↓							
10		↓				40							
11		Paint				↓							
12		↓	↓	↓	↓	30	↓						
13		IR	7.94	210	815	↓	1.0						
14						40							Counter malfunction- Group does not exist
15		↓											
16		Paint				↓							
17		↓				30			↓				
18		IR				↓			0.005				
19		↓				40							
20	↓	Paint	↓	↓	↓	↓	↓	↓	↓				

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NOMENCLATURE

VB-2 (9/77)

VKF TUNNEL B TEST LOG

USER: Rockwell International

PROJECT TITLE: NASA/RI OH-90 Transition Test

PROJECT: V41B-P4A

DATE: March 3, 1978

REPRESENTATIVE(S): J. Cummings, L. Johnson

MODEL: 94-0 Orbiter (0.025 scale)

ARO TEST PERSONNEL: D. W. Stallings

Data Group	Configuration	Data Type	M_∞	P_0 psia	T_0 °F	Alpha Model deg	Re/ft $\times 10^{-6}$	Tile Gap, in.	Tile Height, in.			Time	Remarks
21	RSI Forward	Paint	7.94	210	815	30	1.00	0.01	0.005				
22			7.99	555	860		2.50						
23						40							
24		IR	8.00	800	875	30	3.50	0.00	0.00				
25						40							
26		Paint				30							
27			7.99	555	860		2.50						
28				670	820	30	3.00	0.01					
29						40							
30			7.98	425	840	30	2.00						
31						40							
32			7.96	320	830	30	1.50						
33													
34						40							
35			7.94	210	815		1.00		0.01				
36													
37			7.92	155	810	30	0.75						
38						40							
39			7.90	105	800	30	0.50						
40						40							

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NOMENCLATURE

VB-2 (9/77)

VKF TUNNEL B TEST LOG

Sverdrup ARO, Inc. ARDC Division

USER: Rockwell International

REPRESENTATIVE(S): J. Cummings, L. Johnson

PROJECT TITLE: NASA/RI OH-90 Transition Test

MODEL: 94-0 Orbiter (0.025 scale)

PROJECT: V41B-P4A

DATE: March 3, 1978

ARO TEST PERSONNEL: D. W. Stallings

Data Group	Configuration	Data Type	M_∞	P_0 psia	T_0 °F	Alpha Model deg	Re/ft x10^{-6}	Tile Gap, in.	Tile Height, in.			Time	Remarks
41	RSI Forward	Paint	7.96	320	830	30	1.50	0.01	0.01				
42		↓				40							
43		IR				30							Digitized early - Data questionable
44						↓							
45			↓	↓	↓	40	↓						
46		↓	7.98	425	840	30	2.00						
47		Paint				↓			↓				
48									0.005				
49			↓	↓	↓	40	↓						
50			7.96	320	830	30	1.50						
51			↓	↓	↓	40	↓						
52		↓	7.94	210	815	30	1.00						
53		IR	7.99	670	870	↓	3.00						
54		Paint											
55	↓		↓	↓	↓	40	↓	↓	↓				
56	RCC Novamide		7.98	425	840	30	2.00	0.00	0.00				Camera malfunction - No pictures
57						40							
58						30							
59			↓	↓	↓	40	↓						
60	↓	↓	7.96	320	830	30	1.50	↓	↓				

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NOMENCLATURE

(3)

VKF TUNNEL B TEST LOG

USER: Rockwell International

PROJECT TITLE: NASA/RI OH-90 Transition Test

PROJECT: V41B-P4A

DATE: March 3, 1978

REPRESENTATIVE(S): J. Cummings, L. Johnson

MODEL: 94-0 Orbiter (0.025 scale)

ARO TEST PERSONNEL: D. W. Stallings

Data Group	Configuration	Data Type	M_∞	P_0 psia	T_0 °F	Alpha Model deg	Re/ft $\times 10^{-6}$	Tile Gap, in.	Tile Height, in.			Time	Remarks
61	RCC Novamide	Paint	7.96	320	830	40	1.50	0.00	0.00				
62			7.99	555	860	30	2.50						
63						40							
64				670	870	30	3.00						
65						40							
66		IR				30							Transmission error - No data
67		Paint	8.00	800	875		3.50						
68						40							
69		IR	7.99	670	870	30	3.00						
70		Paint	7.98	425	840		2.00	0.01	0.00				
71						40							
72			7.99	555	860	30	2.50						
73													
74			7.96	320	830		1.50						
75						40							
76			7.94	210	815	30	1.00						
77						40							
78						30			0.01				
79						40							
80			7.90	105	800	30	0.50						

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NOMENCLATURE

VKF TUNNEL B TEST LOG

PAGE 5 OF 7

Sverdrup | ARO, Inc. AEDC Division

USER: Rockwell International

PROJECT TITLE: NASA/RI OH-90 Transition Test

PROJECT: V41B-P4A

DATE: March 3, 1978

REPRESENTATIVE(S): J. Cummings, L. Johnson

MODEL: 94-0 Orbiter (0.025 scale)

ARO TEST PERSONNEL: D. W. Stallings

Data Group	Configuration	Data Type	M_∞	P_0 psia	T_0 °F	Alpha Model deg	Re/ft x10^{-6}	Tile Gap, in.	Tile Height, in.			Time	Remarks
81	RCC Novamide	Paint	7.90	105	800	40	0.50	0.01	0.01				
82			7.93	155	810	30	0.75						
83						40							
84			7.96	320	830	30	1.50						
85	RSI Aft								0.00				
86													
87						40							
88			7.94	210	815	30	1.00						
89		IR											
90													
91						40							
92		Paint											
93			7.98	425	840	30	2.00						
94						40							
95													
96		IR	7.90	105	800	30	0.50						
97						40							
98		Paint	7.99	555	860	30	2.50						
99													System check-no data
00						40							

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NOMENCLATURE

VB-2 (9/77)

VKF TUNNEL B TEST LOG

Sverdrup ARO

USER: Rockwell International

REPRESENTATIVE(S): J. Cummings, L. Johnson

PROJECT TITLE: NASA/RI OH-90 Transition Test

MODEL: 94-0 Orbiter (0.025 scale)

PROJECT: V41B-P4A

DATE: March 3, 1978

ARO TEST PERSONNEL: D. W. Stallings

Data Group	Configuration	Data Type	M_∞	P_0 psia	T_0 °F	Alpha Model deg	Re/ft $\times 10^{-6}$	Tile Gap, in.	Tile Height, in.			Time	Remarks
101	RSI AFT	Paint	7.99	555	860	40	2.50	0.01	0.00				System check-no data
102													
103				670	870	30	3.00						
104			7.94	210	815		1.00	0.02	0.01				
105						40							
106			7.93	155	810	30	0.75						
107						40							
108			7.96	320	830	30	1.50						
109	B-9					40							
110		IR											Frame size error-no data
111													
112						30							
113		Paint	7.98	425	840		2.00						Camera started late
114		IR											
115		Paint	7.99	555	860		2.50						
116		IR											
117		Paint	7.98	425	840		2.00		0.015				
118			7.96	320	830		1.50						
119		IR											
120		Paint	7.94	210	815		1.00						

NOMENCLATURE

VKF TUNNEL B TEST LOG

Sverdrup ARO, Inc. AEDC Division

USER: Rockwell International

REPRESENTATIVE(S): J. Cummings, L. Johnson

PROJECT TITLE: NASA/RI OH-90 Transition Test

MODEL: 94-0 Orbiter (0.025 scale)

PROJECT: V41B-P4A

DATE: March 3, 1978

ARO TEST PERSONNEL: D. W. Stallings

Data Group	Configuration	Data Type	M_∞	P_0 psia	T_0 °F	Alpha Model deg	Re/ft x10^{-6}	Tile Gap, in.	Tile Height, in.			Time	Remarks
121	RSI AFT	Paint	7.94	210	815	40	1.00	0.02	0.015				
122		IR				30							
123		Paint	7.93	155	810		0.75						
124						40							
125			7.90	105	800	30	0.50						
126						40							
127													
128		IR				30							

NOMENCLATURE

NASA/R1 OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 3,1978

GROUP 2

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R
2146 25	593.849	593.892	593.892	593.892
2146 26	594.066	594.153	593.892	594.110
2146 27	594.371	594.328	593.892	594.371
2146 28	594.545	594.545	593.892	594.589
2146 29	594.719	594.676	593.892	594.719
2146 29	594.719	594.719	593.892	594.719
2146 30	594.806	594.763	593.892	594.850
2146 31	594.937	594.894	593.892	594.937
2146 32	595.024	594.981	593.892	595.024
2146 33	595.068	595.068	593.892	595.111
2146 34	595.155	595.111	593.892	595.155
2146 35	595.198	595.155	593.892	595.198
2146 35	595.242	595.155	593.892	595.198
2146 36	595.285	595.242	593.892	595.242
2146 37	595.329	595.285	593.892	595.285
2146 38	595.416	595.329	593.892	595.329
2146 39	595.416	595.372	593.892	595.372

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MAR 3,1978

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP	* * * * TITLE TYPE	MODEL DESCRIPTION * * * * GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
2	RSI FORWARD	0.01	0.000	0.01	29.99	0.053	21	46	1

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/F FT-1	HRFR BTU/FT2-SEC-R	INITIAL TEMP DEG R
7.99	553.15	1321.67	96.00	0.0571	3838.	0.100E+04	0.773E-07	0.248E+07	0.331E-01	526.7

- 1160

IR CAMERA INFORMATION

MOUNTING LOCATION	260
F STOP	1.8
LENS-DEG	15
SENSITIVITY	1000.
BLACK LEVEL VOLTAGE	2.4542
LINE SCAN PHI	90
MODEL EMISSIVITY	0.96
REF EMISSIVITY	0.94
WINDOW FACTOR	0.860

TIME RECORDS

LIFT OFF	0.00
CENTER LINE	1.00
IR SCAN TIME	9.95
DELTA TIME,SEC	9.39
PHOTO 1 TIME	2146
PHOTO 2 TIME	0
PHOTO 3 TIME	0
PHOTO 4 TIME	0

REFERENCE TARGET INFORMATION

TCR5	500.61
TCR6	-228.49
POINT	0
LINE	-1287

DIGITAL DATA AREA PRINTOUT LOCATION

LINE 29 THROUGH 98
POINT 1 THROUGH 110

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 3,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 9.39 SEC
GROUP 2 INITIAL TEMP 526.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	1.088	1.092	1.095	1.097	1.101	1.097	1.098	1.097	1.096	1.095	1.095	1.094	1.092	1.093	1.093	1.093	1.090	1.095	1.096	1.095
30	1.094	1.097	1.100	1.099	1.100	1.098	1.096	1.095	1.096	1.094	1.093	1.093	1.094	1.094	1.095	1.095	1.097	1.097	1.097	1.096
31	1.100	1.101	1.101	1.101	1.097	1.096	1.094	1.097	1.097	1.098	1.097	1.098	1.096	1.097	1.097	1.099	1.098	1.100	1.097	1.097
32	1.103	1.102	1.101	1.098	1.099	1.097	1.100	1.099	1.099	1.099	1.099	1.099	1.100	1.101	1.100	1.099	1.099	1.098	1.097	1.095
33	1.102	1.100	1.101	1.101	1.102	1.102	1.103	1.102	1.101	1.100	1.101	1.101	1.101	1.099	1.098	1.097	1.097	1.095	1.095	1.093
34	1.102	1.103	1.103	1.103	1.106	1.105	1.103	1.101	1.102	1.101	1.101	1.098	1.098	1.096	1.095	1.095	1.095	1.096	1.099	1.101
35	1.107	1.103	1.106	1.100	1.101	1.098	1.101	1.095	1.097	1.094	1.096	1.091	1.093	1.091	1.096	1.100	1.102	1.103	1.104	1.105
36	1.107	1.105	1.103	1.103	1.100	1.099	1.096	1.096	1.092	1.095	1.094	1.097	1.097	1.100	1.100	1.103	1.104	1.106	1.104	1.105
37	1.103	1.100	1.100	1.097	1.094	1.092	1.093	1.094	1.097	1.097	1.099	1.099	1.102	1.103	1.105	1.104	1.103	1.098	1.093	1.081
38	1.097	1.095	1.092	1.093	1.093	1.096	1.097	1.100	1.100	1.102	1.100	1.103	1.103	1.105	1.098	1.092	1.080	1.071	1.057	1.050
39	1.093	1.093	1.096	1.097	1.098	1.099	1.101	1.101	1.102	1.103	1.103	1.099	1.094	1.084	1.075	1.060	1.051	1.047	1.049	1.047
40	1.095	1.097	1.098	1.101	1.100	1.103	1.101	1.105	1.102	1.096	1.086	1.077	1.062	1.056	1.050	1.051	1.050	1.049	1.047	1.050
41	1.100	1.101	1.102	1.102	1.103	1.103	1.102	1.092	1.083	1.068	1.061	1.054	1.051	1.050	1.051	1.050	1.050	1.050	1.051	1.053
42	1.105	1.103	1.106	1.102	1.100	1.086	1.078	1.060	1.056	1.050	1.051	1.049	1.053	1.053	1.053	1.050	1.053	1.051	1.054	1.053
43	1.110	1.109	1.104	1.091	1.077	1.061	1.057	1.053	1.053	1.051	1.056	1.053	1.054	1.053	1.054	1.053	1.056	1.050	1.054	1.051
44	1.105	1.092	1.076	1.065	1.060	1.060	1.054	1.056	1.053	1.057	1.054	1.060	1.058	1.060	1.057	1.060	1.054	1.060	1.060	1.062
45	1.079	1.068	1.065	1.061	1.061	1.058	1.061	1.060	1.061	1.060	1.061	1.060	1.063	1.060	1.065	1.063	1.066	1.063	1.066	1.066
46	1.071	1.068	1.066	1.070	1.065	1.067	1.063	1.066	1.065	1.067	1.066	1.070	1.066	1.070	1.070	1.073	1.072	1.080	1.093	1.110
47	1.076	1.073	1.073	1.072	1.073	1.072	1.073	1.071	1.072	1.071	1.075	1.073	1.075	1.075	1.078	1.078	1.084	1.116	1.193	1.256
48	1.078	1.077	1.078	1.079	1.077	1.078	1.077	1.078	1.077	1.079	1.078	1.080	1.080	1.084	1.084	1.086	1.091	1.140	1.240	1.317
49	1.083	1.083	1.081	1.079	1.083	1.080	1.083	1.079	1.080	1.079	1.084	1.084	1.085	1.085	1.087	1.089	1.099	1.152	1.261	1.340
50	1.083	1.083	1.085	1.084	1.086	1.084	1.085	1.083	1.085	1.085	1.086	1.085	1.087	1.085	1.090	1.090	1.105	1.174	1.289	1.361
51	1.085	1.085	1.085	1.083	1.086	1.083	1.087	1.085	1.087	1.085	1.087	1.087	1.090	1.091	1.095	1.096	1.122	1.222	1.330	1.388
52	1.081	1.080	1.079	1.081	1.080	1.084	1.081	1.085	1.083	1.085	1.084	1.087	1.087	1.090	1.091	1.099	1.140	1.258	1.354	1.404
53	1.075	1.075	1.076	1.073	1.075	1.072	1.073	1.073	1.077	1.076	1.078	1.078	1.081	1.081	1.085	1.093	1.160	1.281	1.364	1.404
54	1.061	1.062	1.062	1.063	1.062	1.063	1.060	1.065	1.061	1.065	1.063	1.068	1.067	1.072	1.073	1.094	1.185	1.303	1.367	1.400
55	1.053	1.051	1.053	1.050	1.051	1.050	1.051	1.053	1.054	1.054	1.060	1.060	1.060	1.060	1.065	1.093	1.206	1.316	1.371	1.397
56	1.050	1.043	1.043	1.044	1.046	1.047	1.047	1.049	1.049	1.049	1.050	1.051	1.051	1.060	1.066	1.098	1.217	1.318	1.368	1.393
57	1.046	1.044	1.044	1.043	1.044	1.043	1.044	1.046	1.049	1.050	1.051	1.050	1.053	1.053	1.063	1.103	1.225	1.319	1.364	1.386
58	1.043	1.041	1.043	1.041	1.043	1.043	1.043	1.041	1.044	1.046	1.049	1.047	1.053	1.056	1.065	1.121	1.245	1.326	1.364	1.384
59	1.040	1.038	1.040	1.040	1.040	1.038	1.038	1.040	1.041	1.041	1.046	1.046	1.049	1.051	1.070	1.159	1.276	1.338	1.367	1.384
60	1.038	1.035	1.035	1.037	1.037	1.038	1.033	1.038	1.037	1.041	1.041	1.043	1.043	1.049	1.075	1.186	1.294	1.345	1.368	1.384
61	1.037	1.035	1.035	1.033	1.033	1.033	1.037	1.033	1.037	1.037	1.040	1.040	1.041	1.047	1.094	1.224	1.319	1.359	1.379	1.392
62	1.035	1.033	1.032	1.037	1.033	1.035	1.033	1.035	1.037	1.040	1.040	1.043	1.044	1.054	1.126	1.258	1.334	1.368	1.388	1.402
63	1.035	1.033	1.033	1.030	1.033	1.030	1.035	1.033	1.038	1.038	1.041	1.041	1.044	1.056	1.151	1.275	1.340	1.370	1.389	1.403

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 3,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 2

IR SCAN TIME 9.39 SEC
INITIAL TEMP 526.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	1.095	1.095	1.097	1.095	1.096	1.097	1.096	1.091	1.091	1.090	1.088	1.085	1.080	1.084	1.085	1.084	1.087	1.087	1.088	1.088
30	1.097	1.097	1.097	1.096	1.096	1.093	1.093	1.090	1.090	1.069	1.090	1.089	1.090	1.090	1.090	1.090	1.093	1.091	1.095	1.095
31	1.094	1.096	1.093	1.095	1.094	1.093	1.091	1.091	1.092	1.095	1.097	1.100	1.099	1.101	1.100	1.103	1.104	1.106	1.105	1.105
32	1.094	1.092	1.094	1.093	1.097	1.098	1.100	1.099	1.102	1.104	1.108	1.108	1.109	1.107	1.107	1.105	1.102	1.097	1.093	1.085
33	1.094	1.096	1.100	1.102	1.104	1.105	1.107	1.106	1.108	1.109	1.107	1.106	1.101	1.093	1.089	1.080	1.077	1.066	1.061	1.050
34	1.103	1.102	1.104	1.106	1.108	1.109	1.107	1.101	1.098	1.092	1.087	1.080	1.072	1.058	1.049	1.041	1.040	1.037	1.037	1.037
35	1.107	1.107	1.107	1.102	1.097	1.090	1.084	1.072	1.066	1.053	1.043	1.038	1.037	1.037	1.037	1.035	1.037	1.037	1.040	1.037
36	1.096	1.093	1.080	1.076	1.060	1.054	1.043	1.041	1.035	1.037	1.033	1.038	1.033	1.040	1.037	1.038	1.037	1.041	1.040	1.040
37	1.072	1.060	1.050	1.043	1.041	1.040	1.043	1.040	1.041	1.038	1.040	1.038	1.040	1.038	1.041	1.033	1.041	1.032	1.041	1.035
38	1.046	1.047	1.044	1.047	1.044	1.044	1.041	1.044	1.043	1.044	1.044	1.044	1.043	1.043	1.043	1.044	1.044	1.046	1.044	1.046
39	1.047	1.047	1.049	1.047	1.046	1.047	1.046	1.044	1.047	1.047	1.050	1.047	1.047	1.046	1.047	1.046	1.049	1.047	1.049	1.049
40	1.047	1.051	1.050	1.051	1.050	1.051	1.049	1.053	1.050	1.051	1.047	1.053	1.051	1.051	1.049	1.050	1.050	1.051	1.050	1.051
41	1.053	1.053	1.053	1.053	1.053	1.051	1.054	1.053	1.054	1.053	1.054	1.053	1.054	1.053	1.053	1.053	1.056	1.053	1.054	1.056
42	1.056	1.056	1.056	1.054	1.056	1.056	1.057	1.056	1.060	1.058	1.058	1.056	1.060	1.057	1.060	1.057	1.060	1.058	1.060	1.058
43	1.057	1.054	1.060	1.057	1.060	1.057	1.060	1.057	1.061	1.058	1.062	1.062	1.063	1.060	1.061	1.058	1.063	1.061	1.063	1.060
44	1.060	1.063	1.061	1.063	1.062	1.065	1.063	1.067	1.065	1.067	1.063	1.066	1.063	1.067	1.062	1.066	1.061	1.065	1.058	1.063
45	1.068	1.068	1.072	1.071	1.071	1.070	1.072	1.071	1.075	1.073	1.075	1.070	1.072	1.071	1.073	1.071	1.073	1.070	1.070	1.068
46	1.120	1.124	1.122	1.121	1.115	1.112	1.103	1.100	1.093	1.091	1.085	1.087	1.083	1.085	1.081	1.083	1.079	1.080	1.078	1.080
47	1.290	1.307	1.318	1.324	1.326	1.322	1.311	1.291	1.266	1.237	1.207	1.175	1.145	1.120	1.106	1.097	1.093	1.090	1.091	1.089
48	1.358	1.381	1.399	1.417	1.436	1.456	1.476	1.492	1.502	1.502	1.489	1.458	1.407	1.339	1.268	1.208	1.158	1.125	1.106	1.101
49	1.381	1.403	1.418	1.433	1.449	1.465	1.483	1.501	1.517	1.531	1.542	1.547	1.544	1.530	1.501	1.451	1.373	1.276	1.194	1.141
50	1.401	1.424	1.443	1.458	1.472	1.487	1.502	1.514	1.522	1.527	1.532	1.537	1.540	1.544	1.547	1.537	1.504	1.433	1.329	1.232
51	1.420	1.441	1.459	1.476	1.493	1.512	1.530	1.543	1.551	1.556	1.560	1.560	1.560	1.559	1.563	1.565	1.561	1.538	1.479	1.375
52	1.430	1.449	1.466	1.486	1.504	1.523	1.544	1.565	1.583	1.595	1.598	1.595	1.586	1.577	1.571	1.571	1.572	1.573	1.566	1.532
53	1.429	1.448	1.465	1.485	1.507	1.529	1.550	1.571	1.592	1.607	1.614	1.620	1.623	1.621	1.615	1.605	1.595	1.590	1.588	1.586
54	1.420	1.436	1.452	1.470	1.492	1.516	1.542	1.568	1.593	1.612	1.621	1.627	1.631	1.637	1.642	1.644	1.640	1.630	1.615	1.600
55	1.415	1.428	1.440	1.456	1.476	1.499	1.524	1.549	1.575	1.600	1.619	1.632	1.638	1.642	1.647	1.651	1.656	1.660	1.661	1.654
56	1.411	1.423	1.436	1.450	1.468	1.488	1.507	1.529	1.552	1.573	1.592	1.606	1.617	1.628	1.640	1.646	1.653	1.660	1.665	1.671
57	1.402	1.414	1.427	1.441	1.459	1.479	1.501	1.522	1.542	1.558	1.568	1.575	1.581	1.586	1.591	1.596	1.608	1.626	1.644	1.656
58	1.399	1.409	1.421	1.434	1.452	1.471	1.492	1.514	1.534	1.551	1.564	1.569	1.572	1.575	1.577	1.575	1.567	1.558	1.559	1.579
59	1.396	1.406	1.416	1.433	1.450	1.469	1.489	1.511	1.532	1.548	1.558	1.565	1.574	1.582	1.582	1.577	1.572	1.565	1.549	1.523
60	1.393	1.401	1.410	1.426	1.443	1.462	1.483	1.506	1.529	1.545	1.555	1.562	1.571	1.581	1.584	1.581	1.582	1.584	1.579	1.565
61	1.400	1.405	1.413	1.422	1.432	1.447	1.466	1.485	1.507	1.525	1.539	1.554	1.571	1.584	1.588	1.586	1.588	1.591	1.590	1.586
62	1.409	1.416	1.425	1.435	1.443	1.455	1.468	1.482	1.493	1.501	1.505	1.514	1.530	1.547	1.562	1.576	1.586	1.591	1.594	1.597
63	1.412	1.420	1.431	1.443	1.454	1.468	1.483	1.499	1.512	1.516	1.517	1.515	1.515	1.511	1.506	1.507	1.515	1.530	1.546	1.568

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 3,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 2

IR SCAN TIME 9.39 SEC
INITIAL TEMP 526.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	1.085	1.089	1.088	1.088	1.090	1.092	1.092	1.095	1.093	1.091	1.088	1.087	1.085	1.085	1.081	1.081	1.078	1.076	1.070	1.066
30	1.100	1.097	1.096	1.095	1.097	1.094	1.097	1.093	1.092	1.085	1.083	1.077	1.076	1.073	1.071	1.068	1.066	1.062	1.060	1.053
31	1.102	1.100	1.095	1.092	1.087	1.085	1.079	1.077	1.068	1.065	1.057	1.054	1.050	1.047	1.041	1.040	1.032	1.037	1.030	1.037
32	1.083	1.076	1.071	1.062	1.057	1.047	1.043	1.038	1.037	1.033	1.033	1.030	1.032	1.030	1.033	1.033	1.033	1.030	1.030	1.030
33	1.044	1.038	1.037	1.037	1.037	1.033	1.033	1.033	1.035	1.033	1.033	1.030	1.033	1.030	1.033	1.030	1.030	1.029	1.032	1.032
34	1.037	1.037	1.037	1.033	1.037	1.033	1.037	1.035	1.033	1.030	1.033	1.033	1.035	1.032	1.032	1.030	1.032	1.029	1.030	1.029
35	1.037	1.033	1.038	1.037	1.038	1.035	1.037	1.035	1.037	1.035	1.035	1.033	1.033	1.033	1.033	1.032	1.032	1.029	1.032	1.030
36	1.037	1.041	1.038	1.041	1.038	1.040	1.037	1.040	1.037	1.040	1.037	1.037	1.035	1.038	1.033	1.037	1.033	1.035	1.033	1.035
37	1.043	1.037	1.043	1.033	1.040	1.032	1.041	1.035	1.040	1.032	1.040	1.037	1.040	1.038	1.038	1.037	1.037	1.033	1.035	1.033
38	1.044	1.046	1.043	1.046	1.043	1.043	1.043	1.044	1.041	1.043	1.040	1.043	1.041	1.041	1.035	1.040	1.033	1.038	1.032	1.038
39	1.049	1.046	1.047	1.050	1.047	1.047	1.044	1.047	1.047	1.044	1.044	1.041	1.044	1.041	1.043	1.043	1.043	1.040	1.041	1.038
40	1.051	1.053	1.051	1.051	1.047	1.050	1.047	1.050	1.047	1.050	1.047	1.047	1.044	1.047	1.046	1.047	1.044	1.044	1.044	1.044
41	1.056	1.053	1.053	1.053	1.053	1.053	1.051	1.053	1.051	1.053	1.051	1.050	1.049	1.047	1.049	1.047	1.049	1.046	1.049	1.046
42	1.058	1.056	1.057	1.056	1.056	1.056	1.056	1.054	1.054	1.053	1.051	1.051	1.051	1.050	1.054	1.051	1.051	1.047	1.047	1.046
43	1.063	1.060	1.061	1.060	1.060	1.060	1.061	1.060	1.060	1.056	1.058	1.054	1.054	1.053	1.053	1.053	1.053	1.051	1.051	1.049
44	1.058	1.065	1.058	1.065	1.057	1.062	1.056	1.061	1.056	1.061	1.060	1.060	1.057	1.056	1.054	1.054	1.054	1.056	1.053	1.053
45	1.070	1.066	1.068	1.066	1.066	1.063	1.066	1.063	1.066	1.062	1.063	1.057	1.062	1.056	1.061	1.056	1.061	1.054	1.057	1.054
46	1.077	1.076	1.075	1.077	1.076	1.076	1.071	1.072	1.070	1.072	1.070	1.075	1.068	1.070	1.065	1.068	1.066	1.067	1.063	1.066
47	1.089	1.087	1.087	1.084	1.085	1.083	1.083	1.079	1.079	1.077	1.079	1.077	1.078	1.075	1.077	1.075	1.076	1.075	1.073	1.072
48	1.097	1.097	1.094	1.094	1.091	1.092	1.089	1.088	1.085	1.086	1.084	1.085	1.081	1.081	1.080	1.081	1.079	1.080	1.077	1.079
49	1.116	1.107	1.103	1.100	1.098	1.095	1.094	1.090	1.092	1.089	1.090	1.086	1.087	1.085	1.086	1.085	1.084	1.080	1.084	1.081
50	1.166	1.130	1.115	1.107	1.103	1.101	1.098	1.095	1.094	1.092	1.092	1.090	1.091	1.089	1.089	1.087	1.087	1.086	1.087	1.084
51	1.264	1.181	1.139	1.122	1.115	1.105	1.104	1.100	1.098	1.095	1.096	1.094	1.095	1.091	1.091	1.090	1.090	1.089	1.090	1.089
52	1.444	1.324	1.219	1.151	1.123	1.118	1.111	1.106	1.101	1.099	1.093	1.096	1.091	1.093	1.090	1.092	1.088	1.090	1.086	1.088
53	1.573	1.521	1.417	1.296	1.199	1.139	1.118	1.109	1.102	1.095	1.092	1.088	1.088	1.086	1.087	1.084	1.084	1.080	1.083	1.081
54	1.588	1.581	1.555	1.460	1.321	1.212	1.145	1.119	1.107	1.097	1.085	1.080	1.073	1.075	1.070	1.071	1.068	1.071	1.070	1.075
55	1.641	1.624	1.606	1.573	1.491	1.362	1.243	1.161	1.123	1.108	1.097	1.083	1.075	1.066	1.067	1.062	1.065	1.062	1.066	1.068
56	1.677	1.677	1.669	1.651	1.623	1.561	1.443	1.305	1.201	1.139	1.115	1.103	1.089	1.075	1.070	1.063	1.067	1.065	1.070	1.075
57	1.668	1.679	1.687	1.690	1.686	1.670	1.630	1.536	1.392	1.259	1.171	1.127	1.110	1.094	1.080	1.071	1.070	1.067	1.073	1.072
58	1.612	1.641	1.659	1.671	1.681	1.686	1.686	1.669	1.603	1.470	1.321	1.210	1.146	1.116	1.100	1.081	1.073	1.066	1.067	1.068
59	1.502	1.511	1.551	1.598	1.634	1.652	1.655	1.651	1.650	1.630	1.547	1.401	1.263	1.168	1.125	1.100	1.084	1.066	1.065	1.060
60	1.545	1.512	1.469	1.444	1.466	1.524	1.581	1.611	1.605	1.586	1.577	1.516	1.374	1.241	1.157	1.120	1.102	1.087	1.066	1.060
61	1.581	1.575	1.559	1.524	1.472	1.427	1.416	1.449	1.509	1.549	1.546	1.512	1.457	1.351	1.229	1.150	1.115	1.100	1.086	1.065
62	1.600	1.597	1.594	1.591	1.578	1.545	1.491	1.438	1.409	1.414	1.449	1.486	1.490	1.452	1.361	1.244	1.158	1.117	1.098	1.089
63	1.592	1.604	1.610	1.610	1.610	1.608	1.599	1.573	1.523	1.463	1.420	1.407	1.421	1.451	1.465	1.417	1.305	1.199	1.135	1.106

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 3,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 2

IR SCAN TIME 9.39 SEC
INITIAL TEMP 526.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	1.056	1.056	1.054	1.057	1.060	1.062	1.061	1.063	1.062	1.062	1.063	1.068	1.065	1.068	1.065	1.066	1.062	1.063	1.060	1.063
30	1.050	1.047	1.046	1.046	1.046	1.044	1.044	1.041	1.044	1.043	1.043	1.044	1.044	1.044	1.044	1.043	1.043	1.043	1.041	1.043
31	1.029	1.035	1.027	1.033	1.029	1.033	1.030	1.033	1.027	1.030	1.027	1.033	1.033	1.033	1.032	1.035	1.032	1.035	1.033	1.037
32	1.033	1.032	1.032	1.029	1.030	1.027	1.030	1.029	1.030	1.027	1.029	1.027	1.030	1.023	1.032	1.023	1.030	1.023	1.030	1.025
33	1.030	1.029	1.030	1.029	1.030	1.029	1.029	1.023	1.027	1.027	1.029	1.025	1.027	1.025	1.030	1.029	1.030	1.025	1.029	1.027
34	1.032	1.029	1.030	1.027	1.029	1.027	1.027	1.027	1.029	1.025	1.027	1.025	1.029	1.025	1.027	1.023	1.027	1.023	1.027	1.025
35	1.033	1.030	1.030	1.027	1.030	1.027	1.030	1.027	1.025	1.027	1.029	1.027	1.029	1.023	1.027	1.023	1.025	1.025	1.027	1.023
36	1.033	1.035	1.030	1.032	1.030	1.032	1.030	1.033	1.027	1.032	1.029	1.032	1.029	1.033	1.025	1.029	1.023	1.029	1.027	1.029
37	1.037	1.035	1.037	1.033	1.035	1.033	1.033	1.035	1.035	1.032	1.033	1.030	1.032	1.030	1.032	1.030	1.030	1.027	1.027	1.027
38	1.033	1.040	1.032	1.038	1.032	1.033	1.030	1.035	1.030	1.038	1.035	1.035	1.032	1.033	1.032	1.033	1.032	1.035	1.032	1.033
39	1.038	1.038	1.040	1.038	1.040	1.038	1.038	1.037	1.037	1.037	1.037	1.033	1.038	1.033	1.035	1.032	1.033	1.030	1.033	1.030
40	1.043	1.043	1.040	1.041	1.040	1.041	1.040	1.043	1.038	1.041	1.037	1.038	1.037	1.037	1.038	1.040	1.037	1.038	1.037	1.037
41	1.046	1.043	1.044	1.043	1.044	1.043	1.046	1.043	1.043	1.040	1.041	1.041	1.041	1.041	1.041	1.040	1.041	1.038	1.038	1.038
42	1.050	1.047	1.047	1.044	1.047	1.046	1.044	1.043	1.046	1.043	1.046	1.043	1.044	1.043	1.044	1.041	1.043	1.041	1.041	1.040
43	1.050	1.050	1.051	1.049	1.050	1.050	1.047	1.044	1.047	1.046	1.047	1.047	1.047	1.044	1.047	1.043	1.044	1.043	1.044	1.044
44	1.050	1.053	1.051	1.053	1.050	1.053	1.050	1.050	1.047	1.049	1.049	1.050	1.050	1.050	1.047	1.047	1.046	1.047	1.047	1.047
45	1.058	1.054	1.057	1.051	1.054	1.050	1.054	1.054	1.056	1.053	1.051	1.053	1.054	1.053	1.053	1.051	1.051	1.050	1.050	1.050
46	1.063	1.066	1.062	1.063	1.060	1.063	1.060	1.063	1.060	1.062	1.054	1.062	1.053	1.061	1.053	1.061	1.053	1.061	1.054	1.060
47	1.072	1.072	1.072	1.070	1.071	1.067	1.071	1.072	1.070	1.066	1.068	1.066	1.068	1.065	1.067	1.065	1.067	1.065	1.067	1.065
48	1.077	1.079	1.076	1.077	1.075	1.077	1.073	1.076	1.072	1.075	1.072	1.075	1.071	1.072	1.070	1.072	1.071	1.073	1.070	1.073
49	1.083	1.080	1.080	1.079	1.079	1.078	1.079	1.077	1.077	1.075	1.077	1.077	1.077	1.075	1.077	1.075	1.076	1.075	1.076	1.073
50	1.085	1.083	1.084	1.081	1.084	1.080	1.081	1.079	1.080	1.078	1.080	1.078	1.078	1.077	1.078	1.077	1.079	1.077	1.077	1.077
51	1.089	1.085	1.086	1.085	1.085	1.084	1.085	1.084	1.083	1.080	1.083	1.080	1.083	1.080	1.083	1.080	1.080	1.078	1.080	1.079
52	1.085	1.088	1.084	1.088	1.084	1.088	1.085	1.087	1.084	1.085	1.084	1.085	1.083	1.084	1.083	1.084	1.080	1.083	1.080	1.083
53	1.085	1.084	1.087	1.086	1.087	1.085	1.086	1.083	1.086	1.083	1.085	1.083	1.086	1.081	1.085	1.080	1.083	1.079	1.083	1.079
54	1.076	1.080	1.080	1.085	1.084	1.087	1.086	1.089	1.086	1.087	1.085	1.088	1.085	1.087	1.085	1.086	1.084	1.085	1.080	1.083
55	1.076	1.078	1.083	1.086	1.086	1.087	1.089	1.087	1.088	1.087	1.089	1.088	1.090	1.089	1.088	1.086	1.087	1.083	1.084	1.081
56	1.079	1.079	1.085	1.085	1.088	1.089	1.090	1.089	1.091	1.091	1.090	1.089	1.093	1.089	1.089	1.087	1.088	1.085	1.085	1.081
57	1.078	1.078	1.084	1.084	1.087	1.086	1.087	1.085	1.086	1.085	1.086	1.085	1.087	1.083	1.085	1.083	1.083	1.079	1.080	1.077
58	1.073	1.076	1.076	1.076	1.076	1.075	1.076	1.075	1.076	1.075	1.075	1.073	1.073	1.070	1.072	1.070	1.071	1.068	1.067	1.062
59	1.062	1.057	1.062	1.061	1.062	1.060	1.061	1.058	1.060	1.060	1.061	1.058	1.060	1.054	1.057	1.054	1.056	1.053	1.054	1.053
60	1.053	1.054	1.051	1.051	1.047	1.049	1.043	1.047	1.041	1.046	1.040	1.046	1.040	1.043	1.038	1.041	1.037	1.040	1.033	1.038
61	1.056	1.050	1.047	1.046	1.047	1.043	1.043	1.041	1.041	1.038	1.040	1.037	1.035	1.035	1.037	1.035	1.033	1.033	1.033	1.032
62	1.067	1.058	1.047	1.050	1.046	1.047	1.043	1.043	1.038	1.041	1.038	1.040	1.035	1.037	1.033	1.037	1.033	1.035	1.032	1.033
63	1.092	1.077	1.061	1.050	1.050	1.046	1.049	1.044	1.043	1.040	1.041	1.038	1.040	1.037	1.037	1.033	1.037	1.033	1.037	1.033

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VAF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 3,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 2

IR SCAN TIME 9.39 SEC
INITIAL TEMP 526.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	1.060	1.062	1.058	1.060	1.057	1.058	1.056	1.058	1.057	1.057	1.054	1.054	1.050	1.053	1.053	1.054	1.053	1.053	1.053	1.053
30	1.043	1.041	1.040	1.038	1.040	1.038	1.038	1.037	1.038	1.037	1.037	1.033	1.035	1.033	1.035	1.033	1.032	1.030	1.030	1.027
31	1.033	1.037	1.033	1.037	1.033	1.035	1.033	1.037	1.035	1.033	1.032	1.032	1.032	1.032	1.030	1.030	1.025	1.027	1.025	1.027
32	1.032	1.023	1.032	1.025	1.032	1.027	1.032	1.025	1.032	1.032	1.030	1.030	1.030	1.027	1.027	1.025	1.029	1.025	1.023	1.020
33	1.029	1.025	1.029	1.027	1.030	1.029	1.029	1.027	1.029	1.027	1.030	1.023	1.027	1.022	1.025	1.018	1.022	1.016	1.022	1.018
34	1.025	1.023	1.025	1.023	1.027	1.023	1.025	1.023	1.025	1.023	1.025	1.022	1.023	1.022	1.023	1.022	1.022	1.018	1.022	1.018
35	1.025	1.023	1.025	1.023	1.023	1.022	1.027	1.023	1.025	1.020	1.023	1.020	1.023	1.020	1.023	1.020	1.020	1.018	1.022	1.018
36	1.023	1.025	1.023	1.027	1.023	1.025	1.020	1.025	1.022	1.025	1.022	1.023	1.018	1.023	1.020	1.023	1.020	1.023	1.018	1.022
37	1.029	1.027	1.030	1.027	1.025	1.023	1.025	1.025	1.025	1.025	1.027	1.023	1.023	1.023	1.023	1.022	1.025	1.023	1.025	1.020
38	1.030	1.032	1.027	1.030	1.027	1.032	1.029	1.030	1.027	1.029	1.025	1.029	1.027	1.029	1.027	1.029	1.025	1.027	1.025	1.027
39	1.035	1.030	1.033	1.030	1.030	1.029	1.032	1.030	1.033	1.030	1.032	1.027	1.030	1.027	1.032	1.029	1.030	1.030	1.032	1.029
40	1.033	1.037	1.033	1.037	1.033	1.037	1.033	1.035	1.033	1.033	1.029	1.033	1.029	1.033	1.029	1.033	1.027	1.032	1.027	1.033
41	1.038	1.037	1.038	1.037	1.038	1.037	1.037	1.035	1.035	1.033	1.037	1.035	1.037	1.035	1.035	1.035	1.033	1.033	1.035	1.033
42	1.043	1.040	1.041	1.038	1.038	1.037	1.040	1.037	1.038	1.037	1.040	1.037	1.038	1.035	1.037	1.037	1.035	1.035	1.037	1.035
43	1.044	1.043	1.041	1.040	1.041	1.041	1.040	1.041	1.041	1.038	1.038	1.037	1.035	1.037	1.040	1.038	1.040	1.037	1.038	1.037
44	1.046	1.046	1.044	1.044	1.043	1.046	1.044	1.044	1.043	1.044	1.041	1.043	1.041	1.046	1.041	1.043	1.041	1.041	1.040	1.043
45	1.051	1.051	1.051	1.050	1.050	1.050	1.049	1.050	1.050	1.050	1.049	1.049	1.047	1.047	1.049	1.047	1.046	1.047	1.047	1.046
46	1.053	1.060	1.054	1.061	1.054	1.058	1.057	1.057	1.057	1.057	1.054	1.057	1.054	1.057	1.054	1.054	1.053	1.056	1.054	1.054
47	1.067	1.065	1.068	1.066	1.067	1.063	1.066	1.063	1.066	1.062	1.063	1.061	1.065	1.060	1.063	1.061	1.063	1.058	1.063	1.060
48	1.072	1.076	1.075	1.076	1.072	1.073	1.071	1.072	1.070	1.071	1.067	1.071	1.068	1.072	1.068	1.070	1.066	1.070	1.066	1.070
49	1.077	1.077	1.078	1.077	1.078	1.075	1.076	1.075	1.077	1.072	1.073	1.072	1.075	1.072	1.073	1.071	1.072	1.070	1.072	1.071
50	1.078	1.077	1.079	1.078	1.080	1.077	1.077	1.075	1.077	1.075	1.077	1.075	1.076	1.073	1.076	1.073	1.076	1.073	1.075	1.071
51	1.079	1.079	1.080	1.078	1.079	1.077	1.079	1.077	1.078	1.077	1.078	1.076	1.077	1.075	1.077	1.075	1.076	1.076	1.076	1.073
52	1.079	1.083	1.080	1.081	1.078	1.079	1.076	1.078	1.076	1.078	1.076	1.077	1.073	1.075	1.071	1.075	1.071	1.072	1.071	1.072
53	1.081	1.077	1.080	1.077	1.076	1.072	1.073	1.070	1.070	1.068	1.070	1.065	1.067	1.063	1.065	1.063	1.066	1.062	1.065	1.063
54	1.078	1.079	1.077	1.075	1.070	1.068	1.060	1.061	1.054	1.058	1.053	1.056	1.053	1.054	1.051	1.054	1.049	1.050	1.046	1.050
55	1.081	1.078	1.078	1.075	1.071	1.063	1.061	1.056	1.054	1.050	1.050	1.047	1.047	1.044	1.047	1.043	1.044	1.041	1.043	1.040
56	1.083	1.076	1.078	1.075	1.073	1.065	1.061	1.056	1.051	1.050	1.047	1.046	1.046	1.043	1.043	1.040	1.040	1.037	1.038	1.037
57	1.077	1.075	1.075	1.070	1.067	1.060	1.060	1.053	1.050	1.047	1.046	1.043	1.041	1.038	1.040	1.037	1.037	1.035	1.037	1.033
58	1.063	1.062	1.062	1.060	1.060	1.053	1.050	1.047	1.044	1.041	1.040	1.037	1.038	1.035	1.033	1.035	1.035	1.033	1.033	1.030
59	1.053	1.051	1.054	1.053	1.049	1.047	1.047	1.046	1.044	1.043	1.041	1.040	1.040	1.037	1.040	1.037	1.038	1.037	1.038	1.037
60	1.033	1.040	1.035	1.037	1.033	1.037	1.033	1.037	1.030	1.032	1.027	1.033	1.029	1.027	1.023	1.030	1.025	1.029	1.025	1.025
61	1.033	1.030	1.030	1.027	1.030	1.025	1.027	1.022	1.025	1.022	1.025	1.022	1.023	1.018	1.023	1.016	1.022	1.016	1.020	1.020
62	1.030	1.032	1.030	1.032	1.027	1.030	1.027	1.030	1.025	1.027	1.023	1.027	1.023	1.027	1.020	1.023	1.018	1.023	1.020	1.020
63	1.033	1.030	1.033	1.030	1.033	1.029	1.032	1.027	1.032	1.027	1.029	1.025	1.025	1.023	1.025	1.023	1.025	1.022	1.023	1.018

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IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 2

IR SCAN TIME 9.39 SEC
INITIAL TEMP 526.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	1.053	1.053	1.051	1.053	1.051	1.054	1.051	1.053	1.050	1.051
30	1.029	1.027	1.027	1.027	1.027	1.023	1.023	1.020	1.023	1.022
31	1.025	1.025	1.022	1.022	1.020	1.023	1.020	1.023	1.020	1.022
32	1.023	1.020	1.022	1.020	1.020	1.018	1.020	1.018	1.020	1.018
33	1.022	1.014	1.018	1.014	1.018	1.014	1.018	1.016	1.018	1.018
34	1.020	1.016	1.018	1.016	1.018	1.016	1.018	1.014	1.016	1.011
35	1.018	1.016	1.018	1.016	1.020	1.014	1.016	1.014	1.018	1.016
36	1.018	1.023	1.018	1.023	1.016	1.020	1.018	1.022	1.018	1.020
37	1.023	1.020	1.023	1.022	1.023	1.022	1.020	1.018	1.022	1.020
38	1.025	1.027	1.025	1.029	1.023	1.025	1.023	1.025	1.022	1.027
39	1.030	1.027	1.030	1.029	1.029	1.029	1.030	1.027	1.030	1.027
40	1.025	1.032	1.027	1.033	1.027	1.032	1.030	1.032	1.030	1.032
41	1.037	1.033	1.037	1.033	1.033	1.033	1.035	1.027	1.035	1.030
42	1.037	1.033	1.035	1.033	1.037	1.035	1.037	1.037	1.037	1.035
43	1.037	1.037	1.038	1.037	1.040	1.037	1.037	1.037	1.038	1.037
44	1.041	1.043	1.041	1.043	1.038	1.043	1.041	1.043	1.041	1.043
45	1.049	1.046	1.047	1.044	1.047	1.044	1.047	1.047	1.044	1.046
46	1.053	1.054	1.053	1.054	1.054	1.053	1.053	1.053	1.051	1.056
47	1.062	1.058	1.062	1.061	1.062	1.060	1.062	1.060	1.061	1.060
48	1.066	1.066	1.065	1.067	1.065	1.067	1.062	1.066	1.060	1.066
49	1.073	1.068	1.071	1.070	1.071	1.070	1.070	1.068	1.070	1.068
50	1.073	1.072	1.073	1.072	1.073	1.068	1.071	1.068	1.071	1.071
51	1.075	1.072	1.073	1.071	1.073	1.071	1.073	1.070	1.071	1.068
52	1.070	1.072	1.066	1.070	1.066	1.070	1.066	1.068	1.066	1.067
53	1.063	1.061	1.061	1.060	1.062	1.060	1.061	1.060	1.060	1.057
54	1.047	1.051	1.050	1.050	1.047	1.047	1.044	1.047	1.044	1.046
55	1.041	1.038	1.038	1.029	1.037	1.027	1.037	1.027	1.035	1.035
56	1.037	1.035	1.035	1.030	1.032	1.029	1.030	1.027	1.029	1.030
57	1.033	1.030	1.032	1.029	1.030	1.025	1.027	1.023	1.023	1.022
58	1.030	1.027	1.029	1.027	1.029	1.027	1.025	1.023	1.025	1.023
59	1.037	1.033	1.035	1.033	1.033	1.033	1.033	1.030	1.032	1.030
60	1.023	1.025	1.023	1.023	1.020	1.023	1.020	1.023	1.018	1.020
61	1.020	1.016	1.018	1.016	1.016	1.014	1.018	1.016	1.014	1.011
62	1.014	1.020	1.013	1.018	1.011	1.016	1.009	1.014	1.011	1.016
63	1.020	1.018	1.022	1.016	1.018	1.014	1.018	1.014	1.018	1.014

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 3,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 2

IR SCAN TIME 9.39 SEC
INITIAL TEMP 526.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	1.035	1.033	1.033	1.037	1.035	1.037	1.033	1.037	1.035	1.040	1.037	1.044	1.041	1.067	1.173	1.289	1.342	1.370	1.386	1.400
65	1.035	1.035	1.037	1.033	1.033	1.033	1.035	1.033	1.037	1.037	1.041	1.041	1.046	1.075	1.197	1.297	1.343	1.367	1.384	1.396
66	1.032	1.032	1.032	1.030	1.030	1.032	1.033	1.030	1.035	1.035	1.038	1.038	1.047	1.102	1.233	1.311	1.346	1.369	1.385	1.395
67	1.027	1.025	1.025	1.025	1.027	1.027	1.029	1.027	1.030	1.030	1.035	1.037	1.047	1.142	1.263	1.320	1.349	1.369	1.384	1.395
68	1.023	1.023	1.023	1.023	1.020	1.023	1.020	1.025	1.023	1.029	1.030	1.037	1.057	1.175	1.278	1.324	1.350	1.368	1.379	1.392
69	1.020	1.016	1.020	1.018	1.018	1.016	1.018	1.018	1.022	1.022	1.027	1.033	1.084	1.209	1.289	1.324	1.346	1.361	1.372	1.382
70	1.018	1.018	1.011	1.016	1.011	1.018	1.016	1.020	1.018	1.023	1.027	1.040	1.116	1.235	1.293	1.322	1.341	1.355	1.366	1.377
71	1.020	1.016	1.018	1.014	1.014	1.014	1.018	1.014	1.022	1.020	1.027	1.035	1.132	1.244	1.297	1.322	1.341	1.353	1.365	1.375
72	1.020	1.018	1.016	1.018	1.016	1.020	1.018	1.022	1.018	1.023	1.025	1.046	1.147	1.256	1.303	1.328	1.345	1.359	1.370	1.380
73	1.020	1.018	1.018	1.016	1.020	1.016	1.020	1.018	1.020	1.022	1.029	1.050	1.163	1.260	1.302	1.325	1.342	1.355	1.366	1.375
74	1.020	1.020	1.018	1.014	1.018	1.016	1.020	1.018	1.020	1.018	1.029	1.068	1.183	1.259	1.291	1.310	1.326	1.336	1.347	1.355
75	1.020	1.020	1.016	1.014	1.016	1.016	1.018	1.014	1.018	1.018	1.030	1.094	1.200	1.254	1.279	1.293	1.304	1.312	1.320	1.329
76	1.018	1.018	1.016	1.016	1.014	1.016	1.014	1.016	1.016	1.022	1.037	1.124	1.215	1.255	1.274	1.286	1.294	1.301	1.307	1.313
77	1.018	1.013	1.018	1.011	1.013	1.013	1.013	1.014	1.016	1.016	1.056	1.164	1.238	1.266	1.282	1.292	1.300	1.306	1.311	1.317
78	1.018	1.018	1.020	1.020	1.014	1.016	1.011	1.016	1.011	1.025	1.080	1.196	1.252	1.277	1.291	1.302	1.309	1.317	1.321	1.328
79	1.025	1.035	1.047	1.043	1.040	1.037	1.035	1.030	1.025	1.027	1.098	1.209	1.261	1.284	1.298	1.308	1.316	1.322	1.330	1.336
80	1.043	1.062	1.060	1.054	1.058	1.056	1.035	1.032	1.033	1.044	1.119	1.221	1.265	1.287	1.301	1.311	1.318	1.325	1.331	1.340
81	1.067	1.086	1.077	1.061	1.068	1.068	1.062	1.050	1.040	1.047	1.133	1.227	1.267	1.286	1.299	1.308	1.316	1.322	1.329	1.335
82	1.116	1.136	1.107	1.090	1.088	1.077	1.077	1.075	1.060	1.073	1.161	1.241	1.274	1.290	1.300	1.307	1.313	1.319	1.326	1.333
83	1.206	1.225	1.154	1.167	1.161	1.099	1.071	1.071	1.076	1.100	1.192	1.257	1.283	1.295	1.304	1.309	1.313	1.318	1.322	1.330
84	1.227	1.244	1.179	1.226	1.231	1.132	1.076	1.047	1.057	1.115	1.214	1.266	1.288	1.299	1.306	1.311	1.314	1.317	1.320	1.325
85	1.173	1.173	1.145	1.198	1.196	1.117	1.065	1.041	1.046	1.140	1.232	1.269	1.286	1.298	1.305	1.312	1.315	1.319	1.320	1.324
86	1.131	1.121	1.113	1.122	1.123	1.097	1.079	1.070	1.078	1.099	1.136	1.158	1.176	1.193	1.215	1.235	1.254	1.270	1.286	1.302
87	1.109	1.098	1.093	1.096	1.093	1.091	1.084	1.078	1.078	1.077	1.077	1.080	1.081	1.086	1.086	1.092	1.094	1.100	1.105	1.115
88	1.075	1.063	1.063	1.065	1.067	1.063	1.065	1.070	1.080	1.075	1.075	1.072	1.075	1.072	1.076	1.075	1.077	1.077	1.079	1.080
89	1.047	1.038	1.037	1.033	1.040	1.041	1.050	1.062	1.077	1.071	1.071	1.068	1.068	1.066	1.068	1.066	1.068	1.067	1.070	1.070
90	1.032	1.027	1.025	1.022	1.030	1.032	1.038	1.050	1.070	1.071	1.071	1.068	1.070	1.063	1.066	1.061	1.063	1.061	1.065	1.060
91	1.020	1.020	1.016	1.016	1.020	1.018	1.025	1.038	1.065	1.070	1.072	1.068	1.070	1.065	1.065	1.062	1.065	1.061	1.063	1.061
92	1.014	1.013	1.005	1.011	1.005	1.014	1.011	1.035	1.054	1.068	1.066	1.070	1.063	1.067	1.060	1.063	1.060	1.063	1.060	1.061
93	1.014	1.013	1.011	1.005	1.011	1.013	1.018	1.033	1.062	1.065	1.068	1.066	1.067	1.065	1.066	1.063	1.065	1.061	1.061	1.051
94	1.025	1.023	1.013	1.016	1.011	1.020	1.022	1.035	1.060	1.070	1.068	1.072	1.068	1.072	1.068	1.071	1.067	1.066	1.058	1.060
95	1.050	1.044	1.043	1.037	1.037	1.033	1.035	1.038	1.060	1.065	1.071	1.072	1.077	1.075	1.077	1.072	1.072	1.065	1.062	1.060
96	1.070	1.066	1.063	1.065	1.060	1.056	1.050	1.054	1.066	1.078	1.072	1.077	1.078	1.084	1.083	1.084	1.078	1.075	1.063	1.060
97	1.086	1.084	1.083	1.079	1.077	1.070	1.062	1.061	1.077	1.083	1.083	1.081	1.087	1.085	1.090	1.089	1.089	1.080	1.071	1.058
98	1.088	1.087	1.087	1.084	1.083	1.070	1.065	1.062	1.076	1.077	1.078	1.083	1.089	1.092	1.095	1.093	1.091	1.083	1.072	1.063

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 3,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 2

IR SCAN TIME 9.39 SEC
INITIAL TEMP 526.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	1.409	1.419	1.430	1.442	1.454	1.469	1.486	1.508	1.527	1.539	1.546	1.553	1.560	1.558	1.546	1.527	1.502	1.480	1.463	1.455
65	1.406	1.415	1.427	1.437	1.450	1.466	1.483	1.501	1.523	1.537	1.549	1.562	1.577	1.584	1.586	1.583	1.574	1.557	1.534	1.501
66	1.403	1.413	1.426	1.436	1.450	1.465	1.482	1.500	1.521	1.538	1.550	1.563	1.579	1.585	1.589	1.595	1.599	1.599	1.593	1.583
67	1.403	1.413	1.426	1.438	1.452	1.468	1.484	1.501	1.519	1.540	1.555	1.562	1.572	1.581	1.588	1.594	1.602	1.607	1.606	1.605
68	1.401	1.411	1.423	1.435	1.449	1.465	1.481	1.500	1.518	1.537	1.555	1.566	1.571	1.577	1.585	1.592	1.597	1.598	1.599	1.604
69	1.391	1.400	1.412	1.423	1.437	1.450	1.466	1.483	1.502	1.521	1.540	1.555	1.563	1.568	1.574	1.585	1.592	1.596	1.601	1.605
70	1.385	1.395	1.406	1.417	1.432	1.446	1.458	1.474	1.492	1.512	1.531	1.549	1.560	1.569	1.576	1.581	1.586	1.592	1.600	1.605
71	1.385	1.395	1.408	1.420	1.434	1.450	1.463	1.475	1.490	1.508	1.526	1.541	1.552	1.558	1.562	1.566	1.570	1.576	1.583	1.588
72	1.388	1.398	1.410	1.422	1.431	1.447	1.461	1.474	1.486	1.503	1.519	1.533	1.543	1.550	1.552	1.555	1.559	1.562	1.563	1.561
73	1.384	1.393	1.402	1.414	1.424	1.437	1.452	1.465	1.480	1.497	1.512	1.524	1.535	1.541	1.544	1.545	1.548	1.553	1.555	1.556
74	1.365	1.374	1.384	1.394	1.408	1.421	1.435	1.450	1.463	1.475	1.489	1.501	1.511	1.518	1.522	1.523	1.526	1.529	1.535	1.539
75	1.336	1.343	1.350	1.358	1.368	1.380	1.392	1.402	1.414	1.424	1.435	1.445	1.455	1.462	1.464	1.464	1.465	1.466	1.470	1.475
76	1.316	1.322	1.329	1.336	1.341	1.349	1.356	1.364	1.370	1.377	1.381	1.385	1.386	1.388	1.388	1.388	1.387	1.387	1.385	1.385
77	1.322	1.326	1.332	1.339	1.345	1.352	1.358	1.362	1.365	1.369	1.372	1.373	1.370	1.366	1.362	1.357	1.352	1.347	1.343	1.338
78	1.333	1.341	1.347	1.354	1.361	1.369	1.377	1.383	1.388	1.391	1.393	1.395	1.394	1.390	1.384	1.378	1.371	1.363	1.355	1.347
79	1.343	1.351	1.359	1.366	1.376	1.385	1.397	1.407	1.415	1.421	1.425	1.426	1.427	1.424	1.421	1.416	1.411	1.403	1.395	1.385
80	1.348	1.356	1.365	1.375	1.384	1.396	1.408	1.419	1.429	1.441	1.448	1.453	1.456	1.458	1.457	1.456	1.453	1.449	1.442	1.435
81	1.344	1.353	1.363	1.372	1.383	1.393	1.406	1.419	1.433	1.445	1.456	1.465	1.472	1.475	1.477	1.479	1.478	1.477	1.475	1.473
82	1.340	1.348	1.358	1.368	1.379	1.391	1.404	1.417	1.431	1.444	1.457	1.467	1.474	1.479	1.482	1.482	1.483	1.483	1.483	1.483
83	1.337	1.345	1.355	1.366	1.378	1.389	1.401	1.414	1.427	1.440	1.452	1.462	1.471	1.478	1.483	1.485	1.487	1.489	1.487	1.485
84	1.331	1.338	1.346	1.359	1.372	1.385	1.396	1.410	1.424	1.436	1.448	1.459	1.468	1.474	1.480	1.484	1.489	1.493	1.496	1.499
85	1.327	1.334	1.341	1.351	1.362	1.376	1.390	1.403	1.415	1.427	1.438	1.448	1.456	1.463	1.468	1.473	1.478	1.482	1.487	1.491
86	1.312	1.318	1.328	1.339	1.351	1.359	1.369	1.380	1.393	1.406	1.421	1.433	1.444	1.451	1.457	1.461	1.465	1.468	1.472	1.475
87	1.122	1.134	1.145	1.165	1.178	1.183	1.184	1.183	1.186	1.198	1.213	1.236	1.257	1.273	1.285	1.296	1.305	1.313	1.320	1.329
88	1.085	1.085	1.089	1.088	1.090	1.090	1.092	1.093	1.093	1.092	1.095	1.097	1.099	1.100	1.102	1.103	1.105	1.106	1.109	1.109
89	1.075	1.075	1.078	1.078	1.080	1.081	1.085	1.084	1.084	1.080	1.083	1.081	1.086	1.085	1.087	1.086	1.089	1.089	1.091	1.090
90	1.065	1.063	1.068	1.068	1.071	1.070	1.072	1.070	1.078	1.072	1.073	1.072	1.075	1.075	1.077	1.073	1.075	1.073	1.076	1.075
91	1.062	1.062	1.066	1.065	1.067	1.065	1.070	1.067	1.070	1.070	1.072	1.072	1.076	1.071	1.072	1.070	1.072	1.070	1.073	1.071
92	1.058	1.062	1.060	1.060	1.060	1.065	1.063	1.067	1.065	1.072	1.092	1.174	1.222	1.186	1.120	1.086	1.072	1.072	1.070	1.072
93	1.057	1.050	1.058	1.053	1.061	1.054	1.062	1.057	1.065	1.061	1.104	1.209	1.271	1.232	1.150	1.095	1.076	1.066	1.066	1.065
94	1.054	1.058	1.056	1.060	1.060	1.061	1.060	1.063	1.063	1.067	1.067	1.079	1.089	1.089	1.077	1.071	1.063	1.065	1.060	1.065
95	1.060	1.053	1.058	1.057	1.061	1.061	1.065	1.065	1.071	1.070	1.072	1.067	1.066	1.063	1.056	1.063	1.063	1.060	1.063	1.060
96	1.053	1.056	1.058	1.062	1.061	1.066	1.063	1.070	1.070	1.075	1.072	1.075	1.071	1.071	1.065	1.065	1.061	1.063	1.060	1.062
97	1.056	1.053	1.060	1.060	1.067	1.065	1.071	1.071	1.075	1.075	1.078	1.077	1.077	1.071	1.068	1.063	1.062	1.060	1.061	1.060
98	1.062	1.060	1.065	1.063	1.070	1.071	1.075	1.073	1.076	1.076	1.079	1.078	1.080	1.075	1.072	1.063	1.065	1.061	1.061	1.060

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 3,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 2

IR SCAN TIME 9.39 SEC
INITIAL TEMP 526.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	1.468	1.497	1.534	1.569	1.595	1.611	1.619	1.621	1.616	1.599	1.560	1.499	1.444	1.418	1.422	1.452	1.460	1.393	1.271	1.178
65	1.465	1.428	1.405	1.403	1.424	1.460	1.503	1.547	1.584	1.606	1.615	1.608	1.580	1.529	1.468	1.432	1.433	1.454	1.429	1.324
66	1.567	1.542	1.504	1.455	1.407	1.370	1.354	1.357	1.380	1.416	1.466	1.516	1.555	1.576	1.567	1.523	1.466	1.434	1.440	1.431
67	1.604	1.597	1.583	1.561	1.530	1.488	1.440	1.390	1.352	1.329	1.322	1.326	1.342	1.376	1.429	1.481	1.505	1.492	1.456	1.433
68	1.607	1.609	1.607	1.600	1.587	1.568	1.538	1.503	1.470	1.435	1.399	1.367	1.346	1.337	1.334	1.340	1.356	1.385	1.416	1.432
69	1.609	1.613	1.615	1.613	1.611	1.615	1.615	1.598	1.571	1.531	1.484	1.445	1.414	1.388	1.370	1.360	1.355	1.356	1.362	1.372
70	1.609	1.615	1.621	1.625	1.624	1.624	1.628	1.630	1.626	1.616	1.597	1.568	1.524	1.472	1.426	1.397	1.382	1.375	1.370	1.367
71	1.594	1.600	1.606	1.611	1.617	1.625	1.630	1.634	1.636	1.633	1.626	1.616	1.608	1.595	1.569	1.532	1.490	1.447	1.414	1.396
72	1.559	1.559	1.560	1.563	1.564	1.566	1.572	1.583	1.591	1.599	1.604	1.608	1.611	1.613	1.609	1.597	1.580	1.555	1.519	1.478
73	1.556	1.552	1.547	1.539	1.523	1.503	1.487	1.475	1.471	1.471	1.477	1.485	1.495	1.507	1.521	1.536	1.551	1.563	1.573	1.574
74	1.542	1.543	1.537	1.526	1.518	1.510	1.503	1.493	1.480	1.460	1.432	1.403	1.380	1.364	1.357	1.358	1.362	1.368	1.382	1.398
75	1.482	1.487	1.489	1.488	1.487	1.489	1.496	1.498	1.493	1.481	1.459	1.435	1.409	1.382	1.356	1.336	1.320	1.309	1.305	1.301
76	1.385	1.387	1.391	1.394	1.390	1.388	1.389	1.393	1.394	1.393	1.391	1.389	1.385	1.379	1.367	1.355	1.338	1.324	1.310	1.299
77	1.334	1.331	1.330	1.327	1.326	1.323	1.321	1.317	1.313	1.309	1.305	1.300	1.294	1.290	1.286	1.283	1.282	1.280	1.278	1.273
78	1.340	1.333	1.327	1.321	1.314	1.309	1.303	1.299	1.292	1.288	1.283	1.279	1.276	1.274	1.270	1.269	1.267	1.267	1.265	1.263
79	1.375	1.364	1.354	1.343	1.333	1.322	1.314	1.306	1.299	1.291	1.286	1.279	1.274	1.269	1.265	1.260	1.256	1.254	1.252	1.251
80	1.426	1.416	1.404	1.393	1.380	1.366	1.351	1.337	1.323	1.312	1.301	1.292	1.286	1.280	1.272	1.268	1.263	1.260	1.256	1.255
81	1.470	1.466	1.461	1.452	1.441	1.429	1.415	1.400	1.385	1.368	1.352	1.336	1.323	1.310	1.298	1.288	1.280	1.273	1.268	1.263
82	1.483	1.484	1.485	1.484	1.482	1.478	1.472	1.464	1.454	1.441	1.428	1.411	1.395	1.377	1.360	1.341	1.325	1.310	1.297	1.287
83	1.483	1.480	1.476	1.474	1.473	1.472	1.471	1.471	1.470	1.466	1.466	1.462	1.456	1.448	1.437	1.423	1.407	1.388	1.368	1.349
84	1.501	1.500	1.499	1.495	1.488	1.480	1.470	1.459	1.449	1.440	1.434	1.429	1.426	1.425	1.424	1.422	1.421	1.418	1.413	1.406
85	1.496	1.501	1.506	1.510	1.513	1.515	1.515	1.510	1.502	1.491	1.476	1.459	1.440	1.423	1.407	1.395	1.385	1.377	1.371	1.369
86	1.480	1.484	1.489	1.494	1.498	1.502	1.506	1.509	1.510	1.511	1.512	1.510	1.507	1.502	1.494	1.481	1.466	1.449	1.433	1.416
87	1.340	1.354	1.367	1.380	1.391	1.403	1.411	1.419	1.422	1.425	1.426	1.427	1.426	1.426	1.424	1.424	1.423	1.424	1.423	1.420
88	1.111	1.112	1.114	1.115	1.116	1.116	1.121	1.119	1.120	1.118	1.118	1.115	1.115	1.115	1.113	1.111	1.110	1.106	1.109	1.105
89	1.092	1.091	1.095	1.094	1.096	1.094	1.096	1.095	1.096	1.093	1.094	1.091	1.090	1.089	1.089	1.085	1.084	1.080	1.080	1.077
90	1.078	1.077	1.078	1.077	1.079	1.078	1.079	1.077	1.077	1.075	1.077	1.073	1.075	1.071	1.071	1.067	1.068	1.063	1.063	1.063
91	1.073	1.071	1.075	1.073	1.077	1.073	1.075	1.072	1.072	1.070	1.071	1.070	1.071	1.063	1.066	1.061	1.061	1.060	1.060	1.056
92	1.070	1.073	1.070	1.076	1.071	1.075	1.071	1.075	1.071	1.075	1.085	1.122	1.135	1.112	1.080	1.070	1.061	1.061	1.056	1.056
93	1.070	1.066	1.071	1.068	1.072	1.070	1.071	1.068	1.070	1.075	1.133	1.237	1.269	1.216	1.139	1.089	1.070	1.060	1.058	1.060
94	1.063	1.068	1.063	1.070	1.065	1.070	1.066	1.070	1.065	1.070	1.070	1.101	1.125	1.112	1.083	1.070	1.061	1.062	1.056	1.057
95	1.062	1.060	1.063	1.062	1.067	1.066	1.071	1.068	1.068	1.063	1.065	1.061	1.062	1.060	1.063	1.058	1.058	1.051	1.053	1.050
96	1.060	1.062	1.060	1.062	1.062	1.067	1.065	1.070	1.066	1.068	1.063	1.065	1.061	1.063	1.060	1.061	1.054	1.054	1.051	1.054
97	1.062	1.060	1.062	1.060	1.063	1.062	1.066	1.065	1.068	1.063	1.066	1.061	1.063	1.058	1.060	1.056	1.057	1.053	1.053	1.050
98	1.061	1.057	1.060	1.056	1.062	1.062	1.065	1.065	1.068	1.065	1.065	1.061	1.063	1.060	1.061	1.057	1.056	1.053	1.053	1.050

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 3,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 9.39 SEC
INITIAL TEMP 526.7 DEG. R

GROUP 2

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	1.123	1.099	1.080	1.066	1.054	1.051	1.047	1.046	1.041	1.041	1.038	1.043	1.038	1.040	1.035	1.037	1.033	1.038	1.033	1.037
65	1.209	1.138	1.105	1.087	1.072	1.057	1.050	1.046	1.044	1.043	1.043	1.040	1.040	1.038	1.038	1.037	1.035	1.033	1.037	1.033
66	1.350	1.230	1.150	1.108	1.092	1.075	1.060	1.047	1.046	1.041	1.041	1.038	1.038	1.037	1.037	1.033	1.035	1.033	1.035	1.033
67	1.423	1.363	1.250	1.157	1.114	1.090	1.078	1.056	1.047	1.040	1.038	1.033	1.035	1.030	1.032	1.030	1.033	1.029	1.032	1.027
68	1.435	1.439	1.411	1.313	1.201	1.133	1.099	1.083	1.060	1.047	1.038	1.037	1.033	1.033	1.030	1.030	1.025	1.027	1.025	1.027
69	1.390	1.413	1.440	1.439	1.353	1.229	1.147	1.104	1.086	1.063	1.046	1.037	1.033	1.030	1.030	1.025	1.025	1.022	1.023	1.020
70	1.366	1.372	1.387	1.416	1.425	1.365	1.255	1.164	1.112	1.091	1.070	1.047	1.033	1.030	1.027	1.027	1.023	1.027	1.022	1.020
71	1.389	1.387	1.390	1.394	1.405	1.419	1.394	1.294	1.186	1.122	1.094	1.076	1.056	1.037	1.030	1.025	1.025	1.023	1.020	1.018
72	1.443	1.420	1.407	1.401	1.401	1.402	1.403	1.386	1.312	1.210	1.135	1.099	1.081	1.063	1.041	1.033	1.023	1.025	1.020	1.023
73	1.556	1.524	1.484	1.440	1.406	1.386	1.380	1.383	1.385	1.347	1.257	1.164	1.111	1.085	1.068	1.047	1.033	1.023	1.023	1.018
74	1.416	1.433	1.450	1.459	1.460	1.451	1.438	1.421	1.408	1.396	1.371	1.294	1.197	1.124	1.092	1.070	1.054	1.035	1.025	1.020
75	1.301	1.302	1.309	1.315	1.325	1.338	1.352	1.365	1.376	1.383	1.389	1.380	1.322	1.225	1.150	1.102	1.077	1.056	1.037	1.022
76	1.291	1.289	1.287	1.288	1.291	1.294	1.298	1.303	1.307	1.316	1.327	1.339	1.339	1.303	1.224	1.145	1.097	1.076	1.060	1.043
77	1.271	1.268	1.268	1.268	1.271	1.274	1.278	1.282	1.286	1.290	1.296	1.301	1.305	1.304	1.280	1.216	1.142	1.093	1.072	1.058
78	1.262	1.260	1.258	1.256	1.252	1.252	1.252	1.255	1.258	1.260	1.263	1.271	1.277	1.284	1.286	1.274	1.222	1.151	1.098	1.075
79	1.252	1.252	1.255	1.258	1.262	1.264	1.267	1.268	1.268	1.269	1.270	1.269	1.269	1.271	1.274	1.274	1.268	1.235	1.173	1.113
80	1.254	1.254	1.252	1.252	1.248	1.249	1.250	1.254	1.257	1.261	1.264	1.271	1.276	1.282	1.289	1.295	1.300	1.300	1.279	1.226
81	1.262	1.258	1.256	1.255	1.254	1.249	1.248	1.248	1.251	1.252	1.254	1.253	1.255	1.258	1.264	1.269	1.277	1.286	1.297	1.303
82	1.278	1.270	1.264	1.260	1.258	1.256	1.254	1.250	1.250	1.252	1.254	1.257	1.257	1.256	1.256	1.258	1.260	1.260	1.263	1.266
83	1.328	1.310	1.292	1.280	1.271	1.265	1.260	1.257	1.254	1.253	1.253	1.254	1.255	1.256	1.254	1.254	1.254	1.255	1.254	1.254
84	1.394	1.378	1.361	1.341	1.321	1.303	1.289	1.278	1.270	1.263	1.260	1.256	1.256	1.253	1.252	1.250	1.251	1.250	1.249	1.248
85	1.365	1.362	1.357	1.353	1.346	1.339	1.332	1.324	1.315	1.304	1.291	1.281	1.271	1.263	1.257	1.254	1.252	1.249	1.245	1.244
86	1.403	1.391	1.383	1.375	1.368	1.360	1.353	1.345	1.340	1.336	1.334	1.332	1.331	1.327	1.324	1.319	1.313	1.305	1.297	1.289
87	1.414	1.403	1.388	1.374	1.364	1.366	1.379	1.404	1.435	1.468	1.497	1.520	1.533	1.537	1.536	1.532	1.525	1.515	1.503	1.491
88	1.108	1.104	1.107	1.103	1.104	1.100	1.108	1.117	1.142	1.169	1.204	1.234	1.260	1.279	1.293	1.303	1.311	1.315	1.317	1.314
89	1.077	1.072	1.072	1.070	1.072	1.070	1.072	1.067	1.070	1.070	1.075	1.075	1.077	1.078	1.083	1.084	1.088	1.085	1.088	1.083
90	1.065	1.060	1.062	1.060	1.061	1.060	1.060	1.060	1.061	1.060	1.063	1.062	1.065	1.065	1.070	1.070	1.072	1.070	1.071	1.065
91	1.057	1.053	1.054	1.053	1.054	1.053	1.053	1.051	1.051	1.047	1.050	1.049	1.050	1.046	1.051	1.054	1.058	1.051	1.054	1.051
92	1.053	1.054	1.053	1.054	1.050	1.054	1.051	1.053	1.050	1.062	1.071	1.071	1.058	1.051	1.046	1.050	1.047	1.047	1.046	1.049
93	1.054	1.054	1.053	1.050	1.051	1.051	1.051	1.051	1.065	1.123	1.176	1.165	1.116	1.075	1.053	1.046	1.049	1.043	1.047	1.041
94	1.053	1.054	1.051	1.053	1.049	1.051	1.050	1.051	1.053	1.071	1.097	1.098	1.079	1.060	1.047	1.046	1.043	1.044	1.041	1.043
95	1.051	1.051	1.054	1.050	1.051	1.047	1.047	1.043	1.043	1.043	1.044	1.046	1.046	1.043	1.043	1.041	1.043	1.041	1.043	1.041
96	1.050	1.051	1.050	1.050	1.047	1.050	1.047	1.049	1.046	1.047	1.041	1.044	1.041	1.041	1.037	1.043	1.040	1.043	1.038	1.041
97	1.050	1.047	1.049	1.051	1.047	1.047	1.047	1.047	1.044	1.043	1.044	1.043	1.043	1.041	1.041	1.041	1.043	1.044	1.047	1.044
98	1.053	1.050	1.053	1.050	1.050	1.047	1.047	1.044	1.047	1.044	1.044	1.041	1.041	1.037	1.040	1.043	1.050	1.050	1.051	1.051

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NASA/RI OH90 TRANSITION TEST
V416-P4A
AHO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 3,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 2

IR SCAN TIME 9.39 SEC
INITIAL TEMP 526.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	1.033	1.035	1.030	1.035	1.030	1.033	1.030	1.033	1.027	1.030	1.025	1.029	1.025	1.029	1.023	1.027	1.018	1.023	1.018	1.023
65	1.035	1.035	1.033	1.032	1.032	1.029	1.032	1.027	1.030	1.027	1.029	1.025	1.025	1.022	1.023	1.022	1.023	1.022	1.022	1.018
66	1.033	1.033	1.033	1.030	1.032	1.029	1.029	1.025	1.029	1.025	1.027	1.023	1.025	1.020	1.022	1.018	1.020	1.018	1.020	1.020
67	1.029	1.027	1.029	1.025	1.029	1.027	1.027	1.023	1.023	1.020	1.022	1.018	1.020	1.016	1.022	1.016	1.016	1.014	1.014	1.011
68	1.023	1.025	1.018	1.023	1.016	1.016	1.013	1.020	1.016	1.018	1.013	1.018	1.011	1.013	1.005	1.011	1.005	1.011	1.009	1.011
69	1.020	1.020	1.022	1.018	1.018	1.013	1.016	1.014	1.016	1.014	1.014	1.013	1.011	1.007	1.007	1.005	1.007	1.005	1.005	0.994
70	1.016	1.020	1.016	1.023	1.016	1.018	1.013	1.014	1.009	1.013	1.007	1.009	1.007	1.009	1.005	1.005	1.001	1.003	0.999	0.999
71	1.018	1.016	1.018	1.014	1.016	1.011	1.014	1.011	1.013	1.009	1.011	1.009	1.009	1.005	1.005	1.005	1.005	1.003	1.005	1.001
72	1.016	1.018	1.014	1.016	1.013	1.016	1.011	1.014	1.009	1.011	1.007	1.009	1.005	1.009	1.001	1.005	1.005	1.005	1.001	1.001
73	1.018	1.016	1.018	1.014	1.014	1.013	1.011	1.011	1.011	1.009	1.009	1.005	1.007	1.005	1.005	1.001	1.001	1.001	1.001	0.996
74	1.020	1.016	1.014	1.013	1.014	1.013	1.011	1.009	1.009	1.005	1.007	1.005	1.005	1.003	1.003	1.003	1.003	0.999	0.996	0.994
75	1.020	1.011	1.013	1.007	1.011	1.005	1.011	1.001	1.005	1.001	1.005	1.001	1.001	0.994	1.001	1.001	1.001	0.996	0.996	0.994
76	1.027	1.020	1.013	1.013	1.009	1.009	1.005	1.007	1.005	1.007	1.001	1.005	0.999	1.001	1.001	1.001	0.994	0.996	0.987	0.996
77	1.047	1.030	1.023	1.013	1.009	1.005	1.005	1.005	1.005	1.005	1.005	1.001	0.999	0.996	0.999	0.996	0.996	0.992	0.994	0.992
78	1.058	1.053	1.043	1.030	1.014	1.014	1.007	1.007	1.001	1.005	1.001	1.005	1.001	1.003	0.996	0.996	0.992	0.994	0.992	0.996
79	1.080	1.061	1.057	1.051	1.046	1.033	1.023	1.013	1.007	1.001	1.001	0.999	0.999	0.996	0.999	0.999	0.996	0.992	0.992	0.990
80	1.155	1.107	1.075	1.062	1.054	1.051	1.046	1.040	1.027	1.018	1.009	1.005	0.999	0.999	0.994	0.996	0.992	0.996	0.992	0.996
81	1.281	1.213	1.135	1.087	1.067	1.056	1.054	1.050	1.050	1.043	1.040	1.032	1.023	1.014	1.011	1.007	1.007	1.005	1.005	1.003
82	1.268	1.244	1.187	1.121	1.083	1.060	1.054	1.047	1.049	1.043	1.046	1.041	1.043	1.038	1.035	1.027	1.023	1.016	1.013	1.001
83	1.252	1.249	1.230	1.186	1.127	1.085	1.060	1.054	1.050	1.050	1.047	1.046	1.046	1.046	1.044	1.044	1.037	1.041	1.032	1.035
84	1.247	1.243	1.238	1.224	1.189	1.134	1.089	1.061	1.051	1.047	1.047	1.046	1.046	1.044	1.046	1.041	1.046	1.043	1.044	1.041
85	1.242	1.240	1.234	1.229	1.218	1.193	1.144	1.097	1.065	1.053	1.047	1.046	1.043	1.043	1.041	1.044	1.043	1.043	1.040	1.041
86	1.280	1.272	1.263	1.254	1.245	1.233	1.213	1.173	1.127	1.089	1.065	1.047	1.044	1.041	1.043	1.040	1.041	1.038	1.041	1.040
87	1.479	1.466	1.453	1.444	1.444	1.453	1.459	1.449	1.405	1.318	1.209	1.123	1.070	1.050	1.041	1.041	1.040	1.043	1.040	1.040
88	1.310	1.303	1.292	1.287	1.296	1.322	1.356	1.374	1.359	1.296	1.202	1.122	1.072	1.046	1.040	1.037	1.037	1.037	1.037	1.033
89	1.084	1.077	1.077	1.072	1.075	1.075	1.086	1.093	1.100	1.090	1.076	1.054	1.044	1.037	1.035	1.030	1.033	1.032	1.033	1.032
90	1.065	1.060	1.060	1.053	1.053	1.047	1.049	1.051	1.053	1.047	1.046	1.040	1.037	1.030	1.033	1.023	1.032	1.023	1.029	1.023
91	1.060	1.058	1.050	1.041	1.040	1.037	1.040	1.040	1.041	1.038	1.037	1.033	1.033	1.027	1.030	1.027	1.030	1.025	1.029	1.023
92	1.050	1.050	1.040	1.038	1.033	1.033	1.030	1.033	1.030	1.032	1.025	1.032	1.027	1.030	1.023	1.030	1.025	1.029	1.025	1.027
93	1.038	1.037	1.037	1.033	1.033	1.033	1.033	1.029	1.029	1.025	1.029	1.025	1.027	1.027	1.027	1.025	1.025	1.023	1.025	1.023
94	1.040	1.038	1.037	1.037	1.030	1.033	1.029	1.032	1.027	1.029	1.023	1.025	1.025	1.027	1.023	1.029	1.023	1.025	1.020	1.025
95	1.043	1.041	1.038	1.033	1.033	1.027	1.030	1.029	1.029	1.027	1.029	1.027	1.025	1.023	1.023	1.023	1.023	1.022	1.025	1.023
96	1.037	1.040	1.033	1.035	1.027	1.030	1.023	1.027	1.022	1.029	1.025	1.029	1.025	1.027	1.023	1.027	1.018	1.023	1.022	1.025
97	1.046	1.041	1.040	1.033	1.032	1.027	1.029	1.025	1.027	1.025	1.027	1.020	1.027	1.016	1.023	1.014	1.022	1.016	1.023	1.016
98	1.047	1.044	1.041	1.035	1.033	1.030	1.030	1.025	1.027	1.025	1.027	1.025	1.027	1.023	1.023	1.020	1.023	1.020	1.025	1.018

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 3,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 2

IR SCAN TIME 9.39 SEC
INITIAL TEMP 526.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	1.020	1.023	1.016	1.020	1.014	1.020	1.014	1.018	1.014	1.016
65	1.018	1.014	1.016	1.016	1.016	1.014	1.018	1.014	1.011	1.009
66	1.018	1.014	1.014	1.014	1.014	1.013	1.013	1.009	1.011	1.007
67	1.013	1.009	1.009	1.009	1.009	1.009	1.005	1.003	1.005	1.005
68	1.007	1.007	1.003	1.005	1.001	1.005	1.001	1.005	0.999	0.999
69	1.003	0.992	0.999	0.987	1.001	0.990	0.996	0.987	0.994	0.987
70	1.001	1.001	0.996	0.996	0.994	0.994	0.992	0.992	0.992	0.994
71	0.999	0.994	0.999	0.994	0.996	0.994	0.994	0.987	0.987	0.987
72	0.994	0.999	0.994	0.999	0.992	0.994	0.990	0.992	0.987	0.992
73	0.996	0.992	0.996	0.994	0.994	0.992	0.990	0.987	0.990	0.987
74	0.999	0.996	0.992	0.992	0.992	0.992	0.990	0.990	0.985	0.985
75	0.994	0.994	0.994	0.987	0.990	0.990	0.990	0.987	0.985	0.983
76	0.987	0.992	0.983	0.990	0.983	0.990	0.980	0.985	0.978	0.985
77	0.992	0.992	0.992	0.990	0.987	0.983	0.985	0.983	0.985	0.983
78	0.992	0.994	0.990	0.992	0.985	0.985	0.983	0.987	0.983	0.987
79	0.990	0.987	0.992	0.987	0.990	0.987	0.987	0.983	0.985	0.983
80	0.992	0.992	0.985	0.987	0.985	0.987	0.985	0.987	0.985	0.985
81	1.003	0.996	1.001	0.996	0.999	0.999	1.001	0.996	0.996	0.994
82	1.005	1.003	1.001	0.992	0.992	0.992	0.990	0.987	0.987	0.987
83	1.023	1.027	1.013	1.018	1.005	1.009	0.994	0.999	0.987	0.992
84	1.043	1.040	1.040	1.035	1.033	1.027	1.025	1.020	1.018	1.013
85	1.040	1.043	1.041	1.041	1.038	1.038	1.037	1.035	1.033	1.033
86	1.041	1.037	1.038	1.037	1.038	1.037	1.038	1.037	1.037	1.035
87	1.037	1.040	1.037	1.038	1.037	1.038	1.037	1.038	1.035	1.037
88	1.037	1.035	1.037	1.033	1.035	1.033	1.033	1.033	1.033	1.030
89	1.032	1.030	1.032	1.030	1.033	1.027	1.032	1.030	1.030	1.030
90	1.029	1.025	1.027	1.023	1.027	1.025	1.029	1.023	1.027	1.027
91	1.029	1.023	1.029	1.025	1.027	1.023	1.023	1.023	1.025	1.025
92	1.023	1.025	1.023	1.025	1.023	1.027	1.023	1.025	1.022	1.025
93	1.023	1.023	1.025	1.020	1.025	1.023	1.023	1.020	1.023	1.018
94	1.022	1.023	1.022	1.023	1.022	1.023	1.022	1.022	1.022	1.022
95	1.025	1.022	1.023	1.020	1.022	1.020	1.022	1.020	1.023	1.020
96	1.020	1.025	1.020	1.025	1.018	1.023	1.020	1.023	1.022	1.025
97	1.020	1.013	1.020	1.014	1.022	1.016	1.025	1.020	1.023	1.020
98	1.023	1.016	1.020	1.018	1.023	1.020	1.023	1.022	1.025	1.018

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 3,1978

IR HEAT TRANSFER COEFFICIENT = H(,9TO)/HREFR
IR SCAN TIME 9.39 SEC
GROUP 2 HREFR = 0.331E-01

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	0.034	0.036	0.037	0.038	0.040	0.038	0.039	0.038	0.038	0.037	0.037	0.037	0.036	0.037	0.037	0.037	0.035	0.037	0.038	0.037
30	0.037	0.038	0.040	0.039	0.040	0.039	0.038	0.037	0.038	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.038	0.038	0.038	0.038
31	0.040	0.040	0.040	0.040	0.038	0.038	0.037	0.038	0.038	0.039	0.038	0.039	0.038	0.038	0.038	0.039	0.039	0.040	0.038	0.038
32	0.041	0.040	0.040	0.039	0.039	0.038	0.040	0.039	0.039	0.039	0.039	0.039	0.040	0.040	0.040	0.039	0.039	0.039	0.038	0.037
33	0.040	0.040	0.040	0.040	0.040	0.040	0.041	0.040	0.040	0.040	0.040	0.040	0.040	0.039	0.039	0.038	0.038	0.037	0.037	0.037
34	0.040	0.041	0.041	0.041	0.042	0.042	0.041	0.040	0.040	0.040	0.040	0.039	0.039	0.038	0.037	0.037	0.037	0.038	0.039	0.040
35	0.042	0.041	0.042	0.040	0.040	0.039	0.040	0.037	0.038	0.037	0.038	0.036	0.037	0.036	0.038	0.040	0.040	0.041	0.041	0.042
36	0.042	0.042	0.041	0.041	0.040	0.039	0.038	0.038	0.036	0.037	0.037	0.038	0.038	0.040	0.040	0.041	0.041	0.042	0.041	0.042
37	0.041	0.040	0.040	0.038	0.037	0.036	0.037	0.037	0.038	0.038	0.039	0.039	0.040	0.041	0.042	0.041	0.041	0.039	0.037	0.032
38	0.038	0.037	0.036	0.037	0.037	0.038	0.038	0.040	0.040	0.040	0.040	0.041	0.041	0.042	0.039	0.036	0.031	0.027	0.022	0.019
39	0.037	0.037	0.038	0.038	0.039	0.039	0.040	0.040	0.040	0.041	0.041	0.039	0.037	0.033	0.029	0.023	0.020	0.018	0.019	0.018
40	0.037	0.038	0.039	0.040	0.040	0.041	0.040	0.042	0.040	0.038	0.034	0.030	0.024	0.021	0.019	0.020	0.019	0.019	0.018	0.019
41	0.040	0.040	0.040	0.040	0.041	0.041	0.040	0.036	0.032	0.026	0.023	0.021	0.020	0.019	0.020	0.019	0.019	0.019	0.020	0.020
42	0.042	0.041	0.042	0.040	0.040	0.034	0.030	0.023	0.021	0.019	0.020	0.019	0.020	0.020	0.020	0.019	0.020	0.020	0.021	0.020
43	0.044	0.043	0.041	0.036	0.030	0.023	0.022	0.020	0.020	0.020	0.021	0.020	0.021	0.020	0.021	0.020	0.021	0.019	0.021	0.020
44	0.042	0.036	0.029	0.025	0.023	0.023	0.021	0.021	0.020	0.022	0.021	0.023	0.022	0.023	0.022	0.023	0.021	0.023	0.023	0.024
45	0.031	0.026	0.025	0.023	0.023	0.022	0.023	0.023	0.023	0.023	0.023	0.023	0.024	0.023	0.025	0.024	0.024	0.025	0.024	0.025
46	0.027	0.026	0.025	0.027	0.025	0.026	0.024	0.025	0.025	0.026	0.025	0.027	0.025	0.027	0.027	0.028	0.028	0.031	0.037	0.044
47	0.029	0.028	0.028	0.028	0.028	0.028	0.028	0.027	0.028	0.027	0.029	0.028	0.029	0.029	0.030	0.030	0.033	0.046	0.081	0.113
48	0.030	0.030	0.030	0.031	0.030	0.030	0.030	0.030	0.030	0.031	0.030	0.031	0.031	0.033	0.033	0.034	0.036	0.057	0.105	0.147
49	0.032	0.032	0.032	0.031	0.032	0.031	0.032	0.031	0.031	0.031	0.033	0.033	0.033	0.033	0.034	0.035	0.039	0.062	0.116	0.161
50	0.032	0.032	0.033	0.033	0.034	0.033	0.033	0.032	0.033	0.033	0.034	0.033	0.034	0.033	0.035	0.035	0.042	0.072	0.131	0.174
51	0.033	0.033	0.033	0.032	0.034	0.032	0.034	0.033	0.034	0.033	0.034	0.034	0.035	0.036	0.037	0.038	0.049	0.096	0.155	0.192
52	0.032	0.031	0.031	0.032	0.031	0.033	0.032	0.033	0.032	0.033	0.033	0.034	0.034	0.035	0.036	0.039	0.057	0.114	0.170	0.203
53	0.029	0.029	0.029	0.028	0.029	0.028	0.028	0.028	0.030	0.029	0.030	0.030	0.032	0.032	0.033	0.037	0.066	0.127	0.176	0.203
54	0.023	0.024	0.024	0.024	0.024	0.024	0.023	0.025	0.023	0.025	0.024	0.026	0.026	0.028	0.028	0.037	0.078	0.139	0.178	0.200
55	0.020	0.020	0.020	0.019	0.020	0.019	0.020	0.020	0.021	0.021	0.023	0.023	0.023	0.023	0.025	0.037	0.088	0.147	0.181	0.198
56	0.019	0.016	0.016	0.017	0.017	0.018	0.018	0.019	0.019	0.019	0.019	0.020	0.020	0.023	0.025	0.039	0.093	0.148	0.179	0.195
57	0.017	0.017	0.017	0.016	0.017	0.016	0.017	0.017	0.019	0.019	0.020	0.019	0.020	0.020	0.024	0.041	0.097	0.148	0.176	0.190
58	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.017	0.017	0.019	0.018	0.020	0.021	0.025	0.048	0.107	0.153	0.176	0.189
59	0.015	0.014	0.015	0.015	0.015	0.014	0.014	0.015	0.016	0.016	0.017	0.017	0.019	0.020	0.027	0.065	0.124	0.160	0.178	0.189
60	0.014	0.013	0.013	0.014	0.014	0.014	0.013	0.014	0.014	0.016	0.016	0.016	0.016	0.019	0.029	0.078	0.134	0.164	0.179	0.189
61	0.014	0.013	0.013	0.013	0.013	0.013	0.014	0.013	0.014	0.014	0.015	0.015	0.016	0.018	0.037	0.097	0.148	0.173	0.186	0.194
62	0.013	0.013	0.012	0.014	0.013	0.013	0.013	0.013	0.014	0.015	0.015	0.016	0.017	0.021	0.050	0.114	0.157	0.178	0.192	0.201
63	0.013	0.013	0.013	0.011	0.013	0.011	0.013	0.013	0.014	0.014	0.016	0.016	0.017	0.021	0.062	0.123	0.161	0.180	0.193	0.202

NASA/RI OH90 TRANSITION TEST
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MAR 3,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 9.39 SEC
HREF = 9.331E-01

GROUP 2

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	0.037	0.037	0.038	0.037	0.038	0.038	0.038	0.036	0.036	0.035	0.034	0.033	0.031	0.033	0.033	0.033	0.034	0.034	0.034	0.034
30	0.038	0.038	0.038	0.038	0.038	0.037	0.037	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.037	0.036	0.037	0.037
31	0.037	0.038	0.037	0.037	0.037	0.037	0.036	0.036	0.036	0.037	0.038	0.040	0.039	0.040	0.040	0.041	0.041	0.042	0.042	0.042
32	0.037	0.036	0.037	0.037	0.038	0.039	0.040	0.039	0.040	0.041	0.043	0.043	0.043	0.042	0.042	0.042	0.040	0.038	0.037	0.033
33	0.037	0.038	0.040	0.040	0.041	0.042	0.042	0.042	0.043	0.043	0.042	0.042	0.040	0.037	0.035	0.031	0.030	0.025	0.023	0.019
34	0.041	0.040	0.041	0.042	0.043	0.043	0.042	0.040	0.039	0.036	0.034	0.031	0.028	0.022	0.019	0.016	0.015	0.014	0.014	0.014
35	0.042	0.042	0.042	0.040	0.038	0.035	0.033	0.028	0.025	0.020	0.016	0.014	0.014	0.014	0.014	0.013	0.014	0.014	0.015	0.014
36	0.038	0.037	0.031	0.029	0.023	0.021	0.016	0.016	0.013	0.014	0.013	0.014	0.013	0.015	0.014	0.014	0.014	0.016	0.015	0.015
37	0.028	0.023	0.019	0.016	0.016	0.015	0.016	0.015	0.016	0.014	0.015	0.014	0.015	0.014	0.016	0.013	0.016	0.012	0.016	0.013
38	0.017	0.018	0.017	0.018	0.017	0.017	0.016	0.017	0.016	0.017	0.017	0.017	0.016	0.016	0.016	0.017	0.017	0.017	0.017	0.017
39	0.018	0.018	0.019	0.018	0.017	0.018	0.017	0.017	0.018	0.018	0.019	0.018	0.018	0.017	0.018	0.017	0.019	0.018	0.019	0.019
40	0.018	0.020	0.019	0.020	0.019	0.020	0.019	0.020	0.019	0.020	0.018	0.020	0.020	0.020	0.019	0.019	0.019	0.020	0.019	0.020
41	0.020	0.020	0.020	0.020	0.020	0.020	0.021	0.020	0.021	0.020	0.021	0.020	0.021	0.020	0.020	0.020	0.021	0.020	0.021	0.021
42	0.021	0.021	0.021	0.021	0.021	0.021	0.022	0.021	0.023	0.022	0.022	0.021	0.023	0.022	0.023	0.022	0.023	0.022	0.023	0.022
43	0.022	0.021	0.023	0.022	0.023	0.022	0.023	0.022	0.023	0.022	0.024	0.024	0.024	0.023	0.023	0.022	0.024	0.023	0.024	0.023
44	0.023	0.024	0.023	0.024	0.024	0.025	0.024	0.026	0.025	0.026	0.024	0.025	0.024	0.026	0.024	0.025	0.023	0.025	0.022	0.024
45	0.026	0.026	0.028	0.027	0.027	0.027	0.028	0.027	0.029	0.028	0.029	0.027	0.028	0.027	0.028	0.027	0.028	0.027	0.027	0.026
46	0.048	0.050	0.049	0.048	0.046	0.044	0.041	0.040	0.037	0.036	0.033	0.034	0.032	0.033	0.032	0.032	0.031	0.031	0.030	0.031
47	0.132	0.142	0.148	0.151	0.153	0.150	0.144	0.132	0.119	0.103	0.088	0.073	0.059	0.048	0.042	0.038	0.037	0.035	0.036	0.035
48	0.172	0.187	0.199	0.212	0.225	0.240	0.256	0.269	0.277	0.277	0.266	0.242	0.205	0.161	0.120	0.089	0.065	0.050	0.042	0.040
49	0.187	0.202	0.213	0.223	0.235	0.247	0.261	0.276	0.291	0.303	0.312	0.318	0.315	0.302	0.276	0.236	0.182	0.124	0.082	0.057
50	0.201	0.217	0.230	0.242	0.253	0.265	0.278	0.288	0.295	0.299	0.304	0.308	0.311	0.315	0.317	0.308	0.279	0.223	0.154	0.101
51	0.214	0.229	0.243	0.256	0.270	0.286	0.302	0.314	0.321	0.326	0.330	0.330	0.330	0.329	0.333	0.335	0.331	0.309	0.259	0.183
52	0.221	0.235	0.248	0.264	0.279	0.296	0.314	0.334	0.353	0.366	0.369	0.365	0.356	0.347	0.341	0.340	0.342	0.342	0.336	0.303
53	0.220	0.234	0.248	0.263	0.282	0.301	0.320	0.341	0.362	0.378	0.387	0.393	0.396	0.394	0.387	0.376	0.365	0.360	0.358	0.356
54	0.214	0.226	0.237	0.252	0.269	0.289	0.313	0.338	0.363	0.383	0.394	0.400	0.405	0.412	0.419	0.421	0.416	0.404	0.387	0.371
55	0.210	0.219	0.229	0.240	0.256	0.275	0.297	0.320	0.345	0.370	0.392	0.407	0.414	0.419	0.425	0.429	0.435	0.441	0.442	0.433
56	0.207	0.216	0.225	0.236	0.250	0.266	0.282	0.301	0.322	0.343	0.362	0.378	0.390	0.402	0.416	0.424	0.431	0.440	0.447	0.456
57	0.201	0.210	0.219	0.229	0.243	0.259	0.277	0.295	0.313	0.328	0.337	0.345	0.351	0.356	0.361	0.366	0.380	0.400	0.420	0.436
58	0.199	0.206	0.214	0.224	0.237	0.252	0.269	0.288	0.306	0.322	0.334	0.339	0.342	0.344	0.347	0.344	0.337	0.328	0.329	0.349
59	0.197	0.204	0.213	0.223	0.236	0.250	0.267	0.285	0.303	0.318	0.328	0.335	0.344	0.352	0.352	0.347	0.342	0.335	0.319	0.296
60	0.195	0.200	0.207	0.218	0.230	0.245	0.262	0.281	0.301	0.316	0.325	0.332	0.341	0.351	0.354	0.351	0.352	0.354	0.349	0.334
61	0.200	0.203	0.209	0.215	0.223	0.234	0.248	0.263	0.282	0.298	0.310	0.324	0.340	0.354	0.358	0.356	0.358	0.361	0.360	0.356
62	0.206	0.211	0.217	0.225	0.231	0.240	0.250	0.261	0.270	0.276	0.280	0.288	0.302	0.318	0.332	0.346	0.356	0.361	0.364	0.368
63	0.209	0.214	0.222	0.230	0.239	0.249	0.262	0.275	0.286	0.291	0.290	0.289	0.288	0.285	0.281	0.281	0.289	0.302	0.317	0.337

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 9.39 SEC
GROUP 2 HREF = 0.331E-01

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	0.033	0.035	0.034	0.034	0.035	0.036	0.036	0.037	0.037	0.036	0.034	0.034	0.033	0.033	0.032	0.032	0.030	0.029	0.027	0.025
30	0.040	0.038	0.039	0.037	0.038	0.037	0.038	0.037	0.036	0.033	0.032	0.030	0.029	0.028	0.027	0.026	0.025	0.024	0.023	0.020
31	0.040	0.040	0.037	0.036	0.034	0.033	0.031	0.030	0.026	0.025	0.022	0.021	0.019	0.018	0.016	0.015	0.012	0.014	0.011	0.014
32	0.032	0.029	0.027	0.024	0.022	0.018	0.016	0.014	0.014	0.013	0.013	0.011	0.012	0.011	0.013	0.013	0.013	0.011	0.011	0.011
33	0.017	0.014	0.014	0.014	0.014	0.013	0.013	0.013	0.013	0.013	0.013	0.011	0.013	0.011	0.013	0.011	0.011	0.011	0.012	0.012
34	0.014	0.014	0.014	0.013	0.014	0.013	0.014	0.013	0.013	0.011	0.013	0.013	0.013	0.012	0.012	0.011	0.012	0.011	0.011	0.011
35	0.014	0.013	0.014	0.014	0.014	0.013	0.014	0.013	0.014	0.013	0.013	0.013	0.013	0.013	0.013	0.012	0.012	0.011	0.012	0.011
36	0.014	0.016	0.014	0.016	0.014	0.015	0.014	0.015	0.014	0.015	0.014	0.014	0.013	0.014	0.013	0.014	0.013	0.013	0.013	0.013
37	0.016	0.014	0.016	0.013	0.015	0.012	0.016	0.013	0.015	0.012	0.015	0.014	0.015	0.014	0.014	0.014	0.014	0.013	0.013	0.013
38	0.017	0.017	0.016	0.017	0.016	0.016	0.016	0.017	0.016	0.016	0.015	0.016	0.016	0.016	0.013	0.015	0.013	0.014	0.012	0.014
39	0.019	0.017	0.018	0.019	0.018	0.018	0.017	0.018	0.018	0.017	0.017	0.016	0.017	0.016	0.016	0.016	0.016	0.015	0.016	0.014
40	0.020	0.020	0.020	0.020	0.018	0.019	0.018	0.019	0.018	0.019	0.018	0.018	0.017	0.018	0.017	0.018	0.017	0.017	0.017	0.017
41	0.021	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.019	0.019	0.018	0.019	0.018	0.019	0.017	0.019	0.017
42	0.022	0.021	0.022	0.021	0.021	0.021	0.021	0.021	0.021	0.020	0.020	0.020	0.020	0.019	0.021	0.020	0.020	0.018	0.018	0.017
43	0.024	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.021	0.022	0.021	0.021	0.020	0.020	0.020	0.020	0.020	0.020	0.019
44	0.022	0.025	0.022	0.025	0.022	0.024	0.021	0.023	0.021	0.023	0.023	0.023	0.022	0.021	0.021	0.021	0.021	0.021	0.020	0.020
45	0.027	0.025	0.026	0.025	0.025	0.024	0.025	0.024	0.025	0.024	0.024	0.022	0.024	0.021	0.023	0.021	0.023	0.021	0.022	0.021
46	0.030	0.030	0.029	0.030	0.029	0.029	0.027	0.028	0.027	0.020	0.027	0.029	0.026	0.027	0.025	0.026	0.025	0.026	0.024	0.025
47	0.035	0.034	0.034	0.033	0.033	0.032	0.032	0.031	0.031	0.030	0.031	0.030	0.030	0.029	0.030	0.029	0.029	0.029	0.028	0.028
48	0.038	0.038	0.037	0.037	0.036	0.036	0.035	0.034	0.033	0.034	0.033	0.033	0.032	0.032	0.031	0.032	0.031	0.031	0.030	0.031
49	0.046	0.042	0.041	0.040	0.039	0.037	0.037	0.035	0.036	0.035	0.035	0.034	0.034	0.033	0.034	0.033	0.033	0.031	0.033	0.032
50	0.069	0.052	0.046	0.042	0.041	0.040	0.039	0.037	0.037	0.036	0.036	0.035	0.036	0.035	0.035	0.034	0.034	0.034	0.034	0.033
51	0.117	0.075	0.056	0.049	0.046	0.042	0.041	0.040	0.039	0.037	0.038	0.037	0.037	0.036	0.036	0.035	0.035	0.035	0.035	0.035
52	0.231	0.151	0.094	0.062	0.049	0.047	0.044	0.042	0.040	0.039	0.037	0.038	0.036	0.037	0.035	0.036	0.034	0.035	0.034	0.034
53	0.343	0.294	0.212	0.135	0.084	0.056	0.047	0.043	0.040	0.037	0.036	0.034	0.034	0.034	0.034	0.033	0.033	0.031	0.032	0.032
54	0.358	0.350	0.325	0.244	0.150	0.091	0.059	0.047	0.042	0.038	0.033	0.031	0.028	0.029	0.027	0.027	0.026	0.027	0.027	0.029
55	0.417	0.397	0.377	0.343	0.269	0.175	0.106	0.066	0.049	0.043	0.038	0.032	0.029	0.025	0.026	0.024	0.025	0.024	0.025	0.026
56	0.464	0.463	0.452	0.430	0.397	0.331	0.231	0.140	0.085	0.056	0.046	0.041	0.035	0.029	0.027	0.024	0.026	0.025	0.027	0.029
57	0.452	0.467	0.478	0.482	0.476	0.454	0.404	0.307	0.195	0.115	0.071	0.051	0.044	0.037	0.031	0.027	0.027	0.026	0.028	0.028
58	0.384	0.417	0.439	0.455	0.468	0.475	0.475	0.452	0.374	0.251	0.149	0.089	0.059	0.046	0.040	0.032	0.028	0.025	0.026	0.026
59	0.278	0.285	0.321	0.369	0.409	0.431	0.434	0.429	0.428	0.404	0.317	0.201	0.117	0.070	0.050	0.040	0.033	0.025	0.025	0.023
60	0.315	0.286	0.250	0.231	0.248	0.297	0.351	0.382	0.376	0.356	0.347	0.289	0.182	0.105	0.064	0.048	0.040	0.034	0.025	0.023
61	0.351	0.344	0.329	0.296	0.253	0.219	0.211	0.235	0.283	0.320	0.316	0.286	0.241	0.168	0.099	0.061	0.046	0.040	0.034	0.025
62	0.371	0.368	0.365	0.362	0.348	0.315	0.269	0.227	0.206	0.210	0.235	0.264	0.267	0.237	0.174	0.107	0.065	0.047	0.039	0.035
63	0.362	0.376	0.382	0.382	0.382	0.380	0.370	0.342	0.296	0.245	0.214	0.205	0.215	0.236	0.248	0.212	0.140	0.084	0.055	0.042

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 9.39 SEC
HREF = 0.331E-01

GROUP 2

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.021	0.021	0.021	0.022	0.023	0.024	0.023	0.024	0.024	0.024	0.024	0.026	0.025	0.026	0.025	0.025	0.024	0.024	0.023	0.024
30	0.019	0.018	0.017	0.017	0.017	0.017	0.017	0.016	0.017	0.016	0.016	0.017	0.017	0.017	0.017	0.016	0.016	0.016	0.016	0.016
31	0.011	0.013	0.010	0.013	0.011	0.013	0.011	0.013	0.010	0.011	0.010	0.013	0.013	0.013	0.012	0.013	0.012	0.013	0.013	0.014
32	0.013	0.012	0.012	0.011	0.011	0.010	0.011	0.011	0.011	0.010	0.011	0.010	0.011	0.009	0.012	0.009	0.011	0.009	0.011	0.009
33	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.009	0.010	0.010	0.011	0.009	0.010	0.009	0.011	0.011	0.011	0.009	0.011	0.010
34	0.012	0.011	0.011	0.010	0.011	0.010	0.010	0.010	0.011	0.009	0.010	0.009	0.011	0.009	0.010	0.009	0.010	0.009	0.010	0.009
35	0.013	0.011	0.011	0.010	0.011	0.010	0.011	0.010	0.009	0.010	0.011	0.010	0.011	0.009	0.010	0.009	0.009	0.009	0.010	0.009
36	0.013	0.013	0.011	0.012	0.011	0.012	0.011	0.013	0.010	0.012	0.011	0.012	0.011	0.013	0.009	0.011	0.009	0.011	0.010	0.011
37	0.014	0.013	0.014	0.013	0.013	0.013	0.013	0.013	0.013	0.012	0.013	0.011	0.012	0.011	0.012	0.011	0.011	0.010	0.010	0.010
38	0.013	0.015	0.012	0.014	0.012	0.013	0.011	0.013	0.011	0.014	0.013	0.013	0.012	0.013	0.012	0.013	0.012	0.013	0.012	0.013
39	0.014	0.014	0.015	0.014	0.015	0.014	0.014	0.014	0.014	0.014	0.014	0.013	0.014	0.013	0.013	0.012	0.013	0.011	0.013	0.011
40	0.016	0.016	0.015	0.016	0.015	0.016	0.015	0.016	0.014	0.016	0.014	0.014	0.014	0.014	0.014	0.015	0.014	0.014	0.014	0.014
41	0.017	0.016	0.017	0.016	0.017	0.016	0.017	0.016	0.016	0.015	0.016	0.016	0.016	0.016	0.016	0.015	0.016	0.014	0.014	0.014
42	0.019	0.018	0.018	0.017	0.018	0.017	0.017	0.016	0.017	0.016	0.017	0.016	0.017	0.016	0.017	0.016	0.016	0.016	0.016	0.015
43	0.019	0.019	0.020	0.019	0.019	0.019	0.018	0.017	0.018	0.017	0.018	0.018	0.018	0.017	0.018	0.016	0.017	0.016	0.017	0.017
44	0.019	0.020	0.020	0.020	0.019	0.020	0.019	0.019	0.018	0.019	0.019	0.019	0.019	0.019	0.018	0.018	0.017	0.018	0.018	0.018
45	0.022	0.021	0.022	0.020	0.021	0.019	0.021	0.021	0.021	0.020	0.020	0.020	0.021	0.020	0.020	0.020	0.020	0.019	0.019	0.019
46	0.024	0.025	0.024	0.024	0.023	0.024	0.023	0.024	0.023	0.024	0.021	0.024	0.020	0.023	0.020	0.023	0.020	0.023	0.021	0.023
47	0.028	0.028	0.028	0.027	0.027	0.026	0.027	0.028	0.027	0.025	0.026	0.025	0.026	0.025	0.026	0.025	0.026	0.025	0.026	0.025
48	0.030	0.031	0.029	0.030	0.029	0.030	0.028	0.029	0.028	0.029	0.028	0.029	0.027	0.028	0.027	0.028	0.027	0.028	0.027	0.028
49	0.032	0.031	0.031	0.031	0.031	0.030	0.031	0.030	0.030	0.029	0.030	0.030	0.030	0.029	0.030	0.029	0.029	0.029	0.029	0.028
50	0.033	0.032	0.033	0.032	0.033	0.031	0.032	0.031	0.031	0.030	0.031	0.030	0.030	0.030	0.030	0.030	0.031	0.030	0.030	0.030
51	0.035	0.033	0.034	0.033	0.033	0.033	0.033	0.033	0.032	0.031	0.032	0.031	0.032	0.031	0.032	0.031	0.031	0.030	0.031	0.031
52	0.033	0.034	0.033	0.034	0.033	0.034	0.033	0.034	0.033	0.033	0.033	0.033	0.032	0.033	0.032	0.033	0.031	0.032	0.031	0.032
53	0.033	0.033	0.034	0.034	0.034	0.033	0.034	0.032	0.034	0.032	0.033	0.032	0.034	0.032	0.033	0.031	0.032	0.031	0.032	0.031
54	0.029	0.031	0.031	0.033	0.033	0.034	0.034	0.035	0.034	0.034	0.033	0.034	0.033	0.034	0.033	0.034	0.033	0.033	0.031	0.032
55	0.029	0.030	0.032	0.034	0.034	0.034	0.035	0.034	0.034	0.034	0.035	0.034	0.035	0.035	0.034	0.034	0.034	0.032	0.033	0.032
56	0.031	0.031	0.033	0.033	0.034	0.035	0.035	0.035	0.036	0.036	0.035	0.035	0.037	0.035	0.035	0.034	0.034	0.033	0.033	0.032
57	0.030	0.030	0.033	0.033	0.034	0.034	0.034	0.033	0.034	0.033	0.034	0.033	0.034	0.032	0.033	0.032	0.032	0.031	0.031	0.030
58	0.026	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.028	0.028	0.027	0.028	0.027	0.027	0.026	0.026	0.024
59	0.024	0.022	0.024	0.023	0.024	0.023	0.023	0.022	0.023	0.023	0.023	0.022	0.023	0.021	0.022	0.021	0.021	0.020	0.021	0.020
60	0.020	0.021	0.020	0.020	0.018	0.019	0.016	0.018	0.016	0.017	0.015	0.017	0.015	0.016	0.014	0.016	0.014	0.015	0.013	0.014
61	0.021	0.019	0.018	0.017	0.018	0.016	0.016	0.016	0.016	0.014	0.015	0.014	0.013	0.013	0.014	0.013	0.013	0.013	0.013	0.012
62	0.026	0.022	0.018	0.019	0.017	0.018	0.016	0.016	0.014	0.016	0.014	0.015	0.013	0.014	0.013	0.014	0.013	0.013	0.012	0.013
63	0.036	0.030	0.023	0.019	0.019	0.017	0.019	0.017	0.016	0.015	0.016	0.014	0.015	0.014	0.014	0.013	0.014	0.013	0.014	0.013

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 9.39 SEC
GROUP 2 HREF = 0.331E-01

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.023	0.024	0.022	0.023	0.022	0.022	0.021	0.022	0.022	0.022	0.021	0.021	0.019	0.020	0.020	0.021	0.020	0.020	0.020	0.020
30	0.016	0.016	0.015	0.014	0.015	0.014	0.014	0.014	0.014	0.014	0.014	0.013	0.013	0.013	0.013	0.013	0.012	0.011	0.011	0.010
31	0.013	0.014	0.013	0.014	0.013	0.013	0.013	0.014	0.013	0.013	0.012	0.012	0.012	0.012	0.011	0.011	0.009	0.010	0.009	0.010
32	0.012	0.009	0.012	0.009	0.012	0.010	0.012	0.009	0.012	0.012	0.011	0.011	0.011	0.010	0.010	0.009	0.011	0.009	0.009	0.007
33	0.011	0.009	0.011	0.010	0.011	0.011	0.011	0.010	0.011	0.010	0.011	0.009	0.010	0.008	0.009	0.007	0.008	0.006	0.008	0.007
34	0.009	0.009	0.009	0.009	0.010	0.009	0.009	0.009	0.009	0.009	0.009	0.008	0.009	0.008	0.009	0.008	0.008	0.007	0.008	0.007
35	0.009	0.009	0.009	0.009	0.009	0.008	0.010	0.009	0.009	0.007	0.009	0.007	0.009	0.007	0.009	0.007	0.007	0.007	0.008	0.007
36	0.009	0.009	0.009	0.010	0.009	0.009	0.007	0.009	0.008	0.009	0.008	0.009	0.007	0.009	0.007	0.009	0.007	0.009	0.007	0.008
37	0.011	0.010	0.011	0.010	0.009	0.009	0.009	0.009	0.009	0.009	0.010	0.009	0.009	0.009	0.009	0.008	0.009	0.009	0.009	0.007
38	0.011	0.012	0.010	0.011	0.010	0.012	0.011	0.011	0.010	0.011	0.009	0.011	0.010	0.011	0.010	0.011	0.009	0.010	0.009	0.010
39	0.013	0.011	0.013	0.011	0.011	0.011	0.012	0.011	0.013	0.011	0.012	0.010	0.011	0.010	0.012	0.011	0.011	0.011	0.012	0.011
40	0.013	0.014	0.013	0.014	0.013	0.014	0.013	0.013	0.013	0.013	0.011	0.013	0.011	0.013	0.011	0.013	0.010	0.012	0.010	0.013
41	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.013	0.013	0.013	0.014	0.013	0.014	0.013	0.013	0.013	0.013	0.013	0.013	0.013
42	0.016	0.015	0.016	0.014	0.014	0.014	0.015	0.014	0.014	0.014	0.015	0.014	0.014	0.013	0.014	0.014	0.013	0.013	0.014	0.013
43	0.017	0.016	0.016	0.015	0.016	0.016	0.015	0.016	0.016	0.014	0.014	0.013	0.014	0.015	0.014	0.015	0.014	0.014	0.014	0.014
44	0.017	0.017	0.017	0.017	0.016	0.017	0.017	0.017	0.016	0.017	0.016	0.016	0.016	0.017	0.016	0.016	0.016	0.016	0.015	0.016
45	0.020	0.020	0.020	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.018	0.018	0.019	0.018	0.017	0.018	0.018	0.017
46	0.020	0.023	0.021	0.023	0.021	0.022	0.022	0.022	0.022	0.022	0.021	0.022	0.021	0.022	0.021	0.021	0.020	0.021	0.021	0.021
47	0.026	0.025	0.026	0.025	0.026	0.024	0.025	0.024	0.025	0.024	0.024	0.023	0.025	0.023	0.024	0.023	0.024	0.022	0.024	0.023
48	0.028	0.029	0.029	0.029	0.028	0.028	0.027	0.028	0.027	0.027	0.026	0.027	0.026	0.028	0.026	0.027	0.025	0.027	0.025	0.027
49	0.030	0.030	0.030	0.030	0.030	0.029	0.029	0.029	0.030	0.028	0.028	0.028	0.029	0.028	0.028	0.027	0.028	0.027	0.028	0.027
50	0.030	0.030	0.031	0.030	0.031	0.030	0.030	0.029	0.030	0.029	0.030	0.029	0.029	0.028	0.029	0.029	0.029	0.028	0.029	0.027
51	0.031	0.031	0.031	0.030	0.031	0.030	0.031	0.030	0.030	0.030	0.030	0.029	0.030	0.029	0.030	0.029	0.029	0.029	0.029	0.028
52	0.031	0.032	0.031	0.032	0.030	0.031	0.029	0.030	0.029	0.030	0.029	0.030	0.028	0.029	0.027	0.029	0.027	0.028	0.027	0.028
53	0.032	0.030	0.031	0.030	0.029	0.028	0.028	0.027	0.027	0.026	0.027	0.025	0.026	0.024	0.025	0.024	0.025	0.024	0.025	0.024
54	0.030	0.031	0.030	0.029	0.027	0.026	0.023	0.023	0.021	0.022	0.020	0.021	0.020	0.021	0.020	0.021	0.019	0.019	0.017	0.019
55	0.032	0.030	0.030	0.029	0.027	0.024	0.023	0.021	0.021	0.019	0.019	0.018	0.018	0.017	0.018	0.016	0.017	0.016	0.016	0.015
56	0.032	0.030	0.030	0.029	0.028	0.025	0.023	0.021	0.020	0.019	0.018	0.017	0.017	0.016	0.016	0.015	0.015	0.014	0.014	0.014
57	0.030	0.029	0.029	0.027	0.026	0.023	0.023	0.020	0.019	0.018	0.017	0.016	0.016	0.014	0.015	0.014	0.014	0.013	0.014	0.013
58	0.024	0.024	0.024	0.023	0.023	0.020	0.019	0.018	0.017	0.016	0.015	0.014	0.014	0.013	0.013	0.013	0.013	0.013	0.013	0.011
59	0.020	0.020	0.021	0.020	0.019	0.018	0.016	0.017	0.017	0.016	0.016	0.015	0.015	0.014	0.015	0.014	0.014	0.014	0.014	0.014
60	0.013	0.015	0.013	0.014	0.013	0.014	0.013	0.014	0.011	0.012	0.010	0.013	0.011	0.010	0.009	0.011	0.009	0.011	0.009	0.009
61	0.013	0.011	0.011	0.010	0.011	0.009	0.010	0.008	0.009	0.008	0.009	0.008	0.009	0.007	0.009	0.006	0.008	0.006	0.007	0.007
62	0.011	0.012	0.011	0.012	0.010	0.011	0.010	0.011	0.009	0.010	0.009	0.010	0.009	0.010	0.007	0.009	0.007	0.009	0.007	0.007
63	0.013	0.011	0.013	0.011	0.013	0.011	0.012	0.010	0.012	0.010	0.011	0.009	0.009	0.009	0.009	0.009	0.009	0.008	0.009	0.007

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 9.39 SEC
GROUP 2 HRFR = 0.331E-01

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.020	0.020	0.020	0.020	0.020	0.021	0.020	0.020	0.019	0.020
30	0.011	0.010	0.010	0.010	0.010	0.009	0.009	0.007	0.009	0.008
31	0.009	0.009	0.008	0.008	0.007	0.009	0.007	0.009	0.007	0.008
32	0.009	0.007	0.008	0.007	0.007	0.007	0.007	0.007	0.007	0.007
33	0.008	0.005	0.007	0.005	0.007	0.005	0.007	0.006	0.007	0.007
34	0.007	0.006	0.007	0.006	0.007	0.006	0.007	0.005	0.006	0.004
35	0.007	0.006	0.007	0.006	0.007	0.005	0.006	0.005	0.007	0.006
36	0.007	0.009	0.007	0.009	0.006	0.007	0.007	0.008	0.007	0.007
37	0.009	0.007	0.009	0.008	0.009	0.008	0.007	0.007	0.008	0.007
38	0.009	0.010	0.009	0.011	0.009	0.009	0.009	0.009	0.008	0.010
39	0.011	0.010	0.011	0.011	0.011	0.011	0.011	0.010	0.011	0.010
40	0.009	0.012	0.010	0.013	0.010	0.012	0.011	0.012	0.011	0.012
41	0.014	0.013	0.014	0.013	0.013	0.013	0.013	0.010	0.013	0.011
42	0.014	0.013	0.013	0.013	0.014	0.013	0.014	0.014	0.014	0.013
43	0.014	0.014	0.014	0.014	0.015	0.014	0.014	0.014	0.014	0.014
44	0.016	0.016	0.016	0.016	0.014	0.016	0.016	0.016	0.016	0.016
45	0.019	0.017	0.018	0.017	0.018	0.017	0.018	0.018	0.017	0.017
46	0.020	0.021	0.020	0.021	0.021	0.020	0.020	0.020	0.020	0.021
47	0.024	0.022	0.024	0.023	0.024	0.023	0.024	0.023	0.023	0.023
48	0.025	0.025	0.025	0.026	0.025	0.026	0.024	0.025	0.023	0.025
49	0.028	0.026	0.027	0.027	0.027	0.027	0.027	0.026	0.027	0.026
50	0.028	0.028	0.028	0.028	0.028	0.026	0.027	0.026	0.027	0.027
51	0.029	0.028	0.028	0.027	0.029	0.027	0.028	0.027	0.027	0.026
52	0.027	0.028	0.025	0.027	0.025	0.027	0.025	0.026	0.025	0.026
53	0.024	0.023	0.023	0.023	0.024	0.023	0.023	0.023	0.023	0.022
54	0.018	0.020	0.019	0.019	0.018	0.018	0.017	0.018	0.017	0.017
55	0.016	0.014	0.014	0.011	0.014	0.010	0.014	0.010	0.013	0.013
56	0.014	0.013	0.013	0.011	0.012	0.011	0.011	0.010	0.011	0.011
57	0.013	0.011	0.012	0.011	0.011	0.009	0.010	0.009	0.009	0.008
58	0.011	0.010	0.011	0.010	0.011	0.010	0.009	0.009	0.009	0.009
59	0.014	0.013	0.013	0.013	0.013	0.013	0.013	0.011	0.012	0.011
60	0.009	0.009	0.009	0.009	0.007	0.009	0.007	0.009	0.007	0.007
61	0.007	0.006	0.007	0.006	0.006	0.005	0.007	0.006	0.005	0.004
62	0.005	0.007	0.005	0.007	0.004	0.006	0.003	0.005	0.004	0.006
63	0.007	0.007	0.008	0.006	0.007	0.005	0.007	0.005	0.007	0.005

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 3,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 9.39 SEC
GROUP 2 HRFR = 0.331E-01

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.013	0.013	0.013	0.014	0.013	0.014	0.013	0.014	0.013	0.015	0.014	0.017	0.016	0.026	0.072	0.131	0.162	0.180	0.190	0.200
65	0.013	0.013	0.014	0.013	0.013	0.013	0.013	0.013	0.014	0.014	0.016	0.016	0.017	0.029	0.083	0.136	0.163	0.178	0.189	0.197
66	0.012	0.012	0.012	0.011	0.011	0.012	0.013	0.011	0.013	0.013	0.014	0.014	0.018	0.040	0.101	0.144	0.165	0.179	0.189	0.197
67	0.010	0.009	0.009	0.009	0.010	0.010	0.011	0.010	0.011	0.011	0.013	0.014	0.018	0.057	0.117	0.149	0.167	0.179	0.189	0.196
68	0.009	0.009	0.009	0.009	0.007	0.009	0.007	0.009	0.009	0.011	0.011	0.014	0.022	0.073	0.125	0.151	0.167	0.178	0.186	0.194
69	0.007	0.006	0.007	0.007	0.007	0.006	0.007	0.007	0.008	0.008	0.010	0.013	0.033	0.089	0.131	0.151	0.165	0.174	0.181	0.188
70	0.007	0.007	0.004	0.006	0.004	0.007	0.006	0.007	0.007	0.009	0.010	0.015	0.046	0.102	0.134	0.150	0.162	0.170	0.177	0.184
71	0.007	0.006	0.007	0.005	0.005	0.005	0.007	0.005	0.008	0.007	0.010	0.013	0.053	0.107	0.136	0.150	0.162	0.169	0.177	0.183
72	0.007	0.007	0.006	0.007	0.006	0.007	0.007	0.008	0.007	0.009	0.009	0.017	0.060	0.113	0.139	0.154	0.164	0.173	0.180	0.187
73	0.007	0.007	0.007	0.006	0.007	0.006	0.007	0.007	0.007	0.008	0.011	0.019	0.067	0.115	0.139	0.152	0.162	0.170	0.177	0.183
74	0.007	0.007	0.007	0.005	0.007	0.006	0.007	0.007	0.007	0.007	0.011	0.026	0.076	0.115	0.132	0.143	0.152	0.159	0.165	0.171
75	0.007	0.007	0.006	0.005	0.006	0.006	0.007	0.005	0.007	0.007	0.011	0.037	0.085	0.112	0.125	0.133	0.140	0.144	0.149	0.154
76	0.007	0.007	0.006	0.006	0.005	0.006	0.005	0.006	0.006	0.008	0.014	0.050	0.092	0.113	0.123	0.130	0.134	0.138	0.141	0.145
77	0.007	0.005	0.007	0.004	0.005	0.005	0.005	0.005	0.006	0.006	0.021	0.067	0.103	0.118	0.127	0.133	0.137	0.141	0.144	0.147
78	0.007	0.007	0.007	0.007	0.005	0.006	0.004	0.006	0.004	0.009	0.031	0.083	0.111	0.125	0.132	0.139	0.142	0.147	0.150	0.154
79	0.009	0.013	0.018	0.016	0.015	0.014	0.013	0.011	0.009	0.010	0.039	0.089	0.116	0.128	0.136	0.142	0.147	0.150	0.155	0.159
80	0.016	0.024	0.023	0.021	0.022	0.021	0.013	0.012	0.013	0.017	0.047	0.095	0.118	0.130	0.136	0.144	0.148	0.152	0.156	0.161
81	0.026	0.034	0.030	0.023	0.026	0.026	0.024	0.019	0.015	0.018	0.054	0.098	0.119	0.129	0.137	0.142	0.147	0.150	0.155	0.158
82	0.046	0.055	0.042	0.035	0.034	0.030	0.030	0.029	0.026	0.028	0.066	0.105	0.123	0.132	0.137	0.141	0.145	0.149	0.153	0.157
83	0.087	0.097	0.063	0.069	0.066	0.039	0.027	0.027	0.029	0.040	0.081	0.114	0.127	0.135	0.140	0.142	0.145	0.148	0.150	0.155
84	0.098	0.107	0.074	0.097	0.100	0.053	0.029	0.018	0.022	0.046	0.091	0.118	0.130	0.137	0.141	0.144	0.146	0.147	0.149	0.152
85	0.072	0.072	0.059	0.084	0.083	0.047	0.025	0.016	0.017	0.057	0.100	0.120	0.129	0.136	0.140	0.144	0.146	0.148	0.149	0.151
86	0.053	0.048	0.045	0.049	0.049	0.038	0.031	0.027	0.030	0.039	0.055	0.065	0.073	0.081	0.092	0.102	0.112	0.121	0.129	0.139
87	0.043	0.039	0.037	0.038	0.037	0.036	0.033	0.030	0.030	0.030	0.030	0.031	0.032	0.034	0.034	0.036	0.037	0.040	0.042	0.046
88	0.029	0.024	0.024	0.025	0.026	0.024	0.025	0.027	0.031	0.029	0.029	0.028	0.029	0.028	0.029	0.029	0.030	0.030	0.031	0.031
89	0.018	0.014	0.014	0.013	0.015	0.016	0.019	0.024	0.030	0.027	0.027	0.026	0.026	0.025	0.026	0.025	0.026	0.026	0.027	0.027
90	0.012	0.010	0.009	0.008	0.011	0.012	0.014	0.019	0.027	0.027	0.027	0.026	0.027	0.024	0.025	0.023	0.024	0.023	0.025	0.023
91	0.007	0.007	0.006	0.006	0.007	0.007	0.009	0.014	0.025	0.027	0.028	0.026	0.027	0.025	0.025	0.024	0.025	0.023	0.024	0.023
92	0.005	0.005	0.002	0.004	0.002	0.005	0.004	0.013	0.021	0.026	0.025	0.027	0.024	0.026	0.023	0.024	0.023	0.024	0.023	0.023
93	0.005	0.005	0.004	0.002	0.004	0.005	0.007	0.013	0.024	0.025	0.026	0.025	0.026	0.025	0.025	0.024	0.025	0.023	0.023	0.020
94	0.009	0.009	0.005	0.006	0.004	0.007	0.008	0.013	0.023	0.027	0.026	0.028	0.026	0.028	0.026	0.027	0.026	0.025	0.022	0.023
95	0.019	0.017	0.016	0.014	0.014	0.013	0.013	0.014	0.023	0.025	0.027	0.028	0.030	0.029	0.030	0.028	0.028	0.025	0.024	0.023
96	0.027	0.025	0.024	0.025	0.023	0.021	0.019	0.021	0.025	0.030	0.028	0.030	0.030	0.033	0.032	0.033	0.030	0.029	0.024	0.023
97	0.034	0.033	0.032	0.031	0.030	0.027	0.024	0.023	0.030	0.032	0.032	0.032	0.034	0.033	0.035	0.035	0.035	0.031	0.027	0.022
98	0.034	0.034	0.034	0.033	0.032	0.027	0.025	0.024	0.029	0.030	0.030	0.032	0.035	0.036	0.037	0.037	0.036	0.032	0.028	0.024

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 3,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 9.39 SEC
HREF = 0.331E-01

GROUP 2

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	0.206	0.213	0.221	0.230	0.239	0.250	0.264	0.282	0.299	0.310	0.316	0.324	0.330	0.328	0.316	0.299	0.278	0.260	0.245	0.240
65	0.204	0.210	0.219	0.226	0.236	0.248	0.262	0.277	0.295	0.309	0.320	0.332	0.347	0.354	0.356	0.353	0.344	0.327	0.306	0.276
66	0.202	0.209	0.218	0.226	0.236	0.248	0.261	0.275	0.294	0.309	0.320	0.333	0.348	0.355	0.359	0.366	0.369	0.370	0.363	0.352
67	0.202	0.209	0.218	0.227	0.238	0.249	0.262	0.276	0.292	0.311	0.325	0.332	0.342	0.351	0.358	0.365	0.373	0.378	0.377	0.377
68	0.200	0.207	0.216	0.225	0.235	0.247	0.260	0.276	0.291	0.308	0.325	0.336	0.341	0.346	0.355	0.363	0.367	0.369	0.370	0.375
69	0.194	0.200	0.209	0.216	0.226	0.236	0.248	0.262	0.278	0.294	0.311	0.325	0.333	0.337	0.344	0.355	0.362	0.366	0.372	0.377
70	0.189	0.196	0.204	0.212	0.223	0.233	0.242	0.254	0.269	0.286	0.303	0.320	0.330	0.339	0.346	0.351	0.356	0.362	0.371	0.376
71	0.190	0.196	0.205	0.214	0.224	0.236	0.246	0.255	0.267	0.283	0.298	0.312	0.322	0.328	0.332	0.336	0.340	0.346	0.353	0.358
72	0.192	0.198	0.207	0.215	0.222	0.233	0.244	0.254	0.264	0.278	0.292	0.304	0.314	0.320	0.323	0.325	0.329	0.332	0.332	0.331
73	0.189	0.195	0.201	0.209	0.217	0.226	0.238	0.247	0.259	0.273	0.286	0.297	0.307	0.312	0.315	0.316	0.318	0.323	0.326	0.326
74	0.177	0.182	0.189	0.196	0.205	0.215	0.225	0.236	0.246	0.255	0.266	0.276	0.285	0.291	0.295	0.296	0.298	0.301	0.307	0.310
75	0.158	0.163	0.167	0.172	0.178	0.186	0.194	0.201	0.210	0.217	0.224	0.232	0.240	0.245	0.247	0.247	0.247	0.248	0.251	0.255
76	0.147	0.150	0.154	0.158	0.162	0.166	0.171	0.176	0.180	0.184	0.187	0.190	0.190	0.192	0.192	0.192	0.191	0.191	0.190	0.190
77	0.150	0.153	0.156	0.160	0.164	0.168	0.172	0.175	0.177	0.180	0.181	0.182	0.180	0.177	0.175	0.172	0.168	0.165	0.163	0.160
78	0.157	0.162	0.165	0.170	0.174	0.179	0.184	0.189	0.192	0.194	0.195	0.196	0.196	0.193	0.189	0.185	0.180	0.175	0.170	0.166
79	0.163	0.168	0.173	0.178	0.184	0.190	0.198	0.205	0.211	0.214	0.217	0.218	0.219	0.217	0.215	0.211	0.207	0.202	0.197	0.190
80	0.166	0.171	0.176	0.183	0.189	0.197	0.205	0.213	0.221	0.229	0.234	0.238	0.241	0.242	0.241	0.240	0.238	0.235	0.230	0.225
81	0.164	0.169	0.175	0.181	0.188	0.195	0.204	0.213	0.223	0.232	0.240	0.248	0.253	0.256	0.257	0.258	0.258	0.257	0.256	0.254
82	0.161	0.166	0.172	0.178	0.186	0.194	0.203	0.212	0.222	0.232	0.241	0.249	0.254	0.258	0.261	0.261	0.261	0.262	0.262	0.262
83	0.159	0.164	0.170	0.178	0.185	0.193	0.200	0.209	0.219	0.229	0.238	0.245	0.252	0.258	0.261	0.264	0.265	0.266	0.265	0.263
84	0.156	0.160	0.166	0.173	0.181	0.189	0.198	0.207	0.216	0.226	0.234	0.242	0.249	0.255	0.259	0.263	0.267	0.270	0.273	0.275
85	0.153	0.157	0.162	0.168	0.175	0.184	0.193	0.202	0.210	0.219	0.227	0.234	0.240	0.246	0.250	0.254	0.258	0.261	0.265	0.269
86	0.144	0.148	0.154	0.160	0.168	0.173	0.180	0.187	0.195	0.204	0.214	0.223	0.231	0.237	0.241	0.244	0.248	0.250	0.253	0.255
87	0.049	0.054	0.059	0.068	0.074	0.077	0.077	0.077	0.078	0.084	0.091	0.103	0.114	0.122	0.129	0.135	0.140	0.145	0.149	0.155
88	0.033	0.033	0.035	0.034	0.035	0.035	0.036	0.037	0.037	0.036	0.037	0.038	0.039	0.040	0.040	0.041	0.042	0.042	0.043	0.043
89	0.029	0.029	0.030	0.030	0.031	0.032	0.033	0.033	0.033	0.031	0.032	0.032	0.034	0.033	0.034	0.034	0.035	0.035	0.036	0.035
90	0.025	0.024	0.026	0.026	0.027	0.027	0.028	0.027	0.030	0.028	0.028	0.028	0.029	0.029	0.030	0.028	0.029	0.028	0.029	0.029
91	0.024	0.024	0.025	0.025	0.026	0.025	0.027	0.026	0.027	0.027	0.028	0.028	0.029	0.027	0.028	0.027	0.028	0.027	0.028	0.027
92	0.022	0.024	0.023	0.023	0.023	0.025	0.024	0.026	0.025	0.026	0.036	0.072	0.095	0.078	0.048	0.034	0.028	0.026	0.027	0.028
93	0.022	0.019	0.022	0.020	0.023	0.021	0.024	0.022	0.025	0.023	0.041	0.089	0.121	0.100	0.061	0.037	0.029	0.025	0.025	0.025
94	0.021	0.022	0.021	0.023	0.023	0.023	0.023	0.024	0.024	0.026	0.026	0.031	0.035	0.035	0.030	0.027	0.024	0.025	0.023	0.025
95	0.023	0.020	0.022	0.022	0.023	0.023	0.025	0.025	0.027	0.027	0.028	0.026	0.025	0.024	0.025	0.024	0.024	0.023	0.024	0.023
96	0.020	0.021	0.022	0.024	0.023	0.025	0.024	0.027	0.027	0.029	0.028	0.029	0.027	0.027	0.025	0.025	0.023	0.024	0.023	0.024
97	0.021	0.020	0.023	0.023	0.026	0.025	0.027	0.027	0.029	0.029	0.030	0.030	0.030	0.027	0.026	0.024	0.024	0.023	0.023	0.023
98	0.024	0.023	0.025	0.024	0.027	0.027	0.029	0.028	0.029	0.029	0.031	0.030	0.031	0.029	0.028	0.024	0.025	0.023	0.023	0.023

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 9.39 SEC
GROUP 2 HRFR = 0.331E-01

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	0.249	0.273	0.306	0.339	0.365	0.383	0.392	0.394	0.388	0.369	0.330	0.275	0.231	0.213	0.216	0.237	0.243	0.195	0.121	0.074
65	0.247	0.219	0.203	0.202	0.217	0.244	0.279	0.318	0.354	0.377	0.387	0.379	0.350	0.301	0.250	0.223	0.223	0.239	0.221	0.151
66	0.337	0.313	0.279	0.240	0.205	0.180	0.170	0.172	0.187	0.211	0.248	0.290	0.325	0.346	0.337	0.295	0.248	0.224	0.228	0.222
67	0.375	0.367	0.353	0.331	0.302	0.266	0.228	0.193	0.168	0.154	0.150	0.153	0.162	0.184	0.220	0.260	0.260	0.269	0.240	0.223
68	0.379	0.381	0.378	0.371	0.357	0.338	0.309	0.279	0.251	0.224	0.199	0.178	0.165	0.159	0.158	0.161	0.171	0.190	0.211	0.222
69	0.380	0.384	0.387	0.385	0.383	0.387	0.387	0.369	0.341	0.303	0.263	0.232	0.210	0.192	0.180	0.173	0.171	0.171	0.175	0.181
70	0.381	0.387	0.394	0.399	0.397	0.397	0.401	0.404	0.400	0.388	0.368	0.338	0.297	0.253	0.218	0.198	0.187	0.183	0.180	0.178
71	0.364	0.370	0.378	0.383	0.390	0.399	0.405	0.409	0.411	0.408	0.399	0.389	0.380	0.365	0.339	0.304	0.267	0.234	0.210	0.197
72	0.329	0.329	0.329	0.333	0.334	0.335	0.341	0.353	0.361	0.369	0.375	0.380	0.382	0.385	0.380	0.367	0.350	0.325	0.292	0.258
73	0.326	0.323	0.318	0.310	0.296	0.279	0.265	0.255	0.252	0.252	0.257	0.263	0.272	0.281	0.294	0.307	0.322	0.333	0.343	0.344
74	0.313	0.314	0.308	0.299	0.291	0.285	0.278	0.270	0.259	0.243	0.223	0.202	0.186	0.176	0.172	0.172	0.175	0.178	0.188	0.198
75	0.261	0.265	0.267	0.266	0.265	0.267	0.272	0.274	0.270	0.260	0.243	0.224	0.206	0.188	0.171	0.159	0.149	0.143	0.140	0.138
76	0.190	0.191	0.194	0.196	0.193	0.192	0.192	0.195	0.196	0.195	0.193	0.192	0.190	0.186	0.178	0.170	0.160	0.151	0.143	0.137
77	0.157	0.155	0.155	0.153	0.152	0.151	0.150	0.147	0.145	0.143	0.140	0.137	0.134	0.132	0.130	0.128	0.127	0.126	0.125	0.122
78	0.161	0.157	0.153	0.150	0.146	0.143	0.139	0.137	0.133	0.130	0.127	0.126	0.124	0.123	0.121	0.120	0.119	0.119	0.118	0.117
79	0.183	0.176	0.170	0.163	0.157	0.150	0.146	0.141	0.137	0.132	0.129	0.126	0.123	0.120	0.118	0.115	0.113	0.112	0.111	0.110
80	0.218	0.211	0.203	0.195	0.186	0.177	0.168	0.159	0.151	0.144	0.138	0.133	0.129	0.126	0.122	0.119	0.117	0.115	0.113	0.113
81	0.251	0.248	0.244	0.237	0.229	0.220	0.210	0.200	0.189	0.179	0.168	0.159	0.151	0.143	0.136	0.131	0.126	0.122	0.120	0.117
82	0.262	0.263	0.263	0.262	0.261	0.258	0.253	0.247	0.239	0.229	0.219	0.208	0.196	0.185	0.173	0.162	0.152	0.143	0.136	0.130
83	0.261	0.259	0.256	0.255	0.253	0.253	0.252	0.252	0.251	0.250	0.248	0.245	0.240	0.234	0.226	0.216	0.205	0.192	0.178	0.167
84	0.276	0.276	0.275	0.271	0.266	0.259	0.251	0.242	0.235	0.229	0.224	0.220	0.218	0.217	0.216	0.215	0.215	0.213	0.209	0.204
85	0.272	0.276	0.281	0.285	0.287	0.289	0.288	0.285	0.278	0.268	0.256	0.243	0.228	0.216	0.205	0.197	0.189	0.184	0.181	0.179
86	0.259	0.263	0.267	0.270	0.274	0.278	0.281	0.283	0.284	0.285	0.286	0.285	0.282	0.277	0.270	0.260	0.248	0.235	0.223	0.211
87	0.161	0.170	0.178	0.187	0.194	0.202	0.208	0.213	0.215	0.217	0.218	0.219	0.218	0.218	0.217	0.217	0.216	0.216	0.216	0.214
88	0.044	0.044	0.045	0.046	0.046	0.046	0.048	0.047	0.048	0.047	0.047	0.046	0.046	0.046	0.045	0.044	0.044	0.042	0.043	0.042
89	0.036	0.036	0.037	0.037	0.038	0.037	0.038	0.037	0.038	0.037	0.037	0.036	0.035	0.035	0.035	0.033	0.033	0.031	0.031	0.030
90	0.030	0.030	0.030	0.030	0.031	0.030	0.031	0.030	0.030	0.029	0.030	0.028	0.029	0.027	0.027	0.026	0.026	0.024	0.024	0.024
91	0.028	0.027	0.029	0.028	0.030	0.028	0.029	0.028	0.028	0.027	0.027	0.027	0.027	0.024	0.025	0.023	0.023	0.023	0.023	0.021
92	0.027	0.028	0.027	0.029	0.027	0.029	0.027	0.029	0.027	0.029	0.033	0.049	0.054	0.044	0.031	0.027	0.023	0.023	0.021	0.021
93	0.027	0.025	0.027	0.026	0.028	0.027	0.027	0.026	0.027	0.029	0.054	0.103	0.120	0.092	0.056	0.035	0.027	0.023	0.022	0.023
94	0.024	0.026	0.024	0.027	0.025	0.027	0.025	0.027	0.025	0.027	0.027	0.040	0.050	0.044	0.032	0.027	0.023	0.024	0.021	0.022
95	0.024	0.023	0.024	0.024	0.026	0.025	0.027	0.026	0.026	0.024	0.025	0.023	0.024	0.023	0.024	0.022	0.022	0.020	0.020	0.019
96	0.023	0.024	0.023	0.024	0.024	0.026	0.025	0.027	0.025	0.026	0.024	0.025	0.023	0.024	0.023	0.023	0.021	0.021	0.020	0.021
97	0.024	0.023	0.024	0.023	0.024	0.024	0.025	0.025	0.026	0.024	0.025	0.023	0.024	0.022	0.023	0.021	0.022	0.020	0.020	0.019
98	0.023	0.022	0.023	0.021	0.024	0.024	0.025	0.025	0.026	0.025	0.025	0.023	0.024	0.023	0.023	0.022	0.021	0.020	0.020	0.019

NASA/RI OH90 TRANSITION TEST
V418-P4A
AKO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 3,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 9.39 SEC
GROUP 2 HREF = 0.331E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.049	0.039	0.031	0.025	0.021	0.020	0.018	0.017	0.016	0.016	0.014	0.016	0.014	0.015	0.013	0.014	0.013	0.014	0.013	0.014
65	0.089	0.056	0.042	0.034	0.028	0.022	0.019	0.017	0.017	0.016	0.016	0.015	0.015	0.014	0.014	0.014	0.013	0.013	0.014	0.013
66	0.167	0.100	0.061	0.043	0.036	0.029	0.023	0.018	0.017	0.016	0.016	0.014	0.014	0.014	0.014	0.013	0.013	0.013	0.013	0.013
67	0.216	0.176	0.110	0.065	0.045	0.035	0.030	0.021	0.018	0.015	0.014	0.013	0.013	0.011	0.012	0.011	0.013	0.011	0.012	0.010
68	0.224	0.228	0.208	0.145	0.065	0.054	0.039	0.032	0.023	0.018	0.014	0.014	0.013	0.013	0.011	0.011	0.009	0.010	0.009	0.010
69	0.193	0.209	0.229	0.227	0.169	0.099	0.060	0.041	0.034	0.024	0.017	0.014	0.013	0.011	0.011	0.009	0.009	0.008	0.009	0.007
70	0.178	0.181	0.191	0.211	0.217	0.177	0.112	0.068	0.044	0.036	0.027	0.018	0.013	0.011	0.010	0.010	0.009	0.010	0.008	0.007
71	0.193	0.191	0.193	0.196	0.203	0.213	0.196	0.134	0.078	0.049	0.037	0.029	0.021	0.014	0.011	0.009	0.009	0.009	0.007	0.007
72	0.231	0.214	0.205	0.201	0.200	0.201	0.202	0.190	0.144	0.089	0.054	0.039	0.032	0.024	0.016	0.013	0.009	0.009	0.007	0.009
73	0.326	0.296	0.262	0.229	0.204	0.190	0.187	0.189	0.189	0.166	0.114	0.067	0.044	0.033	0.026	0.018	0.013	0.009	0.009	0.007
74	0.211	0.223	0.236	0.243	0.243	0.237	0.227	0.214	0.205	0.197	0.180	0.134	0.083	0.050	0.036	0.027	0.021	0.013	0.009	0.007
75	0.138	0.139	0.142	0.146	0.152	0.160	0.169	0.177	0.184	0.188	0.193	0.187	0.150	0.097	0.061	0.040	0.030	0.021	0.014	0.008
76	0.132	0.131	0.130	0.131	0.132	0.134	0.136	0.139	0.142	0.146	0.153	0.160	0.160	0.139	0.097	0.059	0.038	0.029	0.023	0.016
77	0.121	0.120	0.120	0.119	0.121	0.123	0.125	0.127	0.129	0.132	0.135	0.138	0.140	0.139	0.126	0.092	0.058	0.037	0.028	0.022
78	0.116	0.115	0.114	0.113	0.111	0.111	0.111	0.112	0.114	0.115	0.117	0.121	0.125	0.128	0.129	0.123	0.096	0.062	0.039	0.029
79	0.111	0.111	0.113	0.114	0.116	0.117	0.119	0.119	0.120	0.120	0.121	0.120	0.120	0.121	0.123	0.123	0.120	0.102	0.072	0.045
80	0.112	0.112	0.111	0.111	0.109	0.109	0.110	0.112	0.114	0.116	0.117	0.121	0.124	0.127	0.131	0.135	0.137	0.137	0.126	0.097
81	0.116	0.114	0.113	0.112	0.112	0.109	0.109	0.109	0.111	0.111	0.112	0.111	0.112	0.114	0.117	0.120	0.124	0.129	0.136	0.139
82	0.125	0.121	0.117	0.115	0.114	0.113	0.112	0.110	0.110	0.111	0.112	0.114	0.114	0.113	0.113	0.114	0.115	0.115	0.117	0.119
83	0.154	0.143	0.133	0.126	0.121	0.118	0.115	0.114	0.112	0.112	0.111	0.112	0.112	0.113	0.112	0.112	0.112	0.112	0.112	0.112
84	0.196	0.185	0.174	0.162	0.149	0.139	0.131	0.125	0.121	0.117	0.115	0.113	0.113	0.112	0.111	0.110	0.111	0.110	0.110	0.109
85	0.177	0.175	0.172	0.169	0.164	0.160	0.156	0.151	0.146	0.140	0.132	0.127	0.121	0.117	0.114	0.112	0.111	0.110	0.107	0.107
86	0.202	0.194	0.188	0.183	0.178	0.173	0.169	0.164	0.161	0.158	0.157	0.156	0.155	0.153	0.151	0.148	0.145	0.140	0.136	0.131
87	0.209	0.202	0.192	0.182	0.176	0.177	0.186	0.202	0.225	0.249	0.273	0.293	0.305	0.309	0.308	0.304	0.297	0.289	0.279	0.269
88	0.043	0.041	0.042	0.041	0.041	0.040	0.043	0.047	0.057	0.070	0.086	0.101	0.115	0.125	0.133	0.139	0.144	0.146	0.147	0.145
89	0.030	0.028	0.028	0.027	0.028	0.027	0.026	0.026	0.027	0.027	0.029	0.029	0.030	0.030	0.032	0.033	0.034	0.033	0.034	0.032
90	0.025	0.023	0.024	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.024	0.024	0.025	0.025	0.027	0.027	0.028	0.027	0.027	0.025
91	0.022	0.020	0.021	0.020	0.021	0.020	0.020	0.020	0.020	0.018	0.019	0.019	0.019	0.017	0.020	0.021	0.022	0.020	0.021	0.020
92	0.020	0.021	0.020	0.021	0.019	0.021	0.020	0.020	0.019	0.024	0.027	0.027	0.022	0.020	0.017	0.019	0.018	0.018	0.017	0.019
93	0.021	0.021	0.020	0.019	0.020	0.020	0.020	0.020	0.025	0.049	0.073	0.068	0.046	0.029	0.020	0.017	0.019	0.016	0.018	0.016
94	0.020	0.021	0.020	0.020	0.019	0.020	0.019	0.020	0.020	0.027	0.038	0.039	0.031	0.023	0.018	0.017	0.016	0.017	0.016	0.016
95	0.020	0.020	0.021	0.019	0.020	0.018	0.018	0.016	0.016	0.016	0.017	0.017	0.017	0.016	0.016	0.016	0.016	0.016	0.016	0.016
96	0.019	0.020	0.019	0.019	0.018	0.019	0.018	0.019	0.017	0.018	0.016	0.017	0.016	0.016	0.014	0.016	0.015	0.016	0.014	0.016
97	0.019	0.018	0.019	0.020	0.018	0.018	0.018	0.018	0.017	0.016	0.017	0.016	0.016	0.016	0.016	0.016	0.016	0.017	0.018	0.017
98	0.020	0.019	0.020	0.019	0.019	0.018	0.018	0.017	0.018	0.017	0.017	0.016	0.016	0.014	0.015	0.016	0.019	0.019	0.020	0.020

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREFR
IR SCAN TIME 9.39 SEC
HREFR = 0.331E-01

GROUP 2

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.013	0.013	0.011	0.013	0.011	0.013	0.011	0.013	0.010	0.011	0.009	0.011	0.009	0.011	0.009	0.010	0.007	0.009	0.007	0.009
65	0.013	0.013	0.013	0.012	0.012	0.011	0.012	0.010	0.011	0.010	0.011	0.009	0.009	0.008	0.009	0.008	0.009	0.008	0.008	0.007
66	0.013	0.013	0.013	0.011	0.012	0.011	0.011	0.009	0.011	0.009	0.010	0.009	0.009	0.007	0.008	0.007	0.007	0.007	0.007	0.007
67	0.011	0.010	0.011	0.009	0.011	0.010	0.010	0.009	0.009	0.007	0.008	0.007	0.007	0.006	0.008	0.006	0.006	0.005	0.005	0.004
68	0.009	0.009	0.007	0.009	0.006	0.006	0.005	0.007	0.006	0.007	0.005	0.007	0.004	0.005	0.002	0.004	0.002	0.004	0.003	0.004
69	0.007	0.007	0.008	0.007	0.007	0.005	0.006	0.005	0.006	0.005	0.005	0.005	0.004	0.003	0.003	0.002	0.003	0.002	0.002	0.002
70	0.006	0.007	0.006	0.009	0.006	0.007	0.005	0.005	0.003	0.005	0.003	0.003	0.003	0.003	0.002	0.002	0.000	0.001	0.001	0.001
71	0.007	0.006	0.007	0.005	0.006	0.004	0.005	0.004	0.005	0.003	0.004	0.003	0.003	0.002	0.002	0.002	0.002	0.001	0.002	0.000
72	0.006	0.007	0.005	0.006	0.005	0.006	0.004	0.005	0.003	0.004	0.003	0.003	0.002	0.003	0.000	0.002	0.002	0.002	0.000	0.000
73	0.007	0.006	0.007	0.005	0.005	0.005	0.004	0.004	0.004	0.003	0.003	0.002	0.003	0.002	0.002	0.000	0.000	0.000	0.000	0.000
74	0.007	0.006	0.005	0.005	0.005	0.005	0.004	0.003	0.003	0.002	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001
75	0.007	0.004	0.005	0.003	0.004	0.002	0.004	0.000	0.002	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76	0.010	0.007	0.005	0.005	0.003	0.003	0.002	0.003	0.002	0.003	0.000	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000
77	0.018	0.011	0.009	0.005	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
78	0.022	0.020	0.016	0.011	0.005	0.005	0.003	0.003	0.000	0.002	0.000	0.002	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001
79	0.031	0.023	0.022	0.020	0.017	0.013	0.009	0.005	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80	0.064	0.042	0.029	0.024	0.021	0.020	0.017	0.015	0.010	0.007	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
81	0.127	0.091	0.055	0.034	0.026	0.021	0.021	0.019	0.019	0.016	0.015	0.012	0.009	0.005	0.004	0.003	0.003	0.002	0.002	0.001
82	0.120	0.107	0.078	0.048	0.032	0.023	0.021	0.018	0.019	0.016	0.017	0.016	0.016	0.014	0.013	0.010	0.009	0.006	0.005	0.000
83	0.111	0.109	0.100	0.078	0.051	0.033	0.023	0.021	0.019	0.019	0.018	0.017	0.017	0.017	0.017	0.017	0.014	0.016	0.012	0.013
84	0.108	0.106	0.104	0.097	0.079	0.054	0.035	0.023	0.020	0.018	0.018	0.017	0.017	0.017	0.017	0.016	0.017	0.016	0.017	0.016
85	0.106	0.105	0.102	0.099	0.094	0.081	0.058	0.038	0.025	0.020	0.018	0.017	0.016	0.016	0.016	0.017	0.016	0.016	0.015	0.016
86	0.126	0.122	0.117	0.112	0.107	0.101	0.091	0.072	0.051	0.035	0.025	0.018	0.017	0.016	0.016	0.015	0.016	0.014	0.016	0.015
87	0.258	0.248	0.238	0.232	0.231	0.238	0.243	0.235	0.203	0.148	0.089	0.049	0.027	0.019	0.016	0.016	0.015	0.016	0.015	0.015
88	0.143	0.139	0.133	0.130	0.135	0.150	0.171	0.182	0.173	0.135	0.086	0.049	0.028	0.017	0.015	0.014	0.014	0.014	0.014	0.013
89	0.033	0.030	0.030	0.028	0.029	0.029	0.034	0.037	0.040	0.035	0.029	0.021	0.017	0.014	0.013	0.011	0.013	0.012	0.013	0.012
90	0.025	0.023	0.023	0.020	0.020	0.018	0.019	0.020	0.020	0.018	0.017	0.015	0.014	0.011	0.013	0.009	0.012	0.009	0.011	0.009
91	0.023	0.022	0.019	0.016	0.015	0.014	0.015	0.015	0.016	0.014	0.014	0.013	0.013	0.010	0.011	0.010	0.011	0.009	0.011	0.009
92	0.019	0.019	0.015	0.014	0.013	0.013	0.011	0.013	0.011	0.012	0.009	0.012	0.010	0.011	0.009	0.011	0.009	0.011	0.009	0.010
93	0.014	0.014	0.014	0.013	0.013	0.013	0.013	0.011	0.011	0.009	0.011	0.009	0.010	0.010	0.010	0.009	0.009	0.009	0.009	0.009
94	0.015	0.014	0.014	0.014	0.011	0.013	0.011	0.012	0.010	0.011	0.009	0.009	0.009	0.010	0.009	0.011	0.009	0.009	0.007	0.009
95	0.016	0.016	0.014	0.013	0.013	0.010	0.011	0.011	0.011	0.010	0.011	0.010	0.009	0.009	0.009	0.009	0.009	0.008	0.009	0.009
96	0.014	0.015	0.013	0.013	0.010	0.011	0.009	0.010	0.008	0.011	0.009	0.011	0.009	0.010	0.009	0.010	0.007	0.009	0.008	0.009
97	0.017	0.016	0.015	0.013	0.012	0.010	0.011	0.009	0.010	0.009	0.010	0.007	0.010	0.006	0.009	0.005	0.008	0.006	0.009	0.006
98	0.018	0.017	0.016	0.013	0.013	0.011	0.011	0.009	0.010	0.009	0.010	0.009	0.010	0.009	0.009	0.007	0.009	0.007	0.009	0.007

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 9.39 SEC
HREF = 0.331E-01

GROUP 2

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.007	0.009	0.006	0.007	0.005	0.007	0.005	0.007	0.005	0.006
65	0.007	0.005	0.006	0.006	0.006	0.005	0.007	0.005	0.004	0.003
66	0.007	0.005	0.005	0.005	0.005	0.005	0.005	0.003	0.004	0.003
67	0.005	0.003	0.003	0.003	0.003	0.003	0.002	0.001	0.002	0.002
68	0.003	0.003	0.001	0.002	0.000	0.002	0.000	0.002	0.002	0.002
69	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
70	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
71	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
75	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
77	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
78	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
79	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
81	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
82	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
83	0.009	0.010	0.005	0.007	0.002	0.003	0.003	0.003	0.003	0.003
84	0.016	0.015	0.015	0.013	0.013	0.010	0.009	0.007	0.007	0.005
85	0.015	0.016	0.016	0.016	0.014	0.014	0.014	0.013	0.013	0.013
86	0.016	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.013
87	0.014	0.015	0.014	0.014	0.014	0.014	0.014	0.014	0.013	0.014
88	0.014	0.013	0.014	0.013	0.013	0.013	0.013	0.013	0.013	0.011
89	0.012	0.011	0.012	0.011	0.013	0.010	0.012	0.011	0.011	0.011
90	0.011	0.009	0.010	0.009	0.010	0.009	0.011	0.009	0.010	0.010
91	0.011	0.009	0.011	0.009	0.010	0.009	0.009	0.009	0.009	0.009
92	0.009	0.009	0.009	0.009	0.009	0.010	0.009	0.009	0.008	0.009
93	0.009	0.009	0.009	0.007	0.009	0.009	0.009	0.007	0.009	0.007
94	0.008	0.009	0.008	0.009	0.008	0.009	0.008	0.008	0.008	0.008
95	0.009	0.008	0.009	0.007	0.008	0.007	0.008	0.007	0.009	0.007
96	0.007	0.009	0.007	0.009	0.007	0.009	0.007	0.009	0.008	0.009
97	0.007	0.005	0.007	0.005	0.008	0.006	0.009	0.007	0.009	0.007
98	0.009	0.006	0.007	0.007	0.009	0.007	0.009	0.008	0.009	0.007

MAR 3,1978

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP 4

TIME,SEC		TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
2301	3	593.892	593.892	593.892	593.892	0.000	591.671
2301	4	594.153	594.241	593.892	594.241	0.000	591.671
2301	5	594.284	594.458	593.892	594.371	0.000	591.671
2301	6	594.502	594.676	593.892	594.632	0.000	591.671
2301	7	594.676	594.806	593.892	594.719	0.000	591.671
2301	7	594.676	594.806	593.892	594.719	0.000	591.671
2301	8	594.806	594.937	593.892	594.806	0.000	591.671
2301	9	594.894	595.024	593.892	594.894	0.000	591.671
2301	10	595.024	595.111	593.892	594.981	0.000	591.671
2301	11	595.111	595.198	593.892	595.024	0.000	591.671
2301	12	595.155	595.285	593.892	595.111	0.000	591.671
2301	13	595.242	595.329	593.892	595.155	0.000	591.671
2301	14	595.285	595.372	593.892	595.198	0.000	591.671
2301	15	595.329	595.416	593.892	595.242	0.000	591.671
2301	16	595.416	595.503	593.892	595.242	0.000	591.671
2301	17	595.459	595.547	593.892	595.285	0.000	591.671
2301	18	595.459	595.547	593.892	595.285	0.000	591.671
2301	18	595.503	595.547	593.892	595.329	0.000	591.671
2301	18	595.503	595.547	593.892	595.329	0.000	591.671
2301	19	595.547	595.590	593.892	595.372	0.000	591.671
2301	20	595.590	595.590	593.892	595.416	0.000	591.671
2301	21	595.590	595.634	593.892	595.459	0.000	591.671

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 3,1978

GROUP	* * * * MODEL DESCRIPTION * * * * TITLE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
4	RSI FORWARD	0.01	0.000	-10.10	40.10	0.053	23	0	16

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/F FT-1	HRFR BTU/FT2-SEC-R	INITIAL TEMP DEG R
7.99	553.76	1320.67	95.92	0.0572	3836.	0.500E-04	0.772E-07	0.248E+07	0.331E-01	529.7

IR CAMERA INFORMATION

MOUNTING LOCATION	260
F STOP	2.5
LENS-DEG	15
SENSITIVITY	1000.
BLACK LEVEL VOLTAGE	2.4651
LINE SCAN PHI	90
MODEL EMISSIVITY	0.96
REF EMISSIVITY	0.94
WINDOW FACTOR	0.840

TIME RECORDS

LIFT OFF	0.00
CENTER LINE	1.00
IR SCAN TIME	14.50
DELTA TIME,SEC	13.94
PHOTO 1 TIME	2301
PHOTO 2 TIME	0
PHOTO 3 TIME	0
PHOTO 4 TIME	0

REFERENCE TARGET INFORMATION

TCR5	500.84
TCR6	-228.49

DIGITAL DATA AREA PRINTOUT LOCATION

LINE 29 THROUGH 98
POINT 1 THROUGH 110

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 3,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 4

IR SCAN TIME 13.94 SEC
INITIAL TEMP 529.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	1.122	1.136	1.149	1.153	1.154	1.150	1.149	1.147	1.150	1.146	1.147	1.143	1.142	1.146	1.150	1.153	1.155	1.158	1.159	1.158
30	1.142	1.150	1.154	1.155	1.147	1.142	1.139	1.145	1.147	1.150	1.150	1.153	1.151	1.154	1.154	1.157	1.155	1.159	1.158	1.157
31	1.151	1.150	1.147	1.147	1.142	1.140	1.145	1.150	1.153	1.157	1.155	1.157	1.154	1.157	1.155	1.158	1.158	1.158	1.150	1.147
32	1.149	1.146	1.145	1.151	1.151	1.157	1.157	1.158	1.155	1.155	1.155	1.157	1.158	1.161	1.154	1.150	1.142	1.137	1.131	1.130
33	1.147	1.150	1.153	1.155	1.158	1.157	1.157	1.154	1.155	1.157	1.158	1.154	1.146	1.137	1.133	1.130	1.133	1.133	1.137	1.137
34	1.158	1.161	1.161	1.157	1.151	1.153	1.151	1.149	1.147	1.145	1.135	1.127	1.122	1.125	1.130	1.136	1.142	1.143	1.143	1.145
35	1.161	1.153	1.153	1.146	1.147	1.139	1.137	1.125	1.125	1.119	1.125	1.124	1.131	1.130	1.137	1.140	1.146	1.146	1.149	1.149
36	1.146	1.145	1.139	1.133	1.124	1.119	1.120	1.124	1.125	1.128	1.128	1.131	1.136	1.137	1.139	1.142	1.145	1.142	1.128	1.117
37	1.133	1.127	1.122	1.117	1.122	1.122	1.127	1.128	1.133	1.133	1.136	1.136	1.142	1.142	1.140	1.128	1.117	1.096	1.079	1.063
38	1.117	1.119	1.120	1.124	1.124	1.128	1.130	1.133	1.136	1.137	1.137	1.139	1.133	1.120	1.101	1.082	1.066	1.061	1.056	1.061
39	1.119	1.122	1.124	1.128	1.130	1.133	1.133	1.136	1.137	1.136	1.122	1.107	1.084	1.071	1.061	1.063	1.059	1.061	1.061	1.063
40	1.124	1.127	1.130	1.131	1.133	1.133	1.133	1.127	1.112	1.094	1.071	1.063	1.061	1.063	1.061	1.063	1.059	1.063	1.059	1.066
41	1.133	1.136	1.137	1.136	1.131	1.120	1.109	1.092	1.068	1.061	1.063	1.061	1.061	1.061	1.066	1.063	1.066	1.061	1.066	1.061
42	1.145	1.146	1.136	1.124	1.096	1.079	1.059	1.061	1.053	1.061	1.056	1.061	1.056	1.066	1.063	1.066	1.066	1.063	1.061	1.068
43	1.149	1.130	1.105	1.075	1.068	1.061	1.066	1.061	1.066	1.061	1.066	1.066	1.068	1.066	1.071	1.061	1.068	1.061	1.071	1.066
44	1.103	1.082	1.073	1.068	1.066	1.066	1.066	1.066	1.068	1.071	1.068	1.071	1.066	1.071	1.071	1.073	1.071	1.075	1.073	1.075
45	1.075	1.071	1.075	1.071	1.075	1.073	1.077	1.071	1.075	1.073	1.077	1.075	1.079	1.075	1.084	1.082	1.082	1.079	1.086	1.084
46	1.077	1.075	1.077	1.079	1.079	1.079	1.079	1.079	1.082	1.082	1.086	1.084	1.090	1.086	1.092	1.088	1.096	1.092	1.096	1.094
47	1.084	1.084	1.088	1.088	1.090	1.086	1.088	1.088	1.090	1.088	1.092	1.092	1.096	1.092	1.098	1.096	1.100	1.100	1.107	1.109
48	1.086	1.084	1.088	1.086	1.096	1.092	1.096	1.090	1.096	1.096	1.096	1.096	1.098	1.100	1.103	1.103	1.109	1.110	1.158	1.296
49	1.088	1.092	1.092	1.092	1.096	1.098	1.100	1.100	1.098	1.096	1.098	1.096	1.103	1.107	1.109	1.107	1.112	1.120	1.200	1.377
50	1.092	1.096	1.092	1.098	1.098	1.100	1.098	1.098	1.100	1.101	1.103	1.107	1.107	1.110	1.105	1.112	1.110	1.133	1.248	1.418
51	1.094	1.096	1.098	1.098	1.100	1.098	1.101	1.100	1.105	1.103	1.110	1.105	1.110	1.110	1.117	1.117	1.125	1.150	1.300	1.448
52	1.086	1.092	1.092	1.092	1.090	1.096	1.094	1.098	1.096	1.098	1.100	1.103	1.103	1.110	1.110	1.115	1.119	1.157	1.321	1.461
53	1.071	1.075	1.075	1.073	1.075	1.075	1.082	1.079	1.084	1.082	1.090	1.088	1.092	1.092	1.098	1.100	1.112	1.162	1.343	1.475
54	1.056	1.059	1.061	1.061	1.061	1.063	1.068	1.068	1.073	1.071	1.077	1.075	1.082	1.084	1.088	1.088	1.105	1.172	1.364	1.486
55	1.053	1.053	1.061	1.059	1.066	1.061	1.068	1.068	1.071	1.071	1.079	1.075	1.079	1.082	1.092	1.096	1.110	1.204	1.395	1.494
56	1.056	1.053	1.063	1.048	1.068	1.059	1.068	1.056	1.075	1.075	1.084	1.079	1.086	1.086	1.094	1.100	1.125	1.268	1.437	1.507
57	1.059	1.061	1.061	1.066	1.063	1.066	1.068	1.073	1.073	1.079	1.079	1.082	1.079	1.088	1.090	1.103	1.139	1.314	1.459	1.513
58	1.056	1.059	1.061	1.056	1.063	1.061	1.068	1.071	1.075	1.073	1.079	1.075	1.084	1.084	1.096	1.103	1.181	1.369	1.482	1.520
59	1.051	1.053	1.051	1.056	1.056	1.063	1.066	1.071	1.068	1.071	1.071	1.077	1.079	1.086	1.092	1.112	1.226	1.408	1.494	1.526
60	1.048	1.048	1.056	1.056	1.063	1.061	1.068	1.066	1.075	1.068	1.075	1.075	1.082	1.086	1.096	1.112	1.248	1.421	1.497	1.526
61	1.048	1.051	1.051	1.056	1.061	1.061	1.061	1.068	1.068	1.071	1.071	1.071	1.075	1.086	1.090	1.124	1.273	1.436	1.502	1.529
62	1.048	1.048	1.056	1.051	1.056	1.056	1.063	1.066	1.068	1.071	1.075	1.077	1.084	1.084	1.094	1.125	1.290	1.442	1.502	1.526
63	1.037	1.034	1.043	1.037	1.051	1.048	1.061	1.063	1.068	1.063	1.068	1.071	1.082	1.084	1.100	1.143	1.323	1.456	1.504	1.526

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 3,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 4

IR SCAN TIME 13.94 SEC
INITIAL TEMP 529.7 DEG, R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	1.154	1.161	1.158	1.161	1.155	1.155	1.143	1.142	1.135	1.135	1.130	1.128	1.122	1.128	1.125	1.131	1.135	1.136	1.136	1.140
30	1.157	1.155	1.150	1.147	1.140	1.136	1.130	1.130	1.130	1.136	1.136	1.139	1.139	1.142	1.142	1.147	1.150	1.151	1.143	1.150
31	1.142	1.136	1.128	1.131	1.133	1.136	1.137	1.139	1.139	1.146	1.149	1.151	1.154	1.154	1.155	1.157	1.154	1.149	1.139	1.133
32	1.131	1.133	1.136	1.140	1.145	1.149	1.147	1.147	1.150	1.157	1.155	1.162	1.153	1.145	1.133	1.124	1.110	1.100	1.082	1.073
33	1.140	1.140	1.145	1.147	1.153	1.153	1.155	1.150	1.149	1.140	1.128	1.119	1.105	1.082	1.071	1.063	1.056	1.048	1.051	1.048
34	1.147	1.150	1.150	1.150	1.145	1.135	1.120	1.107	1.092	1.073	1.056	1.053	1.048	1.051	1.048	1.051	1.045	1.051	1.043	1.051
35	1.147	1.135	1.124	1.107	1.088	1.071	1.061	1.048	1.053	1.048	1.053	1.051	1.053	1.048	1.051	1.045	1.051	1.051	1.053	1.051
36	1.092	1.075	1.053	1.053	1.043	1.051	1.045	1.048	1.040	1.048	1.043	1.048	1.045	1.053	1.051	1.048	1.045	1.056	1.048	1.053
37	1.061	1.053	1.061	1.053	1.056	1.048	1.056	1.053	1.056	1.053	1.056	1.051	1.056	1.048	1.056	1.040	1.056	1.040	1.059	1.037
38	1.056	1.059	1.056	1.059	1.056	1.056	1.056	1.061	1.053	1.059	1.056	1.061	1.061	1.061	1.056	1.061	1.056	1.061	1.061	1.061
39	1.061	1.063	1.061	1.061	1.061	1.063	1.061	1.061	1.061	1.066	1.061	1.066	1.061	1.063	1.061	1.066	1.061	1.066	1.061	1.063
40	1.061	1.063	1.061	1.066	1.066	1.066	1.063	1.066	1.066	1.068	1.066	1.066	1.066	1.068	1.068	1.068	1.066	1.066	1.063	1.066
41	1.068	1.066	1.071	1.066	1.068	1.066	1.073	1.068	1.071	1.068	1.071	1.068	1.077	1.068	1.073	1.068	1.071	1.068	1.071	1.066
42	1.066	1.071	1.068	1.068	1.068	1.073	1.071	1.073	1.071	1.071	1.073	1.075	1.075	1.075	1.071	1.071	1.071	1.075	1.073	1.071
43	1.073	1.066	1.073	1.068	1.075	1.071	1.079	1.071	1.075	1.071	1.077	1.075	1.079	1.075	1.077	1.073	1.077	1.075	1.079	1.073
44	1.073	1.075	1.075	1.079	1.079	1.082	1.079	1.082	1.079	1.082	1.079	1.086	1.082	1.084	1.075	1.079	1.073	1.084	1.073	1.082
45	1.090	1.088	1.092	1.090	1.092	1.090	1.094	1.094	1.096	1.094	1.098	1.094	1.096	1.092	1.096	1.092	1.096	1.092	1.096	1.090
46	1.101	1.101	1.105	1.105	1.107	1.105	1.110	1.105	1.110	1.109	1.110	1.107	1.112	1.107	1.109	1.103	1.109	1.105	1.107	1.103
47	1.117	1.119	1.124	1.122	1.122	1.122	1.124	1.122	1.124	1.122	1.124	1.120	1.120	1.117	1.119	1.115	1.117	1.115	1.114	1.112
48	1.393	1.426	1.442	1.446	1.445	1.434	1.414	1.379	1.334	1.279	1.224	1.181	1.157	1.142	1.135	1.127	1.125	1.120	1.120	1.117
49	1.481	1.521	1.546	1.568	1.590	1.610	1.633	1.655	1.667	1.668	1.656	1.624	1.564	1.475	1.362	1.247	1.181	1.150	1.136	1.130
50	1.495	1.527	1.546	1.565	1.588	1.613	1.638	1.661	1.684	1.701	1.709	1.709	1.703	1.697	1.681	1.621	1.477	1.302	1.204	1.159
51	1.508	1.535	1.553	1.570	1.588	1.607	1.630	1.655	1.677	1.690	1.701	1.709	1.708	1.709	1.715	1.710	1.675	1.541	1.346	1.229
52	1.512	1.538	1.558	1.575	1.590	1.607	1.627	1.647	1.661	1.675	1.695	1.713	1.726	1.735	1.740	1.740	1.730	1.705	1.609	1.415
53	1.522	1.545	1.564	1.577	1.594	1.610	1.628	1.646	1.666	1.682	1.694	1.702	1.711	1.721	1.734	1.747	1.752	1.746	1.723	1.648
54	1.527	1.548	1.561	1.575	1.594	1.610	1.630	1.648	1.667	1.687	1.697	1.700	1.705	1.707	1.713	1.723	1.736	1.751	1.759	1.745
55	1.529	1.549	1.565	1.577	1.592	1.610	1.627	1.644	1.666	1.686	1.698	1.703	1.709	1.712	1.717	1.721	1.730	1.739	1.744	1.747
56	1.535	1.551	1.564	1.577	1.593	1.611	1.632	1.653	1.672	1.691	1.704	1.710	1.714	1.717	1.723	1.725	1.725	1.723	1.720	1.722
57	1.537	1.554	1.564	1.577	1.592	1.612	1.633	1.655	1.677	1.696	1.709	1.719	1.723	1.723	1.728	1.731	1.735	1.739	1.737	1.729
58	1.541	1.556	1.566	1.578	1.594	1.613	1.633	1.653	1.674	1.694	1.710	1.719	1.723	1.723	1.726	1.723	1.728	1.734	1.738	1.743
59	1.543	1.556	1.566	1.578	1.593	1.610	1.630	1.652	1.673	1.691	1.701	1.710	1.716	1.720	1.725	1.725	1.726	1.727	1.729	1.735
60	1.544	1.555	1.565	1.576	1.590	1.607	1.625	1.646	1.664	1.683	1.699	1.709	1.715	1.726	1.732	1.733	1.732	1.733	1.735	1.733
61	1.543	1.553	1.561	1.572	1.586	1.604	1.621	1.642	1.663	1.680	1.693	1.699	1.711	1.724	1.729	1.728	1.732	1.738	1.738	1.740
62	1.541	1.551	1.557	1.567	1.584	1.598	1.615	1.633	1.654	1.672	1.683	1.690	1.702	1.715	1.723	1.722	1.729	1.738	1.741	1.739
63	1.541	1.550	1.557	1.567	1.579	1.591	1.609	1.627	1.647	1.665	1.675	1.683	1.697	1.711	1.718	1.717	1.723	1.730	1.736	1.741

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 3,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 4

IR SCAN TIME 13.94 SEC
INITIAL TEMP 529.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	1.145	1.146	1.143	1.143	1.143	1.145	1.146	1.146	1.140	1.133	1.125	1.125	1.120	1.120	1.114	1.110	1.101	1.098	1.094	1.088
30	1.150	1.155	1.145	1.145	1.135	1.131	1.120	1.120	1.107	1.100	1.088	1.086	1.071	1.073	1.066	1.061	1.056	1.056	1.051	1.053
31	1.125	1.120	1.107	1.096	1.082	1.073	1.063	1.056	1.051	1.048	1.043	1.045	1.037	1.043	1.037	1.043	1.034	1.043	1.034	1.043
32	1.061	1.056	1.048	1.048	1.043	1.048	1.043	1.048	1.037	1.043	1.037	1.045	1.040	1.043	1.043	1.043	1.040	1.043	1.037	1.043
33	1.048	1.043	1.051	1.048	1.051	1.045	1.048	1.043	1.045	1.040	1.045	1.043	1.045	1.043	1.045	1.040	1.043	1.037	1.045	1.037
34	1.045	1.051	1.045	1.051	1.045	1.048	1.045	1.045	1.043	1.045	1.043	1.045	1.043	1.045	1.037	1.045	1.037	1.043	1.040	1.045
35	1.056	1.051	1.053	1.045	1.051	1.048	1.051	1.048	1.053	1.045	1.051	1.043	1.045	1.043	1.048	1.045	1.048	1.043	1.045	1.040
36	1.053	1.053	1.051	1.051	1.045	1.051	1.048	1.053	1.048	1.051	1.045	1.048	1.045	1.048	1.045	1.048	1.045	1.048	1.043	1.043
37	1.056	1.040	1.056	1.045	1.059	1.040	1.056	1.037	1.056	1.040	1.056	1.053	1.053	1.048	1.053	1.048	1.053	1.048	1.053	1.048
38	1.056	1.059	1.056	1.061	1.056	1.061	1.053	1.056	1.053	1.056	1.053	1.056	1.051	1.053	1.045	1.053	1.045	1.053	1.043	1.051
39	1.061	1.066	1.061	1.068	1.059	1.061	1.056	1.063	1.056	1.059	1.056	1.061	1.056	1.059	1.053	1.059	1.056	1.056	1.053	1.053
40	1.066	1.066	1.061	1.066	1.061	1.066	1.061	1.061	1.059	1.061	1.061	1.061	1.056	1.059	1.053	1.061	1.056	1.059	1.051	1.053
41	1.071	1.066	1.071	1.068	1.068	1.066	1.068	1.066	1.068	1.061	1.066	1.061	1.066	1.063	1.063	1.056	1.061	1.056	1.061	1.056
42	1.068	1.071	1.071	1.073	1.066	1.068	1.066	1.068	1.068	1.066	1.063	1.066	1.063	1.066	1.061	1.061	1.056	1.063	1.059	1.061
43	1.075	1.071	1.075	1.071	1.073	1.071	1.073	1.071	1.075	1.066	1.071	1.071	1.071	1.066	1.066	1.063	1.063	1.063	1.066	1.061
44	1.075	1.079	1.073	1.077	1.068	1.075	1.071	1.073	1.071	1.075	1.071	1.071	1.068	1.071	1.071	1.071	1.068	1.068	1.063	1.066
45	1.090	1.086	1.088	1.086	1.086	1.084	1.086	1.082	1.084	1.079	1.082	1.075	1.075	1.071	1.079	1.068	1.075	1.066	1.073	1.068
46	1.105	1.100	1.100	1.096	1.096	1.092	1.096	1.092	1.096	1.092	1.092	1.088	1.088	1.086	1.088	1.086	1.088	1.082	1.086	1.077
47	1.115	1.110	1.110	1.105	1.107	1.103	1.103	1.098	1.098	1.094	1.096	1.092	1.094	1.090	1.092	1.090	1.092	1.088	1.090	1.084
48	1.122	1.119	1.120	1.114	1.112	1.107	1.107	1.103	1.105	1.101	1.101	1.098	1.100	1.094	1.094	1.092	1.096	1.092	1.092	1.092
49	1.130	1.124	1.124	1.119	1.120	1.117	1.117	1.110	1.112	1.107	1.109	1.103	1.105	1.101	1.103	1.100	1.100	1.096	1.098	1.096
50	1.137	1.135	1.128	1.128	1.122	1.120	1.117	1.119	1.115	1.115	1.114	1.112	1.107	1.107	1.105	1.107	1.103	1.103	1.103	1.101
51	1.184	1.151	1.140	1.130	1.130	1.119	1.124	1.120	1.122	1.117	1.119	1.114	1.114	1.110	1.112	1.110	1.110	1.105	1.107	1.103
52	1.250	1.195	1.161	1.149	1.135	1.128	1.122	1.124	1.120	1.120	1.110	1.114	1.107	1.112	1.105	1.107	1.101	1.105	1.101	1.105
53	1.477	1.285	1.197	1.150	1.135	1.124	1.120	1.110	1.109	1.105	1.107	1.100	1.100	1.094	1.094	1.092	1.096	1.086	1.090	1.088
54	1.685	1.538	1.344	1.224	1.166	1.137	1.125	1.112	1.109	1.103	1.101	1.094	1.096	1.090	1.092	1.088	1.090	1.082	1.086	1.088
55	1.743	1.706	1.587	1.385	1.239	1.173	1.145	1.130	1.122	1.110	1.110	1.103	1.105	1.100	1.098	1.092	1.096	1.090	1.098	1.096
56	1.732	1.746	1.732	1.617	1.408	1.252	1.183	1.147	1.135	1.124	1.119	1.112	1.112	1.105	1.107	1.100	1.103	1.101	1.103	1.105
57	1.712	1.701	1.706	1.720	1.658	1.467	1.281	1.199	1.155	1.139	1.128	1.122	1.114	1.110	1.107	1.107	1.103	1.107	1.107	1.110
58	1.744	1.726	1.689	1.659	1.665	1.637	1.480	1.287	1.204	1.158	1.142	1.125	1.117	1.107	1.110	1.103	1.107	1.101	1.103	1.101
59	1.746	1.751	1.745	1.718	1.661	1.621	1.608	1.506	1.320	1.214	1.166	1.146	1.124	1.117	1.105	1.109	1.103	1.103	1.096	1.100
60	1.728	1.727	1.734	1.745	1.746	1.713	1.645	1.597	1.541	1.395	1.253	1.182	1.151	1.136	1.122	1.110	1.112	1.103	1.103	1.096
61	1.742	1.735	1.725	1.718	1.721	1.736	1.740	1.704	1.631	1.545	1.396	1.246	1.181	1.151	1.136	1.124	1.112	1.110	1.103	1.103
62	1.743	1.750	1.750	1.741	1.729	1.715	1.707	1.713	1.723	1.693	1.607	1.462	1.295	1.201	1.162	1.139	1.128	1.115	1.114	1.107
63	1.746	1.750	1.757	1.761	1.759	1.751	1.735	1.716	1.694	1.678	1.682	1.657	1.537	1.350	1.228	1.174	1.149	1.133	1.124	1.114

41

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 3,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 4

IR SCAN TIME 13.94 SEC
INITIAL TEMP 529.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	1.075	1.073	1.068	1.068	1.068	1.071	1.068	1.066	1.061	1.063	1.063	1.066	1.061	1.063	1.061	1.063	1.061	1.061	1.056	1.056
30	1.045	1.048	1.045	1.048	1.045	1.048	1.043	1.043	1.040	1.045	1.043	1.048	1.043	1.045	1.043	1.045	1.045	1.048	1.045	1.045
31	1.031	1.040	1.031	1.040	1.034	1.040	1.031	1.040	1.028	1.037	1.031	1.040	1.037	1.043	1.040	1.043	1.037	1.040	1.037	1.043
32	1.040	1.043	1.037	1.043	1.034	1.037	1.034	1.037	1.034	1.040	1.034	1.037	1.037	1.037	1.021	1.034	1.021	1.037	1.024	1.037
33	1.043	1.040	1.040	1.034	1.040	1.034	1.037	1.034	1.037	1.034	1.040	1.034	1.037	1.031	1.034	1.034	1.037	1.031	1.040	1.031
34	1.043	1.045	1.037	1.040	1.034	1.037	1.037	1.040	1.034	1.040	1.034	1.037	1.031	1.037	1.031	1.037	1.031	1.037	1.031	1.034
35	1.043	1.043	1.045	1.037	1.043	1.037	1.043	1.034	1.037	1.037	1.040	1.034	1.040	1.037	1.040	1.031	1.037	1.031	1.037	1.031
36	1.037	1.043	1.040	1.043	1.040	1.045	1.037	1.040	1.037	1.043	1.037	1.043	1.037	1.037	1.037	1.034	1.031	1.037	1.031	1.037
37	1.051	1.043	1.051	1.045	1.048	1.043	1.045	1.040	1.043	1.043	1.045	1.043	1.045	1.040	1.045	1.037	1.040	1.037	1.043	1.037
38	1.040	1.051	1.045	1.051	1.043	1.045	1.037	1.045	1.043	1.051	1.045	1.048	1.043	1.045	1.045	1.045	1.043	1.045	1.037	1.043
39	1.051	1.056	1.048	1.053	1.048	1.051	1.048	1.053	1.048	1.048	1.045	1.048	1.040	1.048	1.037	1.045	1.037	1.045	1.037	1.045
40	1.053	1.056	1.048	1.051	1.051	1.053	1.051	1.053	1.045	1.051	1.045	1.051	1.045	1.048	1.045	1.048	1.045	1.048	1.043	1.043
41	1.056	1.053	1.061	1.056	1.059	1.051	1.056	1.048	1.056	1.048	1.056	1.048	1.056	1.048	1.053	1.048	1.051	1.045	1.051	1.045
42	1.056	1.059	1.056	1.056	1.056	1.059	1.053	1.056	1.051	1.056	1.053	1.053	1.048	1.053	1.048	1.053	1.048	1.051	1.045	1.051
43	1.061	1.056	1.061	1.056	1.063	1.056	1.061	1.053	1.059	1.053	1.056	1.053	1.056	1.051	1.053	1.051	1.053	1.048	1.056	1.048
44	1.063	1.066	1.063	1.066	1.061	1.063	1.061	1.063	1.061	1.061	1.053	1.061	1.061	1.059	1.053	1.059	1.053	1.059	1.056	1.061
45	1.073	1.068	1.075	1.066	1.071	1.063	1.071	1.066	1.071	1.066	1.073	1.068	1.071	1.066	1.066	1.063	1.068	1.063	1.063	1.061
46	1.082	1.075	1.084	1.077	1.082	1.075	1.079	1.075	1.077	1.061	1.077	1.061	1.077	1.063	1.075	1.063	1.073	1.056	1.073	1.056
47	1.086	1.086	1.086	1.084	1.086	1.082	1.082	1.079	1.079	1.077	1.082	1.077	1.079	1.077	1.079	1.077	1.077	1.073	1.077	1.075
48	1.092	1.088	1.090	1.084	1.088	1.090	1.088	1.088	1.086	1.073	1.084	1.086	1.082	1.084	1.082	1.082	1.073	1.082	1.077	1.075
49	1.096	1.096	1.096	1.094	1.096	1.090	1.092	1.088	1.090	1.088	1.090	1.086	1.090	1.086	1.086	1.084	1.084	1.084	1.088	1.084
50	1.098	1.098	1.096	1.098	1.096	1.098	1.096	1.096	1.090	1.094	1.090	1.092	1.092	1.092	1.088	1.090	1.086	1.090	1.088	1.092
51	1.103	1.101	1.103	1.101	1.100	1.098	1.098	1.098	1.098	1.096	1.098	1.094	1.098	1.092	1.096	1.090	1.096	1.090	1.092	1.088
52	1.100	1.103	1.098	1.101	1.098	1.103	1.100	1.100	1.098	1.100	1.098	1.098	1.096	1.096	1.090	1.098	1.096	1.096	1.092	1.092
53	1.096	1.094	1.100	1.098	1.100	1.098	1.101	1.092	1.098	1.092	1.100	1.092	1.096	1.088	1.096	1.088	1.096	1.086	1.092	1.086
54	1.096	1.096	1.100	1.100	1.103	1.101	1.103	1.100	1.103	1.101	1.103	1.100	1.101	1.098	1.100	1.098	1.100	1.094	1.096	1.090
55	1.103	1.103	1.109	1.105	1.112	1.105	1.110	1.105	1.110	1.107	1.110	1.105	1.107	1.107	1.109	1.105	1.103	1.100	1.101	1.098
56	1.112	1.110	1.115	1.114	1.114	1.110	1.114	1.112	1.114	1.112	1.114	1.110	1.109	1.112	1.107	1.109	1.103	1.105	1.100	
57	1.110	1.110	1.109	1.112	1.110	1.112	1.110	1.110	1.105	1.109	1.105	1.107	1.103	1.105	1.100	1.100	1.096	1.098	1.096	1.096
58	1.103	1.100	1.103	1.101	1.101	1.100	1.101	1.096	1.101	1.100	1.101	1.100	1.101	1.098	1.098	1.096	1.096	1.092	1.096	1.092
59	1.092	1.094	1.092	1.096	1.096	1.096	1.092	1.094	1.088	1.092	1.086	1.088	1.090	1.088	1.084	1.084	1.079	1.079	1.079	1.079
60	1.098	1.092	1.092	1.088	1.092	1.084	1.096	1.075	1.084	1.073	1.079	1.071	1.073	1.071	1.075	1.068	1.071	1.063	1.068	1.061
61	1.098	1.098	1.092	1.090	1.090	1.088	1.084	1.086	1.082	1.084	1.079	1.075	1.073	1.075	1.073	1.075	1.071	1.073	1.068	1.068
62	1.105	1.100	1.100	1.092	1.096	1.090	1.094	1.088	1.090	1.084	1.084	1.079	1.079	1.075	1.079	1.075	1.079	1.073	1.075	1.068
63	1.112	1.105	1.105	1.100	1.098	1.094	1.096	1.090	1.092	1.086	1.088	1.079	1.082	1.079	1.082	1.077	1.082	1.073	1.075	1.066

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 3,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 4

IR SCAN TIME 13.94 SEC
INITIAL TEMP 529.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	1.053	1.056	1.056	1.056	1.053	1.053	1.048	1.056	1.048	1.053	1.048	1.048	1.045	1.048	1.045	1.048	1.045	1.043	1.040	1.045
30	1.045	1.045	1.043	1.045	1.043	1.048	1.043	1.048	1.037	1.043	1.037	1.043	1.037	1.043	1.040	1.037	1.031	1.037	1.031	1.037
31	1.040	1.043	1.040	1.043	1.037	1.043	1.037	1.043	1.037	1.043	1.040	1.040	1.034	1.034	1.031	1.034	1.031	1.034	1.031	1.031
32	1.028	1.037	1.024	1.034	1.028	1.037	1.031	1.037	1.031	1.037	1.034	1.037	1.031	1.034	1.031	1.034	1.031	1.034	1.024	1.028
33	1.037	1.031	1.034	1.031	1.034	1.031	1.037	1.031	1.037	1.028	1.034	1.021	1.031	1.021	1.034	1.021	1.031	1.021	1.028	1.018
34	1.028	1.031	1.031	1.034	1.031	1.037	1.031	1.031	1.024	1.028	1.024	1.031	1.024	1.031	1.031	1.031	1.021	1.028	1.018	1.028
35	1.037	1.031	1.034	1.028	1.034	1.024	1.031	1.031	1.034	1.028	1.034	1.024	1.031	1.024	1.031	1.024	1.031	1.024	1.031	1.024
36	1.031	1.037	1.024	1.028	1.024	1.034	1.031	1.034	1.028	1.031	1.024	1.028	1.024	1.031	1.024	1.031	1.024	1.031	1.021	1.031
37	1.040	1.037	1.037	1.034	1.040	1.037	1.043	1.031	1.034	1.031	1.040	1.031	1.037	1.031	1.034	1.031	1.034	1.028	1.037	1.031
38	1.037	1.043	1.037	1.037	1.034	1.040	1.037	1.043	1.037	1.037	1.034	1.037	1.040	1.040	1.034	1.037	1.031	1.037	1.037	1.037
39	1.034	1.043	1.037	1.045	1.034	1.040	1.031	1.043	1.043	1.040	1.037	1.040	1.037	1.043	1.034	1.040	1.037	1.043	1.037	1.040
40	1.043	1.045	1.043	1.043	1.043	1.043	1.043	1.043	1.037	1.040	1.024	1.040	1.031	1.040	1.024	1.037	1.028	1.040	1.031	1.034
41	1.051	1.043	1.048	1.043	1.048	1.043	1.048	1.040	1.045	1.043	1.045	1.040	1.043	1.037	1.045	1.040	1.045	1.037	1.043	1.037
42	1.045	1.053	1.045	1.048	1.043	1.045	1.043	1.051	1.043	1.045	1.037	1.043	1.040	1.045	1.040	1.040	1.037	1.043	1.043	1.043
43	1.051	1.048	1.051	1.048	1.053	1.045	1.048	1.043	1.045	1.043	1.048	1.043	1.048	1.043	1.045	1.040	1.045	1.043	1.048	1.040
44	1.053	1.056	1.051	1.056	1.051	1.056	1.051	1.056	1.048	1.053	1.045	1.051	1.045	1.053	1.048	1.051	1.045	1.051	1.043	1.048
45	1.071	1.061	1.068	1.063	1.063	1.061	1.066	1.063	1.066	1.063	1.063	1.061	1.061	1.061	1.066	1.059	1.063	1.059	1.063	1.056
46	1.073	1.063	1.075	1.063	1.075	1.071	1.071	1.071	1.071	1.071	1.073	1.071	1.073	1.068	1.071	1.066	1.071	1.068	1.071	1.068
47	1.079	1.077	1.082	1.077	1.079	1.073	1.075	1.073	1.075	1.073	1.075	1.068	1.075	1.066	1.073	1.071	1.073	1.068	1.075	1.068
48	1.088	1.084	1.084	1.086	1.086	1.084	1.079	1.079	1.077	1.073	1.079	1.077	1.075	1.079	1.079	1.077	1.075	1.075	1.079	1.077
49	1.088	1.086	1.088	1.084	1.088	1.082	1.086	1.082	1.084	1.082	1.082	1.077	1.079	1.077	1.082	1.077	1.082	1.075	1.079	1.075
50	1.090	1.088	1.086	1.088	1.086	1.088	1.084	1.086	1.084	1.086	1.082	1.082	1.082	1.084	1.084	1.086	1.082	1.079	1.079	1.082
51	1.092	1.088	1.092	1.090	1.090	1.086	1.088	1.086	1.090	1.086	1.086	1.084	1.086	1.084	1.088	1.086	1.084	1.082	1.082	1.082
52	1.090	1.092	1.090	1.088	1.088	1.086	1.086	1.086	1.082	1.082	1.082	1.084	1.079	1.082	1.075	1.079	1.079	1.079	1.075	1.075
53	1.090	1.084	1.086	1.082	1.079	1.075	1.075	1.071	1.071	1.066	1.071	1.066	1.071	1.063	1.066	1.061	1.068	1.063	1.063	1.061
54	1.092	1.086	1.090	1.082	1.082	1.071	1.073	1.061	1.066	1.053	1.061	1.053	1.063	1.053	1.059	1.048	1.056	1.048	1.056	1.043
55	1.096	1.092	1.092	1.088	1.090	1.079	1.079	1.068	1.068	1.061	1.068	1.061	1.061	1.056	1.061	1.056	1.061	1.051	1.056	1.048
56	1.101	1.096	1.096	1.088	1.092	1.084	1.082	1.075	1.073	1.066	1.068	1.066	1.066	1.061	1.063	1.056	1.061	1.056	1.059	1.053
57	1.090	1.090	1.086	1.086	1.082	1.082	1.077	1.075	1.071	1.066	1.063	1.066	1.061	1.063	1.061	1.063	1.056	1.056	1.051	1.056
58	1.094	1.092	1.096	1.090	1.092	1.088	1.092	1.086	1.090	1.082	1.084	1.077	1.079	1.077	1.082	1.079	1.084	1.082	1.082	1.077
59	1.075	1.075	1.073	1.073	1.071	1.071	1.066	1.068	1.066	1.068	1.066	1.066	1.061	1.061	1.053	1.059	1.051	1.056	1.051	1.056
60	1.071	1.063	1.068	1.061	1.066	1.056	1.061	1.056	1.061	1.053	1.056	1.053	1.056	1.045	1.051	1.043	1.048	1.045	1.045	1.043
61	1.066	1.066	1.063	1.066	1.056	1.063	1.056	1.059	1.048	1.056	1.045	1.056	1.045	1.053	1.048	1.048	1.040	1.045	1.037	1.045
62	1.068	1.068	1.071	1.066	1.071	1.063	1.066	1.059	1.061	1.053	1.061	1.053	1.061	1.053	1.056	1.048	1.051	1.045	1.048	1.043
63	1.073	1.068	1.073	1.068	1.073	1.066	1.068	1.063	1.071	1.061	1.066	1.056	1.061	1.053	1.056	1.051	1.056	1.048	1.053	1.048

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 3,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 4

IR SCAN TIME 13.94 SEC
INITIAL TEMP 529.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	1.037	1.043	1.037	1.040	1.034	1.040	1.031	1.037	1.034	1.037
30	1.031	1.037	1.031	1.034	1.024	1.034	1.021	1.034	1.031	1.034
31	1.024	1.028	1.024	1.031	1.024	1.037	1.024	1.028	1.021	1.028
32	1.024	1.031	1.024	1.031	1.024	1.028	1.024	1.024	1.021	1.024
33	1.024	1.018	1.028	1.018	1.024	1.018	1.024	1.021	1.028	1.021
34	1.021	1.028	1.024	1.028	1.018	1.024	1.018	1.018	1.018	1.021
35	1.024	1.024	1.028	1.021	1.028	1.024	1.031	1.021	1.024	1.018
36	1.028	1.031	1.024	1.031	1.021	1.028	1.018	1.028	1.021	1.028
37	1.034	1.028	1.031	1.028	1.031	1.028	1.034	1.028	1.031	1.024
38	1.034	1.037	1.031	1.034	1.034	1.037	1.031	1.034	1.031	1.037
39	1.034	1.040	1.037	1.040	1.034	1.037	1.037	1.040	1.037	1.037
40	1.028	1.037	1.031	1.037	1.024	1.040	1.034	1.043	1.037	1.040
41	1.043	1.037	1.040	1.034	1.043	1.037	1.045	1.031	1.037	1.028
42	1.034	1.043	1.037	1.043	1.037	1.040	1.037	1.040	1.037	1.045
43	1.045	1.037	1.043	1.043	1.045	1.040	1.045	1.040	1.043	1.037
44	1.045	1.051	1.045	1.051	1.045	1.048	1.043	1.048	1.045	1.048
45	1.061	1.056	1.063	1.056	1.061	1.056	1.061	1.056	1.056	1.053
46	1.073	1.068	1.068	1.066	1.066	1.066	1.068	1.066	1.068	1.066
47	1.073	1.068	1.073	1.071	1.068	1.068	1.071	1.071	1.075	1.068
48	1.075	1.075	1.077	1.075	1.073	1.073	1.082	1.068	1.075	1.066
49	1.077	1.077	1.079	1.075	1.077	1.075	1.077	1.073	1.075	1.073
50	1.079	1.082	1.079	1.079	1.079	1.077	1.075	1.079	1.075	1.079
51	1.084	1.082	1.084	1.077	1.079	1.077	1.082	1.079	1.082	1.075
52	1.075	1.075	1.075	1.075	1.073	1.073	1.071	1.073	1.071	1.073
53	1.063	1.061	1.066	1.061	1.061	1.056	1.061	1.056	1.061	1.051
54	1.051	1.048	1.056	1.048	1.051	1.043	1.048	1.043	1.051	1.040
55	1.053	1.048	1.053	1.031	1.043	1.028	1.045	1.031	1.043	1.021
56	1.056	1.048	1.051	1.043	1.051	1.043	1.048	1.037	1.043	1.034
57	1.045	1.053	1.051	1.051	1.043	1.045	1.040	1.046	1.043	1.045
58	1.077	1.077	1.075	1.059	1.053	1.043	1.053	1.061	1.075	1.075
59	1.048	1.053	1.045	1.048	1.043	1.048	1.043	1.048	1.043	1.045
60	1.045	1.040	1.040	1.034	1.040	1.034	1.037	1.031	1.037	1.031
61	1.043	1.045	1.040	1.043	1.034	1.037	1.031	1.037	1.031	1.034
62	1.051	1.037	1.043	1.031	1.040	1.028	1.037	1.034	1.037	1.028
63	1.051	1.043	1.048	1.037	1.045	1.037	1.045	1.037	1.040	1.031

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 3,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 4

IR SCAN TIME 13.94 SEC
INITIAL TEMP 529.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	1.037	1.034	1.045	1.043	1.053	1.051	1.061	1.056	1.068	1.061	1.071	1.068	1.082	1.084	1.101	1.174	1.360	1.467	1.507	1.528
65	1.037	1.040	1.037	1.043	1.045	1.053	1.053	1.066	1.063	1.066	1.068	1.075	1.079	1.090	1.105	1.217	1.392	1.478	1.512	1.532
66	1.037	1.037	1.043	1.040	1.053	1.053	1.059	1.059	1.068	1.066	1.073	1.071	1.079	1.090	1.119	1.266	1.421	1.483	1.514	1.531
67	1.037	1.043	1.040	1.048	1.045	1.053	1.061	1.066	1.066	1.068	1.068	1.075	1.082	1.094	1.136	1.307	1.438	1.488	1.512	1.528
68	1.045	1.040	1.045	1.043	1.051	1.053	1.061	1.066	1.071	1.068	1.075	1.071	1.079	1.092	1.151	1.326	1.443	1.484	1.509	1.525
69	1.048	1.048	1.045	1.048	1.051	1.056	1.059	1.068	1.068	1.071	1.071	1.075	1.079	1.094	1.166	1.345	1.446	1.483	1.506	1.521
70	1.048	1.048	1.045	1.048	1.043	1.048	1.061	1.068	1.071	1.075	1.071	1.077	1.082	1.096	1.175	1.352	1.444	1.480	1.502	1.516
71	1.045	1.048	1.045	1.053	1.051	1.059	1.061	1.071	1.066	1.071	1.066	1.075	1.075	1.100	1.199	1.370	1.446	1.479	1.499	1.512
72	1.043	1.045	1.051	1.051	1.048	1.059	1.063	1.071	1.071	1.073	1.071	1.077	1.082	1.114	1.256	1.398	1.452	1.479	1.498	1.508
73	1.040	1.040	1.048	1.043	1.053	1.056	1.068	1.073	1.075	1.071	1.073	1.073	1.084	1.130	1.294	1.413	1.457	1.481	1.498	1.510
74	1.043	1.040	1.040	1.045	1.045	1.056	1.066	1.073	1.073	1.073	1.071	1.073	1.084	1.161	1.329	1.424	1.459	1.481	1.494	1.505
75	1.043	1.043	1.045	1.043	1.048	1.053	1.071	1.073	1.075	1.073	1.071	1.075	1.096	1.192	1.353	1.429	1.459	1.478	1.493	1.503
76	1.040	1.037	1.043	1.043	1.056	1.059	1.073	1.075	1.082	1.071	1.071	1.075	1.098	1.210	1.363	1.431	1.459	1.476	1.489	1.499
77	1.043	1.040	1.045	1.045	1.053	1.056	1.068	1.073	1.075	1.071	1.071	1.075	1.103	1.230	1.374	1.433	1.459	1.476	1.488	1.497
78	1.040	1.040	1.048	1.043	1.051	1.045	1.061	1.066	1.073	1.066	1.071	1.068	1.105	1.239	1.377	1.432	1.458	1.472	1.484	1.492
79	1.040	1.043	1.048	1.043	1.048	1.051	1.066	1.071	1.075	1.066	1.071	1.075	1.124	1.272	1.391	1.435	1.457	1.471	1.482	1.490
80	1.037	1.034	1.045	1.043	1.051	1.051	1.061	1.063	1.071	1.068	1.071	1.075	1.157	1.317	1.407	1.439	1.458	1.471	1.481	1.488
81	1.043	1.048	1.056	1.061	1.051	1.056	1.068	1.071	1.066	1.068	1.068	1.088	1.201	1.352	1.416	1.443	1.459	1.470	1.479	1.487
82	1.066	1.077	1.077	1.079	1.086	1.086	1.084	1.082	1.086	1.073	1.075	1.101	1.246	1.376	1.424	1.446	1.460	1.470	1.478	1.484
83	1.092	1.096	1.088	1.100	1.110	1.109	1.090	1.079	1.073	1.082	1.068	1.133	1.284	1.392	1.427	1.448	1.459	1.469	1.475	1.483
84	1.119	1.103	1.103	1.114	1.112	1.122	1.110	1.101	1.096	1.082	1.086	1.146	1.305	1.399	1.430	1.448	1.458	1.465	1.470	1.475
85	1.136	1.117	1.119	1.142	1.112	1.128	1.103	1.103	1.096	1.096	1.101	1.170	1.320	1.405	1.433	1.449	1.457	1.463	1.466	1.472
86	1.157	1.154	1.174	1.195	1.210	1.179	1.128	1.098	1.092	1.094	1.110	1.179	1.330	1.408	1.436	1.450	1.458	1.461	1.465	1.466
87	1.172	1.176	1.217	1.235	1.254	1.218	1.147	1.101	1.075	1.068	1.090	1.199	1.347	1.410	1.436	1.450	1.458	1.463	1.467	1.467
88	1.154	1.151	1.179	1.204	1.241	1.212	1.140	1.092	1.068	1.061	1.109	1.256	1.379	1.418	1.436	1.446	1.453	1.459	1.464	1.466
89	1.127	1.117	1.125	1.130	1.137	1.135	1.119	1.107	1.096	1.112	1.154	1.252	1.335	1.366	1.385	1.403	1.423	1.440	1.454	1.461
90	1.142	1.124	1.124	1.125	1.131	1.131	1.139	1.136	1.125	1.131	1.142	1.133	1.136	1.139	1.146	1.145	1.150	1.154	1.166	1.172
91	1.068	1.068	1.071	1.084	1.100	1.110	1.107	1.109	1.103	1.105	1.117	1.119	1.114	1.117	1.114	1.119	1.120	1.120	1.119	1.122
92	1.034	1.034	1.045	1.051	1.056	1.048	1.061	1.063	1.075	1.071	1.098	1.100	1.103	1.100	1.103	1.100	1.107	1.107	1.107	1.105
93	1.028	1.034	1.034	1.043	1.037	1.048	1.048	1.061	1.056	1.066	1.062	1.098	1.100	1.100	1.096	1.100	1.096	1.100	1.098	1.100
94	1.031	1.031	1.037	1.031	1.037	1.031	1.040	1.037	1.048	1.063	1.088	1.096	1.101	1.098	1.100	1.096	1.100	1.096	1.100	1.096
95	1.031	1.031	1.031	1.031	1.034	1.031	1.037	1.034	1.043	1.056	1.086	1.092	1.098	1.096	1.100	1.098	1.100	1.092	1.096	1.094
96	1.028	1.028	1.034	1.024	1.037	1.034	1.045	1.043	1.053	1.063	1.084	1.092	1.098	1.096	1.100	1.096	1.096	1.096	1.096	1.090
97	1.045	1.045	1.040	1.043	1.037	1.048	1.053	1.061	1.053	1.071	1.088	1.096	1.096	1.098	1.096	1.096	1.090	1.094	1.092	1.096
98	1.066	1.061	1.066	1.056	1.063	1.056	1.063	1.059	1.073	1.088	1.110	1.103	1.100	1.096	1.098	1.096	1.098	1.096	1.096	1.092

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 3,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 4

IR SCAN TIME 13.94 SEC
INITIAL TEMP 529.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	1.543	1.550	1.557	1.567	1.580	1.590	1.606	1.623	1.643	1.659	1.668	1.677	1.694	1.707	1.713	1.719	1.723	1.723	1.723	1.732
65	1.544	1.552	1.557	1.568	1.579	1.590	1.604	1.622	1.638	1.653	1.661	1.672	1.687	1.701	1.709	1.717	1.719	1.724	1.722	1.725
66	1.543	1.550	1.559	1.568	1.579	1.590	1.602	1.620	1.641	1.655	1.663	1.673	1.690	1.702	1.707	1.709	1.712	1.720	1.726	1.727
67	1.540	1.548	1.556	1.567	1.576	1.588	1.603	1.619	1.638	1.654	1.663	1.673	1.691	1.702	1.704	1.709	1.712	1.716	1.719	1.725
68	1.536	1.542	1.550	1.559	1.567	1.580	1.596	1.610	1.628	1.648	1.659	1.669	1.690	1.702	1.701	1.706	1.711	1.715	1.717	1.720
69	1.530	1.536	1.543	1.555	1.564	1.576	1.589	1.602	1.618	1.638	1.658	1.667	1.676	1.689	1.695	1.702	1.710	1.716	1.715	1.719
70	1.526	1.534	1.540	1.550	1.560	1.571	1.583	1.596	1.612	1.627	1.644	1.659	1.665	1.671	1.681	1.691	1.699	1.704	1.708	1.716
71	1.521	1.529	1.536	1.547	1.556	1.567	1.579	1.593	1.607	1.622	1.638	1.654	1.664	1.668	1.671	1.680	1.689	1.693	1.699	1.705
72	1.519	1.529	1.536	1.545	1.554	1.566	1.576	1.588	1.602	1.619	1.634	1.650	1.663	1.668	1.673	1.675	1.675	1.678	1.682	1.686
73	1.520	1.527	1.535	1.545	1.555	1.566	1.579	1.587	1.599	1.613	1.631	1.647	1.659	1.664	1.669	1.672	1.674	1.679	1.684	1.687
74	1.514	1.523	1.531	1.541	1.552	1.562	1.576	1.589	1.596	1.608	1.627	1.642	1.654	1.662	1.664	1.666	1.672	1.677	1.681	1.683
75	1.512	1.518	1.525	1.535	1.546	1.552	1.567	1.580	1.591	1.605	1.621	1.634	1.646	1.654	1.658	1.661	1.666	1.672	1.676	1.679
76	1.508	1.515	1.522	1.529	1.538	1.548	1.558	1.572	1.584	1.597	1.611	1.624	1.635	1.643	1.648	1.650	1.652	1.658	1.665	1.670
77	1.505	1.512	1.519	1.527	1.536	1.547	1.561	1.571	1.586	1.597	1.608	1.619	1.629	1.642	1.648	1.646	1.646	1.647	1.651	1.658
78	1.503	1.511	1.519	1.525	1.535	1.544	1.557	1.570	1.582	1.595	1.608	1.617	1.629	1.640	1.646	1.645	1.645	1.645	1.644	1.647
79	1.499	1.505	1.512	1.520	1.532	1.541	1.554	1.565	1.580	1.591	1.605	1.617	1.627	1.630	1.635	1.636	1.640	1.644	1.648	1.650
80	1.495	1.503	1.510	1.518	1.528	1.539	1.552	1.564	1.577	1.588	1.601	1.614	1.624	1.631	1.638	1.643	1.647	1.650	1.654	1.656
81	1.493	1.501	1.508	1.516	1.525	1.535	1.546	1.559	1.571	1.585	1.595	1.604	1.615	1.623	1.631	1.636	1.639	1.642	1.644	1.647
82	1.492	1.497	1.505	1.514	1.523	1.533	1.544	1.558	1.572	1.584	1.595	1.604	1.611	1.616	1.621	1.625	1.630	1.634	1.637	1.640
83	1.489	1.497	1.504	1.512	1.521	1.530	1.541	1.554	1.565	1.578	1.590	1.599	1.606	1.612	1.616	1.621	1.624	1.628	1.630	1.633
84	1.481	1.488	1.498	1.505	1.515	1.524	1.534	1.546	1.560	1.574	1.587	1.597	1.606	1.612	1.615	1.618	1.619	1.620	1.622	1.624
85	1.476	1.481	1.487	1.495	1.504	1.515	1.525	1.537	1.549	1.562	1.575	1.587	1.596	1.603	1.608	1.610	1.613	1.616	1.617	1.618
86	1.470	1.474	1.479	1.486	1.497	1.505	1.517	1.526	1.538	1.550	1.562	1.571	1.580	1.587	1.593	1.595	1.598	1.602	1.606	1.607
87	1.468	1.470	1.474	1.479	1.488	1.497	1.508	1.520	1.532	1.544	1.555	1.565	1.574	1.581	1.588	1.590	1.591	1.592	1.595	1.598
88	1.468	1.468	1.471	1.476	1.483	1.491	1.500	1.511	1.524	1.535	1.546	1.555	1.563	1.569	1.574	1.577	1.581	1.582	1.584	1.585
89	1.465	1.470	1.468	1.470	1.475	1.482	1.490	1.500	1.513	1.526	1.527	1.524	1.525	1.532	1.536	1.536	1.534	1.532	1.529	1.526
90	1.193	1.205	1.220	1.238	1.267	1.286	1.283	1.275	1.277	1.267	1.258	1.231	1.195	1.183	1.175	1.168	1.166	1.162	1.163	1.161
91	1.120	1.124	1.122	1.125	1.128	1.154	1.145	1.133	1.150	1.157	1.161	1.150	1.130	1.128	1.127	1.130	1.128	1.131	1.133	1.133
92	1.110	1.110	1.115	1.110	1.120	1.140	1.140	1.125	1.161	1.170	1.153	1.136	1.120	1.117	1.117	1.115	1.117	1.117	1.120	1.120
93	1.092	1.100	1.096	1.103	1.100	1.130	1.130	1.115	1.105	1.110	1.124	1.130	1.110	1.112	1.103	1.110	1.109	1.112	1.110	1.114
94	1.100	1.096	1.098	1.096	1.101	1.119	1.135	1.112	1.105	1.103	1.125	1.135	1.120	1.110	1.110	1.107	1.110	1.105	1.110	1.103
95	1.101	1.096	1.096	1.094	1.100	1.120	1.139	1.109	1.103	1.101	1.128	1.157	1.238	1.295	1.242	1.149	1.120	1.107	1.107	1.105
96	1.098	1.094	1.096	1.092	1.094	1.092	1.096	1.092	1.098	1.096	1.101	1.133	1.253	1.313	1.255	1.154	1.122	1.105	1.107	1.103
97	1.090	1.092	1.088	1.092	1.086	1.090	1.088	1.090	1.086	1.090	1.090	1.096	1.096	1.101	1.098	1.096	1.096	1.098	1.096	1.100
98	1.096	1.090	1.092	1.088	1.090	1.090	1.092	1.088	1.090	1.082	1.090	1.086	1.092	1.088	1.096	1.092	1.096	1.092	1.098	1.090

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 3,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 4

IR SCAN TIME 13.94 SEC
INITIAL TEMP 529.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	1.744	1.747	1.753	1.761	1.768	1.771	1.770	1.762	1.743	1.712	1.677	1.646	1.629	1.565	1.403	1.250	1.189	1.154	1.140	1.125
65	1.733	1.740	1.745	1.750	1.758	1.768	1.776	1.777	1.776	1.770	1.743	1.700	1.648	1.609	1.578	1.474	1.307	1.213	1.166	1.145
66	1.731	1.734	1.738	1.743	1.746	1.750	1.758	1.769	1.777	1.777	1.771	1.759	1.731	1.679	1.619	1.571	1.483	1.320	1.213	1.166
67	1.730	1.733	1.736	1.741	1.745	1.746	1.749	1.751	1.752	1.759	1.765	1.769	1.766	1.744	1.704	1.649	1.587	1.486	1.331	1.220
68	1.725	1.731	1.734	1.734	1.738	1.742	1.746	1.748	1.750	1.749	1.746	1.742	1.744	1.751	1.757	1.744	1.700	1.632	1.536	1.381
69	1.724	1.729	1.731	1.734	1.735	1.734	1.738	1.745	1.747	1.746	1.742	1.740	1.737	1.732	1.724	1.713	1.712	1.717	1.693	1.618
70	1.723	1.729	1.729	1.730	1.735	1.741	1.740	1.741	1.742	1.740	1.741	1.738	1.736	1.737	1.737	1.738	1.736	1.711	1.670	1.645
71	1.710	1.718	1.726	1.727	1.727	1.736	1.741	1.742	1.743	1.742	1.741	1.740	1.736	1.734	1.735	1.737	1.738	1.729	1.722	1.709
72	1.688	1.693	1.701	1.708	1.711	1.716	1.722	1.727	1.729	1.730	1.733	1.739	1.740	1.740	1.741	1.736	1.726	1.715	1.702	1.694
73	1.690	1.692	1.695	1.695	1.697	1.699	1.697	1.694	1.690	1.682	1.678	1.681	1.691	1.698	1.709	1.722	1.729	1.730	1.725	1.703
74	1.687	1.691	1.697	1.700	1.697	1.693	1.697	1.698	1.695	1.685	1.670	1.651	1.629	1.609	1.598	1.600	1.616	1.638	1.659	1.687
75	1.683	1.686	1.691	1.692	1.690	1.691	1.697	1.703	1.704	1.703	1.700	1.690	1.675	1.657	1.629	1.595	1.566	1.543	1.531	1.530
76	1.676	1.680	1.678	1.676	1.679	1.684	1.691	1.700	1.709	1.707	1.705	1.704	1.699	1.696	1.690	1.681	1.669	1.644	1.608	1.568
77	1.665	1.668	1.666	1.663	1.662	1.669	1.679	1.685	1.693	1.686	1.682	1.681	1.680	1.683	1.688	1.691	1.694	1.692	1.687	1.675
78	1.650	1.655	1.663	1.663	1.657	1.655	1.657	1.656	1.650	1.640	1.632	1.625	1.619	1.613	1.611	1.612	1.617	1.620	1.628	1.637
79	1.652	1.654	1.660	1.662	1.666	1.669	1.668	1.663	1.658	1.650	1.638	1.623	1.607	1.591	1.578	1.566	1.556	1.546	1.539	1.533
80	1.659	1.662	1.666	1.668	1.669	1.669	1.670	1.666	1.664	1.661	1.657	1.651	1.643	1.631	1.617	1.599	1.578	1.557	1.540	1.524
81	1.651	1.654	1.657	1.660	1.662	1.664	1.666	1.667	1.666	1.665	1.664	1.662	1.659	1.655	1.650	1.645	1.636	1.624	1.609	1.588
82	1.644	1.646	1.649	1.652	1.653	1.653	1.654	1.654	1.655	1.655	1.657	1.659	1.659	1.657	1.656	1.655	1.654	1.653	1.653	1.647
83	1.636	1.640	1.641	1.642	1.642	1.644	1.644	1.646	1.648	1.648	1.651	1.654	1.654	1.655	1.656	1.656	1.656	1.656	1.655	1.651
84	1.627	1.630	1.634	1.636	1.637	1.638	1.639	1.639	1.640	1.642	1.644	1.646	1.648	1.649	1.650	1.650	1.651	1.651	1.649	1.645
85	1.620	1.622	1.624	1.625	1.627	1.628	1.629	1.630	1.630	1.631	1.631	1.631	1.631	1.631	1.631	1.630	1.629	1.630	1.625	1.620
86	1.610	1.612	1.614	1.616	1.618	1.620	1.620	1.620	1.620	1.619	1.618	1.616	1.614	1.612	1.610	1.609	1.607	1.607	1.602	1.597
87	1.600	1.602	1.606	1.608	1.610	1.611	1.611	1.610	1.609	1.608	1.607	1.604	1.601	1.598	1.595	1.592	1.589	1.586	1.584	1.580
88	1.587	1.588	1.592	1.594	1.597	1.598	1.599	1.599	1.598	1.594	1.591	1.588	1.585	1.580	1.576	1.572	1.567	1.562	1.558	1.551
89	1.521	1.518	1.515	1.511	1.507	1.503	1.499	1.503	1.498	1.470	1.443	1.425	1.406	1.389	1.371	1.353	1.336	1.320	1.300	1.285
90	1.163	1.161	1.162	1.162	1.166	1.162	1.168	1.166	1.168	1.164	1.163	1.161	1.162	1.158	1.161	1.158	1.159	1.155	1.158	1.154
91	1.133	1.135	1.136	1.139	1.142	1.143	1.145	1.145	1.142	1.145	1.143	1.143	1.143	1.145	1.142	1.142	1.142	1.145	1.145	1.146
92	1.124	1.124	1.127	1.125	1.130	1.128	1.131	1.130	1.135	1.133	1.135	1.133	1.136	1.133	1.136	1.131	1.135	1.133	1.137	1.136
93	1.114	1.117	1.117	1.122	1.120	1.124	1.124	1.125	1.125	1.130	1.128	1.130	1.130	1.131	1.130	1.128	1.128	1.131	1.131	1.133
94	1.112	1.109	1.117	1.114	1.119	1.117	1.122	1.120	1.127	1.137	1.189	1.208	1.169	1.139	1.128	1.125	1.128	1.127	1.130	1.127
95	1.110	1.107	1.114	1.110	1.114	1.112	1.119	1.117	1.125	1.175	1.304	1.342	1.264	1.170	1.140	1.124	1.125	1.120	1.125	1.120
96	1.107	1.105	1.110	1.109	1.114	1.112	1.114	1.112	1.117	1.122	1.145	1.155	1.136	1.127	1.124	1.119	1.122	1.120	1.122	1.120
97	1.100	1.101	1.101	1.107	1.109	1.110	1.107	1.110	1.105	1.114	1.112	1.119	1.115	1.117	1.110	1.115	1.114	1.117	1.115	1.119
98	1.098	1.096	1.100	1.100	1.105	1.103	1.107	1.105	1.110	1.107	1.114	1.110	1.114	1.109	1.112	1.109	1.115	1.114	1.115	1.110

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 3,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 4

IR SCAN TIME 13.94 SEC
INITIAL TEMP 529.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	1.117	1.110	1.110	1.103	1.103	1.096	1.098	1.092	1.096	1.092	1.092	1.086	1.086	1.084	1.084	1.082	1.084	1.075	1.079	1.073
65	1.128	1.119	1.114	1.110	1.103	1.100	1.098	1.096	1.096	1.092	1.086	1.088	1.084	1.086	1.082	1.082	1.079	1.079	1.075	1.077
66	1.147	1.133	1.120	1.110	1.109	1.103	1.101	1.096	1.094	1.088	1.090	1.086	1.088	1.082	1.082	1.079	1.082	1.079	1.077	1.073
67	1.170	1.149	1.131	1.119	1.105	1.105	1.094	1.094	1.086	1.092	1.084	1.084	1.075	1.082	1.075	1.075	1.071	1.073	1.066	1.073
68	1.245	1.184	1.155	1.137	1.122	1.105	1.103	1.098	1.096	1.090	1.090	1.082	1.084	1.079	1.082	1.075	1.075	1.071	1.075	1.071
69	1.480	1.309	1.209	1.167	1.143	1.125	1.107	1.101	1.096	1.092	1.090	1.088	1.082	1.079	1.075	1.077	1.073	1.073	1.071	1.071
70	1.624	1.536	1.360	1.235	1.181	1.150	1.127	1.112	1.100	1.098	1.092	1.090	1.084	1.084	1.079	1.077	1.075	1.075	1.073	1.071
71	1.670	1.611	1.532	1.405	1.263	1.190	1.154	1.136	1.115	1.103	1.096	1.096	1.090	1.090	1.084	1.082	1.079	1.077	1.075	1.075
72	1.688	1.671	1.620	1.523	1.379	1.244	1.179	1.151	1.135	1.117	1.103	1.094	1.088	1.086	1.082	1.082	1.077	1.077	1.075	1.073
73	1.664	1.626	1.604	1.575	1.511	1.396	1.253	1.182	1.153	1.133	1.117	1.100	1.096	1.086	1.092	1.084	1.082	1.077	1.075	1.071
74	1.709	1.710	1.677	1.619	1.552	1.485	1.379	1.255	1.179	1.153	1.131	1.119	1.092	1.090	1.079	1.079	1.073	1.079	1.077	1.075
75	1.540	1.556	1.588	1.621	1.636	1.611	1.544	1.434	1.294	1.201	1.161	1.137	1.122	1.101	1.090	1.084	1.086	1.079	1.073	1.073
76	1.533	1.507	1.496	1.493	1.494	1.504	1.520	1.516	1.460	1.345	1.232	1.170	1.142	1.127	1.103	1.088	1.079	1.077	1.075	1.073
77	1.655	1.620	1.577	1.532	1.498	1.478	1.469	1.464	1.456	1.428	1.343	1.228	1.168	1.142	1.135	1.115	1.096	1.082	1.079	1.073
78	1.648	1.660	1.667	1.660	1.634	1.588	1.534	1.489	1.463	1.444	1.419	1.352	1.248	1.175	1.147	1.130	1.124	1.107	1.092	1.079
79	1.529	1.529	1.533	1.546	1.566	1.588	1.600	1.594	1.569	1.524	1.476	1.430	1.368	1.269	1.185	1.147	1.128	1.120	1.115	1.100
80	1.514	1.506	1.500	1.492	1.486	1.479	1.479	1.483	1.494	1.507	1.513	1.497	1.464	1.402	1.300	1.200	1.151	1.127	1.120	1.114
81	1.563	1.538	1.514	1.501	1.491	1.485	1.475	1.468	1.460	1.454	1.449	1.448	1.451	1.454	1.434	1.364	1.250	1.172	1.136	1.122
82	1.638	1.622	1.596	1.569	1.544	1.520	1.500	1.481	1.466	1.456	1.450	1.443	1.434	1.423	1.415	1.399	1.334	1.221	1.161	1.128
83	1.649	1.650	1.646	1.636	1.625	1.613	1.593	1.568	1.537	1.504	1.476	1.459	1.447	1.434	1.419	1.405	1.376	1.313	1.222	1.161
84	1.642	1.642	1.643	1.642	1.641	1.639	1.639	1.638	1.634	1.621	1.594	1.557	1.521	1.482	1.452	1.429	1.408	1.381	1.330	1.246
85	1.615	1.610	1.609	1.612	1.614	1.616	1.616	1.619	1.623	1.627	1.628	1.630	1.628	1.613	1.581	1.540	1.491	1.445	1.403	1.356
86	1.593	1.587	1.581	1.579	1.579	1.576	1.573	1.568	1.563	1.557	1.552	1.547	1.542	1.538	1.537	1.537	1.534	1.520	1.496	1.462
87	1.577	1.571	1.565	1.558	1.552	1.545	1.540	1.536	1.532	1.526	1.521	1.514	1.507	1.499	1.489	1.479	1.469	1.459	1.451	1.442
88	1.545	1.537	1.529	1.516	1.505	1.494	1.481	1.466	1.453	1.437	1.426	1.413	1.402	1.385	1.367	1.346	1.328	1.312	1.300	1.286
89	1.268	1.253	1.234	1.215	1.201	1.196	1.187	1.184	1.182	1.180	1.183	1.190	1.193	1.195	1.191	1.191	1.184	1.187	1.188	1.195
90	1.158	1.155	1.157	1.154	1.155	1.151	1.157	1.154	1.155	1.155	1.164	1.169	1.175	1.179	1.181	1.179	1.179	1.181	1.185	1.189
91	1.143	1.146	1.145	1.145	1.143	1.146	1.147	1.147	1.147	1.150	1.157	1.167	1.173	1.178	1.179	1.178	1.174	1.175	1.176	1.182
92	1.139	1.136	1.139	1.137	1.142	1.140	1.142	1.139	1.145	1.147	1.158	1.170	1.174	1.174	1.179	1.183	1.182	1.174	1.175	1.179
93	1.133	1.135	1.135	1.137	1.136	1.140	1.149	1.159	1.150	1.147	1.149	1.161	1.168	1.170	1.174	1.175	1.173	1.172	1.173	1.176
94	1.130	1.128	1.133	1.131	1.137	1.154	1.247	1.311	1.266	1.184	1.158	1.155	1.166	1.170	1.174	1.174	1.173	1.169	1.169	1.169
95	1.125	1.122	1.128	1.127	1.131	1.130	1.161	1.189	1.172	1.140	1.140	1.146	1.158	1.163	1.170	1.168	1.168	1.162	1.163	1.162
96	1.124	1.122	1.124	1.122	1.125	1.124	1.128	1.124	1.125	1.124	1.131	1.140	1.153	1.155	1.164	1.161	1.162	1.150	1.149	1.143
97	1.117	1.119	1.119	1.122	1.120	1.122	1.122	1.122	1.117	1.120	1.125	1.139	1.150	1.159	1.162	1.162	1.154	1.145	1.136	1.135
98	1.115	1.115	1.117	1.115	1.120	1.117	1.120	1.115	1.119	1.117	1.127	1.137	1.153	1.157	1.163	1.159	1.153	1.136	1.125	1.122

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 4

IR SCAN TIME 13.94 SEC
INITIAL TEMP 529.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	1.079	1.073	1.075	1.071	1.073	1.068	1.071	1.066	1.071	1.063	1.068	1.056	1.061	1.056	1.061	1.053	1.061	1.048	1.053	1.045
65	1.075	1.075	1.071	1.073	1.068	1.071	1.066	1.066	1.061	1.063	1.061	1.063	1.056	1.056	1.051	1.053	1.051	1.053	1.048	1.045
66	1.073	1.073	1.073	1.068	1.068	1.066	1.068	1.063	1.066	1.061	1.061	1.056	1.061	1.053	1.053	1.048	1.051	1.048	1.048	1.043
67	1.073	1.071	1.066	1.068	1.063	1.066	1.061	1.063	1.056	1.059	1.056	1.059	1.051	1.051	1.045	1.048	1.045	1.045	1.037	1.040
68	1.073	1.063	1.066	1.061	1.066	1.051	1.061	1.051	1.061	1.048	1.056	1.043	1.048	1.037	1.048	1.037	1.045	1.040	1.043	1.037
69	1.068	1.071	1.066	1.063	1.061	1.063	1.061	1.061	1.053	1.053	1.051	1.051	1.048	1.045	1.043	1.043	1.037	1.040	1.037	1.037
70	1.068	1.068	1.066	1.068	1.066	1.063	1.056	1.059	1.053	1.056	1.053	1.056	1.048	1.048	1.043	1.043	1.040	1.043	1.037	1.037
71	1.073	1.073	1.071	1.071	1.066	1.063	1.061	1.063	1.059	1.061	1.053	1.056	1.048	1.051	1.045	1.051	1.043	1.048	1.043	1.043
72	1.068	1.068	1.066	1.068	1.066	1.066	1.063	1.061	1.056	1.056	1.051	1.056	1.051	1.053	1.045	1.048	1.043	1.043	1.034	1.037
73	1.073	1.071	1.071	1.068	1.068	1.066	1.063	1.061	1.061	1.053	1.056	1.051	1.056	1.048	1.051	1.043	1.048	1.037	1.043	1.037
74	1.068	1.068	1.068	1.066	1.066	1.066	1.063	1.063	1.056	1.056	1.051	1.053	1.048	1.051	1.048	1.048	1.045	1.043	1.037	1.037
75	1.068	1.068	1.066	1.068	1.066	1.066	1.066	1.063	1.061	1.056	1.056	1.059	1.056	1.053	1.051	1.061	1.048	1.043	1.034	1.040
76	1.071	1.071	1.068	1.066	1.063	1.063	1.061	1.063	1.061	1.061	1.056	1.053	1.048	1.051	1.048	1.048	1.045	1.045	1.034	1.040
77	1.075	1.071	1.073	1.068	1.068	1.063	1.066	1.061	1.066	1.061	1.061	1.053	1.056	1.048	1.056	1.048	1.051	1.043	1.045	1.040
78	1.079	1.071	1.071	1.066	1.068	1.063	1.068	1.061	1.063	1.053	1.059	1.053	1.053	1.051	1.053	1.043	1.048	1.043	1.045	1.040
79	1.086	1.073	1.068	1.066	1.066	1.061	1.063	1.056	1.056	1.051	1.059	1.051	1.051	1.043	1.048	1.043	1.045	1.037	1.040	1.037
80	1.110	1.098	1.086	1.071	1.071	1.063	1.061	1.056	1.059	1.053	1.061	1.051	1.053	1.051	1.053	1.048	1.051	1.045	1.048	1.045
81	1.110	1.110	1.105	1.103	1.090	1.092	1.071	1.066	1.061	1.056	1.048	1.051	1.045	1.048	1.045	1.045	1.037	1.040	1.037	1.043
82	1.120	1.105	1.107	1.098	1.101	1.092	1.096	1.088	1.092	1.082	1.082	1.068	1.066	1.061	1.061	1.048	1.053	1.040	1.043	1.034
83	1.133	1.122	1.112	1.109	1.103	1.100	1.096	1.094	1.096	1.098	1.090	1.094	1.090	1.090	1.084	1.084	1.071	1.077	1.061	1.063
84	1.176	1.139	1.122	1.110	1.110	1.103	1.107	1.101	1.101	1.096	1.096	1.094	1.096	1.096	1.100	1.098	1.100	1.096	1.098	1.090
85	1.279	1.199	1.153	1.135	1.117	1.114	1.107	1.109	1.103	1.107	1.101	1.103	1.101	1.103	1.103	1.109	1.107	1.112	1.103	1.100
86	1.418	1.348	1.258	1.184	1.150	1.131	1.127	1.119	1.120	1.117	1.114	1.110	1.112	1.110	1.112	1.107	1.112	1.110	1.114	1.105
87	1.434	1.422	1.382	1.297	1.207	1.161	1.143	1.133	1.128	1.122	1.124	1.120	1.124	1.122	1.124	1.117	1.119	1.114	1.117	1.110
88	1.282	1.280	1.277	1.246	1.194	1.161	1.154	1.154	1.154	1.154	1.149	1.145	1.142	1.136	1.136	1.130	1.130	1.125	1.124	1.117
89	1.197	1.200	1.192	1.183	1.172	1.157	1.159	1.155	1.154	1.162	1.161	1.162	1.155	1.153	1.146	1.143	1.139	1.136	1.131	1.130
90	1.193	1.190	1.183	1.168	1.167	1.170	1.174	1.169	1.170	1.173	1.179	1.181	1.179	1.172	1.169	1.162	1.162	1.154	1.154	1.147
91	1.183	1.183	1.176	1.167	1.166	1.174	1.179	1.179	1.172	1.169	1.172	1.179	1.182	1.184	1.183	1.185	1.183	1.183	1.179	1.179
92	1.181	1.176	1.176	1.170	1.169	1.168	1.170	1.169	1.170	1.166	1.166	1.166	1.170	1.174	1.181	1.184	1.191	1.190	1.191	1.188
93	1.175	1.175	1.170	1.170	1.168	1.169	1.167	1.167	1.163	1.163	1.162	1.163	1.166	1.169	1.172	1.180	1.185	1.191	1.188	1.183
94	1.170	1.169	1.170	1.170	1.170	1.169	1.168	1.163	1.167	1.163	1.164	1.161	1.162	1.161	1.168	1.173	1.179	1.182	1.184	1.181
95	1.166	1.166	1.173	1.174	1.179	1.176	1.178	1.176	1.178	1.178	1.176	1.173	1.172	1.170	1.173	1.175	1.180	1.178	1.181	1.180
96	1.147	1.147	1.157	1.155	1.164	1.167	1.173	1.173	1.179	1.181	1.184	1.182	1.184	1.183	1.188	1.189	1.190	1.189	1.190	1.188
97	1.133	1.136	1.136	1.139	1.139	1.142	1.147	1.154	1.157	1.164	1.169	1.174	1.173	1.179	1.176	1.179	1.174	1.176	1.172	1.174
98	1.125	1.124	1.128	1.125	1.128	1.127	1.131	1.133	1.137	1.139	1.142	1.140	1.145	1.145	1.146	1.143	1.147	1.140	1.143	1.137

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 3,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 4

IR SCAN TIME 13.94 SEC
INITIAL TEMP 529.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	1.051	1.043	1.051	1.043	1.045	1.040	1.043	1.034	1.043	1.031
65	1.043	1.048	1.040	1.045	1.037	1.040	1.031	1.037	1.031	1.037
66	1.045	1.040	1.043	1.031	1.037	1.031	1.037	1.031	1.031	1.021
67	1.037	1.040	1.031	1.034	1.028	1.031	1.028	1.031	1.018	1.024
68	1.040	1.031	1.034	1.028	1.034	1.028	1.028	1.018	1.024	1.018
69	1.018	1.031	1.018	1.031	1.018	1.024	1.007	1.021	1.007	1.021
70	1.031	1.034	1.028	1.031	1.024	1.031	1.021	1.024	1.014	1.018
71	1.034	1.037	1.031	1.034	1.031	1.031	1.024	1.024	1.018	1.021
72	1.031	1.037	1.031	1.034	1.024	1.028	1.018	1.021	1.018	1.021
73	1.040	1.031	1.037	1.028	1.034	1.018	1.028	1.018	1.024	1.018
74	1.034	1.037	1.031	1.037	1.028	1.031	1.021	1.021	1.018	1.028
75	1.040	1.034	1.037	1.037	1.031	1.031	1.028	1.024	1.024	1.021
76	1.024	1.040	1.021	1.031	1.021	1.031	1.018	1.024	1.014	1.018
77	1.043	1.037	1.043	1.034	1.037	1.024	1.031	1.024	1.028	1.024
78	1.045	1.037	1.040	1.031	1.037	1.031	1.034	1.024	1.028	1.018
79	1.043	1.037	1.037	1.028	1.034	1.024	1.034	1.021	1.024	1.018
80	1.051	1.043	1.045	1.040	1.043	1.040	1.043	1.037	1.040	1.034
81	1.034	1.034	1.028	1.034	1.024	1.031	1.021	1.024	1.018	1.024
82	1.040	1.031	1.031	1.024	1.034	1.021	1.028	1.018	1.021	1.018
83	1.048	1.053	1.037	1.045	1.028	1.031	1.014	1.028	1.011	1.024
84	1.092	1.086	1.084	1.075	1.073	1.061	1.061	1.051	1.053	1.048
85	1.096	1.096	1.092	1.092	1.096	1.082	1.076	1.073	1.068	1.066
86	1.103	1.100	1.103	1.103	1.103	1.094	1.092	1.079	1.077	1.068
87	1.109	1.101	1.103	1.103	1.100	1.092	1.084	1.079	1.077	1.073
88	1.114	1.107	1.107	1.105	1.107	1.100	1.098	1.090	1.088	1.077
89	1.125	1.124	1.119	1.119	1.117	1.120	1.110	1.112	1.107	1.100
90	1.147	1.139	1.140	1.135	1.142	1.139	1.140	1.133	1.131	1.125
91	1.174	1.169	1.166	1.168	1.164	1.169	1.169	1.169	1.164	1.166
92	1.184	1.183	1.184	1.189	1.197	1.204	1.224	1.242	1.265	1.272
93	1.181	1.184	1.191	1.203	1.226	1.283	1.356	1.411	1.434	1.433
94	1.183	1.184	1.193	1.203	1.229	1.290	1.370	1.424	1.446	1.445
95	1.183	1.185	1.191	1.194	1.203	1.216	1.245	1.281	1.309	1.320
96	1.191	1.188	1.187	1.183	1.185	1.185	1.191	1.191	1.195	1.193
97	1.164	1.166	1.157	1.158	1.151	1.155	1.154	1.162	1.162	1.164
98	1.136	1.131	1.133	1.128	1.131	1.128	1.133	1.131	1.137	1.133

50

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 3,1978

IR HEAT TRANSFER COEFFICIENT = H(,9TO)/HREFR
IR SCAN TIME 13.94 SEC
GROUP 4 HREFR = 0.331E-01

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	0.041	0.046	0.050	0.052	0.052	0.051	0.050	0.050	0.051	0.049	0.050	0.048	0.048	0.049	0.051	0.052	0.053	0.054	0.054	0.054
30	0.048	0.051	0.052	0.053	0.050	0.048	0.047	0.049	0.050	0.051	0.051	0.052	0.051	0.052	0.052	0.053	0.053	0.054	0.054	0.053
31	0.051	0.051	0.050	0.050	0.048	0.047	0.049	0.051	0.052	0.053	0.053	0.053	0.052	0.053	0.053	0.054	0.054	0.054	0.051	0.050
32	0.050	0.049	0.049	0.051	0.051	0.053	0.053	0.054	0.053	0.053	0.053	0.053	0.054	0.055	0.052	0.051	0.048	0.046	0.044	0.043
33	0.050	0.051	0.052	0.053	0.054	0.053	0.053	0.052	0.053	0.053	0.054	0.052	0.049	0.046	0.045	0.043	0.045	0.045	0.046	0.046
34	0.054	0.055	0.055	0.053	0.051	0.052	0.051	0.050	0.050	0.049	0.045	0.042	0.041	0.042	0.043	0.046	0.048	0.048	0.048	0.049
35	0.055	0.052	0.052	0.049	0.050	0.047	0.046	0.042	0.042	0.039	0.042	0.041	0.044	0.043	0.046	0.047	0.049	0.049	0.050	0.050
36	0.049	0.049	0.047	0.045	0.041	0.039	0.040	0.041	0.042	0.043	0.043	0.044	0.046	0.046	0.047	0.048	0.049	0.048	0.043	0.039
37	0.045	0.042	0.041	0.039	0.041	0.041	0.042	0.043	0.045	0.045	0.046	0.046	0.048	0.048	0.047	0.043	0.039	0.031	0.026	0.020
38	0.039	0.039	0.040	0.041	0.041	0.043	0.043	0.045	0.046	0.046	0.046	0.047	0.045	0.040	0.033	0.026	0.021	0.019	0.018	0.019
39	0.039	0.041	0.041	0.043	0.043	0.045	0.045	0.046	0.046	0.046	0.041	0.035	0.027	0.023	0.019	0.020	0.019	0.019	0.019	0.020
40	0.041	0.042	0.043	0.044	0.045	0.045	0.045	0.042	0.037	0.031	0.023	0.020	0.019	0.020	0.019	0.020	0.019	0.020	0.019	0.021
41	0.045	0.046	0.046	0.046	0.044	0.040	0.036	0.026	0.022	0.019	0.020	0.019	0.019	0.019	0.021	0.020	0.021	0.019	0.021	0.019
42	0.049	0.049	0.046	0.041	0.031	0.026	0.019	0.019	0.017	0.019	0.018	0.019	0.018	0.021	0.020	0.021	0.021	0.020	0.019	0.022
43	0.050	0.043	0.035	0.024	0.022	0.019	0.021	0.019	0.021	0.019	0.021	0.021	0.022	0.021	0.023	0.019	0.022	0.019	0.023	0.021
44	0.034	0.026	0.023	0.022	0.021	0.021	0.021	0.021	0.022	0.023	0.022	0.023	0.021	0.023	0.023	0.023	0.023	0.024	0.023	0.024
45	0.024	0.023	0.024	0.023	0.024	0.023	0.025	0.023	0.024	0.023	0.025	0.024	0.026	0.024	0.027	0.026	0.026	0.026	0.028	0.027
46	0.025	0.024	0.025	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.028	0.027	0.029	0.028	0.030	0.029	0.031	0.030	0.031	0.031
47	0.027	0.027	0.029	0.029	0.029	0.028	0.029	0.029	0.029	0.029	0.030	0.030	0.031	0.030	0.032	0.031	0.033	0.033	0.035	0.036
48	0.028	0.027	0.029	0.028	0.031	0.030	0.031	0.029	0.031	0.031	0.031	0.031	0.032	0.033	0.034	0.034	0.036	0.036	0.054	0.112
49	0.029	0.030	0.030	0.030	0.031	0.032	0.033	0.033	0.032	0.031	0.032	0.031	0.034	0.035	0.036	0.035	0.037	0.040	0.070	0.154
50	0.030	0.031	0.030	0.032	0.032	0.033	0.032	0.032	0.033	0.033	0.034	0.035	0.035	0.036	0.035	0.037	0.036	0.045	0.091	0.177
51	0.031	0.031	0.032	0.032	0.033	0.032	0.033	0.033	0.035	0.034	0.036	0.035	0.036	0.036	0.039	0.039	0.042	0.051	0.115	0.195
52	0.028	0.030	0.030	0.030	0.029	0.031	0.031	0.032	0.031	0.032	0.033	0.034	0.034	0.036	0.036	0.038	0.039	0.053	0.124	0.204
53	0.023	0.024	0.024	0.023	0.024	0.024	0.026	0.026	0.027	0.026	0.029	0.029	0.030	0.030	0.032	0.033	0.037	0.055	0.136	0.213
54	0.018	0.019	0.019	0.019	0.019	0.020	0.022	0.022	0.023	0.023	0.025	0.024	0.026	0.027	0.029	0.029	0.035	0.059	0.147	0.220
55	0.017	0.017	0.019	0.019	0.021	0.019	0.022	0.022	0.023	0.023	0.026	0.024	0.026	0.026	0.030	0.031	0.036	0.072	0.164	0.226
56	0.018	0.017	0.020	0.015	0.022	0.019	0.022	0.018	0.024	0.024	0.027	0.026	0.028	0.028	0.031	0.033	0.042	0.100	0.189	0.235
57	0.019	0.019	0.019	0.021	0.020	0.021	0.022	0.023	0.023	0.026	0.026	0.026	0.026	0.029	0.029	0.034	0.047	0.121	0.203	0.240
58	0.018	0.019	0.019	0.018	0.020	0.019	0.022	0.023	0.024	0.023	0.026	0.024	0.027	0.027	0.031	0.034	0.063	0.149	0.218	0.245
59	0.016	0.017	0.016	0.018	0.018	0.020	0.021	0.023	0.022	0.023	0.023	0.025	0.026	0.028	0.030	0.037	0.081	0.171	0.226	0.249
60	0.015	0.015	0.018	0.018	0.020	0.019	0.022	0.021	0.024	0.022	0.024	0.024	0.026	0.028	0.031	0.037	0.091	0.179	0.228	0.249
61	0.015	0.016	0.016	0.018	0.019	0.019	0.019	0.022	0.022	0.023	0.023	0.023	0.024	0.028	0.029	0.041	0.102	0.188	0.232	0.252
62	0.015	0.015	0.018	0.016	0.018	0.018	0.020	0.021	0.022	0.023	0.024	0.025	0.027	0.027	0.031	0.042	0.110	0.192	0.231	0.249
63	0.012	0.011	0.013	0.012	0.016	0.015	0.019	0.020	0.022	0.020	0.022	0.023	0.026	0.027	0.033	0.048	0.125	0.200	0.233	0.249

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 3,1978

IR HEAT TRANSFER COEFFICIENT = H(,9TO)/HRFR
IR SCAN TIME 13.94 SEC
GROUP 4 HRFR = 0.331E-01

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	0.052	0.055	0.054	0.055	0.053	0.053	0.048	0.048	0.045	0.045	0.043	0.043	0.041	0.043	0.042	0.044	0.045	0.046	0.046	0.047
30	0.053	0.053	0.051	0.050	0.047	0.046	0.043	0.043	0.043	0.046	0.046	0.047	0.047	0.048	0.048	0.050	0.051	0.051	0.048	0.051
31	0.048	0.046	0.043	0.044	0.045	0.046	0.046	0.047	0.047	0.049	0.050	0.051	0.052	0.052	0.053	0.053	0.052	0.050	0.047	0.045
32	0.044	0.045	0.046	0.047	0.049	0.050	0.050	0.050	0.051	0.053	0.053	0.055	0.052	0.049	0.045	0.041	0.036	0.033	0.026	0.023
33	0.047	0.047	0.049	0.050	0.052	0.052	0.053	0.051	0.050	0.047	0.043	0.039	0.035	0.026	0.023	0.020	0.018	0.015	0.016	0.015
34	0.050	0.051	0.051	0.051	0.049	0.045	0.040	0.035	0.030	0.023	0.018	0.017	0.015	0.016	0.015	0.016	0.014	0.016	0.013	0.016
35	0.050	0.045	0.041	0.035	0.029	0.023	0.019	0.015	0.017	0.015	0.017	0.016	0.017	0.015	0.016	0.014	0.016	0.016	0.017	0.016
36	0.030	0.024	0.017	0.017	0.013	0.016	0.014	0.015	0.012	0.015	0.013	0.015	0.014	0.017	0.016	0.015	0.014	0.018	0.015	0.017
37	0.019	0.017	0.019	0.017	0.018	0.015	0.018	0.017	0.018	0.017	0.018	0.016	0.018	0.015	0.018	0.012	0.018	0.012	0.019	0.012
38	0.018	0.019	0.018	0.019	0.018	0.018	0.018	0.019	0.017	0.019	0.018	0.019	0.019	0.019	0.018	0.019	0.018	0.019	0.019	0.019
39	0.019	0.020	0.019	0.019	0.019	0.020	0.019	0.019	0.019	0.021	0.019	0.021	0.019	0.020	0.019	0.021	0.019	0.021	0.019	0.020
40	0.019	0.020	0.019	0.021	0.021	0.021	0.020	0.021	0.021	0.022	0.021	0.021	0.021	0.022	0.022	0.022	0.021	0.021	0.020	0.021
41	0.022	0.021	0.023	0.021	0.022	0.021	0.023	0.022	0.023	0.022	0.023	0.022	0.025	0.022	0.023	0.022	0.023	0.022	0.023	0.021
42	0.021	0.023	0.022	0.022	0.022	0.023	0.023	0.023	0.023	0.023	0.023	0.024	0.024	0.024	0.023	0.023	0.023	0.024	0.023	0.023
43	0.023	0.021	0.023	0.022	0.024	0.023	0.026	0.023	0.024	0.023	0.025	0.024	0.026	0.024	0.025	0.023	0.025	0.024	0.026	0.023
44	0.023	0.024	0.024	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.028	0.026	0.027	0.024	0.026	0.023	0.027	0.023	0.026
45	0.029	0.029	0.030	0.029	0.030	0.029	0.031	0.031	0.031	0.031	0.032	0.031	0.031	0.030	0.031	0.030	0.031	0.030	0.031	0.029
46	0.033	0.033	0.035	0.035	0.035	0.035	0.036	0.035	0.036	0.036	0.036	0.035	0.037	0.035	0.036	0.034	0.036	0.035	0.035	0.034
47	0.039	0.039	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.040	0.040	0.039	0.039	0.038	0.039	0.038	0.038	0.037
48	0.163	0.182	0.192	0.194	0.194	0.187	0.175	0.155	0.131	0.104	0.080	0.063	0.053	0.048	0.045	0.042	0.042	0.040	0.040	0.039
49	0.217	0.245	0.265	0.283	0.302	0.320	0.342	0.364	0.378	0.379	0.365	0.333	0.279	0.213	0.146	0.090	0.063	0.051	0.046	0.043
50	0.227	0.250	0.265	0.280	0.300	0.322	0.346	0.371	0.397	0.418	0.427	0.428	0.420	0.413	0.394	0.330	0.214	0.115	0.072	0.054
51	0.236	0.256	0.270	0.284	0.300	0.317	0.339	0.364	0.389	0.404	0.418	0.426	0.426	0.427	0.434	0.429	0.387	0.261	0.137	0.082
52	0.239	0.258	0.274	0.288	0.301	0.317	0.336	0.356	0.371	0.387	0.410	0.432	0.450	0.461	0.468	0.468	0.454	0.422	0.319	0.175
53	0.246	0.264	0.279	0.290	0.305	0.319	0.336	0.355	0.377	0.394	0.409	0.419	0.429	0.442	0.460	0.477	0.484	0.476	0.445	0.357
54	0.250	0.266	0.277	0.298	0.305	0.320	0.338	0.357	0.378	0.400	0.413	0.416	0.422	0.425	0.433	0.445	0.462	0.483	0.496	0.475
55	0.252	0.267	0.280	0.291	0.303	0.319	0.336	0.353	0.376	0.399	0.414	0.419	0.427	0.431	0.437	0.442	0.455	0.467	0.473	0.478
56	0.256	0.268	0.279	0.290	0.304	0.321	0.340	0.362	0.383	0.405	0.421	0.428	0.434	0.437	0.445	0.447	0.447	0.444	0.442	0.443
57	0.258	0.271	0.280	0.290	0.303	0.321	0.341	0.365	0.389	0.411	0.427	0.440	0.445	0.446	0.451	0.456	0.460	0.466	0.464	0.452
58	0.261	0.272	0.281	0.291	0.305	0.322	0.342	0.362	0.385	0.409	0.428	0.440	0.445	0.446	0.448	0.446	0.451	0.459	0.465	0.472
59	0.262	0.273	0.281	0.291	0.304	0.320	0.338	0.362	0.385	0.405	0.418	0.428	0.436	0.442	0.447	0.448	0.450	0.451	0.452	0.461
60	0.263	0.272	0.280	0.289	0.302	0.317	0.334	0.355	0.375	0.395	0.415	0.426	0.435	0.448	0.457	0.458	0.457	0.458	0.460	0.458
61	0.262	0.271	0.277	0.286	0.298	0.314	0.330	0.350	0.373	0.392	0.407	0.414	0.430	0.447	0.453	0.452	0.457	0.464	0.465	0.467
62	0.261	0.269	0.274	0.282	0.296	0.306	0.324	0.342	0.363	0.383	0.395	0.404	0.418	0.435	0.445	0.444	0.453	0.465	0.469	0.466
63	0.261	0.268	0.274	0.282	0.291	0.303	0.319	0.336	0.356	0.376	0.387	0.396	0.413	0.430	0.438	0.437	0.444	0.454	0.462	0.469

IR HEAT TRANSFER COEFFICIENT - H(,9TO)/HRFR
IR SCAN TIME 13.94 SEC
GROUP 4 HRFR = 0.331E-01

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	0.049	0.049	0.048	0.048	0.048	0.049	0.049	0.049	0.047	0.045	0.042	0.042	0.040	0.040	0.038	0.036	0.033	0.032	0.031	0.029
30	0.051	0.053	0.049	0.049	0.045	0.044	0.040	0.040	0.035	0.033	0.029	0.028	0.023	0.023	0.021	0.019	0.018	0.018	0.016	0.017
31	0.042	0.040	0.035	0.031	0.026	0.023	0.020	0.018	0.016	0.015	0.013	0.014	0.012	0.013	0.012	0.013	0.011	0.013	0.011	0.013
32	0.019	0.018	0.015	0.015	0.013	0.015	0.013	0.015	0.012	0.013	0.012	0.014	0.012	0.013	0.013	0.013	0.012	0.013	0.012	0.013
33	0.015	0.013	0.016	0.015	0.016	0.014	0.015	0.013	0.014	0.012	0.014	0.013	0.014	0.013	0.014	0.012	0.013	0.012	0.014	0.012
34	0.014	0.016	0.014	0.016	0.014	0.015	0.014	0.014	0.013	0.014	0.013	0.014	0.013	0.014	0.012	0.014	0.012	0.013	0.012	0.014
35	0.018	0.016	0.017	0.014	0.016	0.015	0.016	0.015	0.017	0.014	0.016	0.013	0.014	0.013	0.015	0.014	0.015	0.013	0.014	0.012
36	0.017	0.017	0.016	0.016	0.014	0.016	0.015	0.017	0.015	0.016	0.014	0.015	0.014	0.015	0.014	0.015	0.014	0.015	0.013	0.013
37	0.018	0.012	0.018	0.014	0.019	0.012	0.018	0.012	0.018	0.012	0.018	0.017	0.017	0.015	0.017	0.015	0.017	0.015	0.017	0.015
38	0.018	0.019	0.018	0.019	0.018	0.019	0.017	0.018	0.017	0.018	0.017	0.018	0.016	0.017	0.014	0.017	0.014	0.017	0.013	0.016
39	0.019	0.021	0.019	0.022	0.019	0.019	0.018	0.020	0.018	0.019	0.018	0.019	0.018	0.019	0.017	0.019	0.018	0.018	0.017	0.017
40	0.021	0.021	0.019	0.021	0.019	0.021	0.019	0.019	0.019	0.019	0.019	0.019	0.018	0.019	0.017	0.019	0.018	0.019	0.016	0.017
41	0.023	0.021	0.023	0.022	0.022	0.021	0.022	0.021	0.022	0.019	0.021	0.019	0.021	0.020	0.020	0.018	0.019	0.018	0.019	0.018
42	0.022	0.023	0.023	0.023	0.021	0.022	0.021	0.022	0.022	0.021	0.020	0.021	0.020	0.021	0.019	0.019	0.018	0.020	0.019	0.019
43	0.024	0.023	0.024	0.023	0.023	0.023	0.023	0.023	0.024	0.021	0.023	0.023	0.023	0.021	0.021	0.020	0.020	0.020	0.021	0.019
44	0.024	0.026	0.023	0.025	0.022	0.024	0.023	0.023	0.023	0.024	0.023	0.023	0.022	0.023	0.023	0.023	0.022	0.022	0.020	0.021
45	0.029	0.028	0.029	0.028	0.029	0.027	0.028	0.026	0.027	0.026	0.026	0.024	0.024	0.023	0.026	0.022	0.024	0.021	0.023	0.022
46	0.035	0.033	0.033	0.031	0.031	0.030	0.031	0.030	0.031	0.030	0.030	0.029	0.029	0.028	0.029	0.028	0.029	0.026	0.028	0.025
47	0.038	0.036	0.036	0.035	0.035	0.034	0.034	0.032	0.032	0.031	0.031	0.030	0.031	0.029	0.030	0.029	0.030	0.029	0.029	0.027
48	0.041	0.039	0.040	0.038	0.037	0.035	0.035	0.034	0.035	0.033	0.033	0.032	0.033	0.031	0.031	0.030	0.031	0.030	0.030	0.030
49	0.043	0.041	0.041	0.039	0.040	0.039	0.039	0.036	0.037	0.035	0.036	0.034	0.035	0.033	0.034	0.033	0.033	0.031	0.032	0.031
50	0.046	0.045	0.043	0.043	0.041	0.040	0.039	0.039	0.038	0.038	0.038	0.037	0.035	0.035	0.035	0.035	0.034	0.034	0.034	0.033
51	0.064	0.051	0.047	0.043	0.043	0.039	0.041	0.040	0.041	0.039	0.039	0.038	0.038	0.036	0.037	0.036	0.036	0.035	0.035	0.034
52	0.092	0.065	0.055	0.050	0.045	0.043	0.041	0.041	0.040	0.040	0.036	0.038	0.035	0.037	0.035	0.035	0.033	0.035	0.033	0.035
53	0.215	0.107	0.069	0.051	0.045	0.041	0.040	0.036	0.036	0.035	0.035	0.033	0.033	0.031	0.031	0.030	0.031	0.028	0.029	0.029
54	0.398	0.258	0.136	0.080	0.057	0.046	0.042	0.037	0.036	0.034	0.033	0.031	0.031	0.029	0.030	0.029	0.029	0.026	0.028	0.029
55	0.472	0.423	0.298	0.158	0.087	0.060	0.049	0.043	0.041	0.036	0.036	0.034	0.035	0.033	0.032	0.030	0.031	0.029	0.032	0.031
56	0.457	0.477	0.457	0.326	0.172	0.092	0.064	0.050	0.045	0.041	0.039	0.037	0.037	0.035	0.035	0.033	0.034	0.033	0.034	0.035
57	0.431	0.417	0.424	0.440	0.368	0.208	0.105	0.070	0.053	0.047	0.043	0.041	0.038	0.036	0.035	0.035	0.034	0.035	0.035	0.036
58	0.474	0.449	0.403	0.369	0.376	0.346	0.216	0.108	0.072	0.054	0.048	0.042	0.039	0.035	0.036	0.034	0.035	0.033	0.034	0.033
59	0.477	0.483	0.475	0.438	0.371	0.330	0.317	0.235	0.124	0.076	0.057	0.049	0.041	0.039	0.035	0.036	0.034	0.034	0.031	0.033
60	0.452	0.451	0.459	0.475	0.476	0.432	0.354	0.308	0.261	0.164	0.093	0.063	0.051	0.046	0.041	0.036	0.037	0.034	0.034	0.031
61	0.471	0.461	0.448	0.439	0.443	0.462	0.468	0.421	0.340	0.264	0.164	0.090	0.063	0.051	0.046	0.041	0.037	0.036	0.034	0.034
62	0.472	0.483	0.482	0.470	0.453	0.434	0.424	0.433	0.445	0.408	0.317	0.204	0.112	0.071	0.055	0.047	0.043	0.038	0.038	0.035
63	0.476	0.481	0.492	0.498	0.496	0.484	0.461	0.436	0.409	0.390	0.394	0.367	0.258	0.139	0.082	0.060	0.050	0.045	0.041	0.038

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 13.94 SEC
GROUP 4 HRFR = 0.331E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.024	0.023	0.022	0.022	0.022	0.023	0.022	0.021	0.019	0.020	0.020	0.021	0.019	0.020	0.019	0.020	0.019	0.019	0.018	0.018
30	0.014	0.015	0.014	0.015	0.014	0.015	0.013	0.013	0.012	0.014	0.013	0.015	0.013	0.014	0.013	0.014	0.014	0.015	0.014	0.014
31	0.010	0.012	0.010	0.012	0.011	0.012	0.010	0.012	0.009	0.012	0.010	0.012	0.012	0.013	0.012	0.013	0.012	0.012	0.012	0.013
32	0.012	0.013	0.012	0.013	0.011	0.012	0.011	0.012	0.011	0.012	0.011	0.012	0.012	0.012	0.007	0.011	0.007	0.012	0.008	0.012
33	0.013	0.012	0.012	0.011	0.012	0.011	0.012	0.011	0.012	0.011	0.012	0.011	0.012	0.010	0.011	0.011	0.012	0.010	0.012	0.010
34	0.013	0.014	0.012	0.012	0.011	0.012	0.012	0.012	0.011	0.012	0.011	0.012	0.010	0.012	0.010	0.012	0.010	0.012	0.010	0.011
35	0.013	0.013	0.014	0.012	0.013	0.012	0.013	0.011	0.012	0.012	0.012	0.011	0.012	0.012	0.012	0.010	0.012	0.010	0.012	0.010
36	0.012	0.013	0.012	0.013	0.012	0.014	0.012	0.012	0.012	0.013	0.012	0.013	0.012	0.012	0.012	0.011	0.010	0.012	0.010	0.012
37	0.016	0.013	0.016	0.014	0.015	0.013	0.014	0.012	0.013	0.013	0.014	0.013	0.014	0.012	0.014	0.012	0.012	0.012	0.013	0.012
39	0.012	0.016	0.014	0.016	0.013	0.014	0.012	0.014	0.013	0.016	0.014	0.015	0.013	0.014	0.014	0.014	0.013	0.014	0.012	0.013
39	0.016	0.018	0.015	0.017	0.015	0.016	0.015	0.017	0.015	0.015	0.014	0.015	0.012	0.015	0.012	0.014	0.012	0.014	0.012	0.014
40	0.017	0.018	0.015	0.016	0.016	0.017	0.016	0.017	0.014	0.016	0.014	0.016	0.014	0.015	0.014	0.015	0.014	0.015	0.013	0.013
41	0.018	0.017	0.019	0.018	0.019	0.016	0.018	0.015	0.018	0.015	0.018	0.015	0.018	0.015	0.017	0.015	0.016	0.014	0.016	0.014
42	0.018	0.019	0.018	0.018	0.018	0.019	0.017	0.018	0.016	0.018	0.017	0.017	0.015	0.017	0.015	0.017	0.015	0.016	0.014	0.016
43	0.019	0.018	0.019	0.018	0.020	0.018	0.019	0.017	0.019	0.017	0.018	0.017	0.018	0.016	0.017	0.016	0.017	0.015	0.018	0.015
44	0.020	0.021	0.020	0.021	0.019	0.020	0.019	0.020	0.019	0.019	0.017	0.019	0.019	0.019	0.017	0.019	0.017	0.019	0.018	0.019
45	0.023	0.022	0.024	0.021	0.023	0.020	0.023	0.021	0.023	0.021	0.023	0.022	0.023	0.021	0.021	0.020	0.022	0.020	0.020	0.019
46	0.026	0.024	0.027	0.025	0.026	0.024	0.026	0.024	0.025	0.019	0.025	0.019	0.025	0.020	0.024	0.020	0.023	0.018	0.023	0.018
47	0.028	0.028	0.028	0.027	0.028	0.026	0.026	0.026	0.026	0.025	0.026	0.025	0.026	0.025	0.026	0.025	0.025	0.023	0.025	0.024
48	0.030	0.029	0.029	0.027	0.029	0.029	0.029	0.029	0.028	0.023	0.027	0.028	0.026	0.027	0.026	0.026	0.023	0.026	0.025	0.024
49	0.031	0.031	0.031	0.031	0.031	0.029	0.030	0.029	0.029	0.029	0.029	0.028	0.029	0.028	0.028	0.027	0.027	0.027	0.029	0.027
50	0.032	0.032	0.031	0.032	0.031	0.032	0.031	0.031	0.029	0.031	0.029	0.030	0.030	0.030	0.029	0.029	0.028	0.029	0.029	0.030
51	0.034	0.033	0.034	0.033	0.033	0.032	0.032	0.032	0.032	0.031	0.032	0.031	0.032	0.030	0.031	0.029	0.031	0.029	0.030	0.029
52	0.033	0.034	0.032	0.033	0.032	0.034	0.033	0.033	0.032	0.033	0.032	0.032	0.031	0.031	0.029	0.032	0.031	0.031	0.030	0.030
53	0.031	0.031	0.033	0.032	0.033	0.032	0.033	0.030	0.032	0.030	0.033	0.030	0.031	0.029	0.031	0.029	0.031	0.028	0.030	0.028
54	0.031	0.031	0.033	0.033	0.034	0.033	0.034	0.033	0.034	0.033	0.034	0.033	0.033	0.032	0.033	0.032	0.033	0.031	0.031	0.029
55	0.034	0.034	0.036	0.035	0.037	0.035	0.036	0.035	0.036	0.035	0.036	0.035	0.035	0.035	0.036	0.035	0.034	0.033	0.033	0.032
56	0.037	0.036	0.038	0.038	0.038	0.036	0.038	0.037	0.038	0.037	0.038	0.036	0.036	0.036	0.037	0.035	0.036	0.034	0.035	0.033
57	0.036	0.036	0.036	0.037	0.036	0.037	0.036	0.036	0.035	0.036	0.035	0.035	0.034	0.035	0.033	0.033	0.031	0.032	0.031	0.031
58	0.034	0.033	0.034	0.033	0.033	0.033	0.033	0.031	0.033	0.033	0.033	0.033	0.033	0.032	0.032	0.031	0.031	0.030	0.031	0.030
59	0.030	0.031	0.030	0.031	0.031	0.031	0.030	0.031	0.029	0.030	0.028	0.029	0.029	0.029	0.027	0.027	0.026	0.026	0.026	0.026
60	0.032	0.030	0.030	0.029	0.030	0.027	0.028	0.024	0.027	0.023	0.026	0.023	0.023	0.023	0.024	0.022	0.023	0.020	0.022	0.019
61	0.032	0.032	0.030	0.029	0.029	0.029	0.027	0.028	0.026	0.027	0.026	0.024	0.023	0.024	0.023	0.024	0.023	0.023	0.022	0.022
62	0.035	0.033	0.033	0.030	0.031	0.029	0.031	0.029	0.029	0.027	0.027	0.026	0.026	0.024	0.026	0.024	0.026	0.023	0.024	0.022
63	0.037	0.035	0.035	0.033	0.032	0.031	0.031	0.029	0.030	0.028	0.029	0.026	0.026	0.026	0.026	0.025	0.026	0.023	0.024	0.021

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 3,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 13.94 SEC
HRFR = 0.331E-01

GROUP 4

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.017	0.018	0.018	0.018	0.017	0.017	0.015	0.018	0.015	0.017	0.015	0.015	0.014	0.015	0.014	0.015	0.014	0.013	0.012	0.014
30	0.014	0.014	0.013	0.014	0.013	0.015	0.013	0.015	0.012	0.013	0.012	0.013	0.012	0.013	0.012	0.012	0.010	0.012	0.010	0.012
31	0.012	0.013	0.012	0.013	0.012	0.013	0.012	0.013	0.012	0.013	0.012	0.012	0.011	0.011	0.010	0.011	0.010	0.011	0.010	0.010
32	0.009	0.012	0.008	0.011	0.009	0.012	0.010	0.012	0.010	0.012	0.011	0.012	0.010	0.011	0.010	0.011	0.010	0.011	0.008	0.009
33	0.012	0.010	0.011	0.010	0.011	0.010	0.012	0.010	0.012	0.009	0.011	0.007	0.010	0.007	0.011	0.007	0.010	0.007	0.009	0.006
34	0.009	0.010	0.010	0.011	0.010	0.012	0.010	0.010	0.008	0.009	0.008	0.010	0.008	0.010	0.010	0.010	0.007	0.009	0.006	0.009
35	0.012	0.010	0.011	0.009	0.011	0.008	0.010	0.010	0.011	0.009	0.011	0.008	0.010	0.008	0.010	0.008	0.010	0.008	0.010	0.008
36	0.010	0.012	0.008	0.009	0.009	0.011	0.010	0.011	0.009	0.010	0.008	0.009	0.008	0.010	0.008	0.010	0.008	0.010	0.007	0.010
37	0.012	0.012	0.012	0.011	0.012	0.012	0.013	0.010	0.011	0.010	0.012	0.010	0.012	0.010	0.011	0.010	0.011	0.009	0.012	0.010
38	0.012	0.013	0.012	0.012	0.011	0.012	0.012	0.013	0.012	0.012	0.011	0.012	0.012	0.012	0.011	0.012	0.010	0.012	0.012	0.012
39	0.011	0.013	0.012	0.014	0.011	0.012	0.010	0.013	0.013	0.012	0.012	0.012	0.012	0.013	0.011	0.012	0.012	0.013	0.012	0.012
40	0.013	0.014	0.013	0.013	0.013	0.013	0.013	0.013	0.012	0.012	0.008	0.012	0.010	0.012	0.008	0.012	0.009	0.012	0.010	0.011
41	0.016	0.013	0.015	0.013	0.015	0.013	0.015	0.012	0.014	0.013	0.014	0.012	0.013	0.012	0.014	0.012	0.014	0.012	0.013	0.012
42	0.014	0.017	0.014	0.015	0.013	0.014	0.013	0.016	0.013	0.014	0.012	0.013	0.012	0.014	0.012	0.012	0.012	0.013	0.013	0.013
43	0.016	0.015	0.016	0.015	0.017	0.014	0.015	0.013	0.014	0.013	0.015	0.013	0.015	0.013	0.014	0.012	0.014	0.013	0.015	0.012
44	0.017	0.018	0.016	0.018	0.016	0.018	0.016	0.018	0.015	0.017	0.014	0.016	0.014	0.017	0.015	0.016	0.014	0.016	0.013	0.015
45	0.023	0.019	0.022	0.020	0.020	0.019	0.021	0.020	0.021	0.020	0.020	0.019	0.019	0.019	0.021	0.019	0.020	0.019	0.020	0.018
46	0.023	0.020	0.024	0.020	0.024	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.022	0.023	0.021	0.023	0.022	0.023	0.022
47	0.026	0.025	0.026	0.025	0.026	0.023	0.024	0.023	0.024	0.023	0.024	0.022	0.024	0.021	0.023	0.023	0.023	0.022	0.024	0.022
48	0.029	0.027	0.027	0.028	0.028	0.027	0.026	0.026	0.025	0.023	0.026	0.025	0.024	0.026	0.026	0.025	0.024	0.024	0.026	0.025
49	0.029	0.028	0.029	0.027	0.029	0.026	0.028	0.026	0.027	0.026	0.026	0.025	0.026	0.025	0.026	0.025	0.026	0.024	0.026	0.024
50	0.029	0.029	0.028	0.029	0.028	0.029	0.027	0.028	0.027	0.028	0.026	0.026	0.026	0.027	0.027	0.028	0.026	0.026	0.026	0.026
51	0.030	0.029	0.030	0.029	0.029	0.028	0.029	0.028	0.029	0.028	0.028	0.027	0.028	0.027	0.029	0.028	0.027	0.026	0.026	0.026
52	0.029	0.030	0.029	0.029	0.029	0.028	0.028	0.028	0.026	0.026	0.026	0.027	0.026	0.026	0.024	0.026	0.026	0.026	0.024	0.024
53	0.029	0.027	0.028	0.026	0.026	0.024	0.024	0.023	0.023	0.021	0.023	0.021	0.023	0.020	0.021	0.019	0.022	0.020	0.020	0.019
54	0.030	0.028	0.029	0.026	0.026	0.023	0.023	0.019	0.021	0.017	0.019	0.017	0.020	0.017	0.019	0.015	0.018	0.015	0.018	0.013
55	0.031	0.030	0.030	0.029	0.029	0.026	0.026	0.022	0.022	0.019	0.022	0.019	0.019	0.018	0.019	0.018	0.019	0.016	0.018	0.015
56	0.033	0.031	0.031	0.029	0.030	0.027	0.026	0.024	0.023	0.021	0.022	0.021	0.021	0.019	0.020	0.018	0.019	0.018	0.019	0.017
57	0.029	0.029	0.028	0.028	0.026	0.026	0.025	0.024	0.023	0.021	0.020	0.021	0.019	0.020	0.019	0.020	0.018	0.018	0.016	0.018
58	0.031	0.030	0.031	0.029	0.030	0.029	0.030	0.028	0.029	0.026	0.027	0.025	0.026	0.025	0.026	0.026	0.027	0.026	0.026	0.025
59	0.024	0.024	0.023	0.023	0.023	0.023	0.021	0.022	0.021	0.022	0.021	0.021	0.019	0.019	0.017	0.019	0.016	0.018	0.016	0.018
60	0.023	0.020	0.022	0.019	0.021	0.018	0.019	0.018	0.019	0.017	0.018	0.017	0.018	0.014	0.016	0.013	0.015	0.014	0.014	0.013
61	0.021	0.021	0.020	0.021	0.018	0.020	0.018	0.019	0.015	0.018	0.014	0.018	0.014	0.017	0.015	0.015	0.012	0.014	0.012	0.014
62	0.022	0.022	0.023	0.021	0.023	0.020	0.021	0.019	0.019	0.017	0.019	0.017	0.019	0.017	0.018	0.015	0.016	0.014	0.015	0.013
63	0.023	0.022	0.023	0.022	0.023	0.021	0.022	0.020	0.023	0.019	0.021	0.018	0.019	0.017	0.018	0.016	0.018	0.015	0.017	0.015

55

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 13.94 SEC
GROUP 4 HRFR = 0.331E-01

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.012	0.013	0.012	0.012	0.011	0.012	0.010	0.012	0.011	0.012
30	0.010	0.012	0.010	0.011	0.008	0.011	0.007	0.011	0.010	0.011
31	0.008	0.009	0.008	0.010	0.008	0.012	0.008	0.009	0.007	0.009
32	0.008	0.010	0.008	0.010	0.008	0.009	0.008	0.008	0.007	0.008
33	0.008	0.006	0.009	0.006	0.008	0.006	0.008	0.007	0.009	0.007
34	0.007	0.009	0.008	0.009	0.006	0.008	0.006	0.006	0.006	0.007
35	0.008	0.008	0.009	0.007	0.009	0.008	0.010	0.007	0.008	0.006
36	0.009	0.010	0.008	0.010	0.007	0.009	0.006	0.009	0.007	0.009
37	0.011	0.009	0.010	0.009	0.010	0.009	0.011	0.009	0.010	0.008
38	0.011	0.012	0.010	0.011	0.011	0.012	0.010	0.011	0.010	0.012
39	0.011	0.012	0.012	0.012	0.011	0.012	0.012	0.012	0.012	0.012
40	0.009	0.012	0.010	0.012	0.008	0.012	0.011	0.013	0.012	0.012
41	0.013	0.012	0.012	0.011	0.013	0.012	0.014	0.010	0.012	0.009
42	0.011	0.013	0.012	0.013	0.012	0.012	0.012	0.012	0.012	0.014
43	0.014	0.012	0.013	0.013	0.014	0.012	0.014	0.012	0.013	0.012
44	0.014	0.016	0.014	0.016	0.014	0.015	0.013	0.015	0.014	0.015
45	0.019	0.018	0.020	0.018	0.019	0.018	0.019	0.018	0.018	0.017
46	0.023	0.022	0.022	0.021	0.021	0.021	0.022	0.021	0.022	0.021
47	0.023	0.022	0.023	0.023	0.022	0.022	0.023	0.023	0.024	0.022
48	0.024	0.024	0.025	0.024	0.023	0.023	0.026	0.022	0.024	0.021
49	0.025	0.025	0.026	0.024	0.025	0.024	0.025	0.023	0.024	0.023
50	0.026	0.026	0.026	0.026	0.026	0.025	0.024	0.026	0.024	0.026
51	0.027	0.026	0.027	0.025	0.026	0.025	0.026	0.026	0.026	0.024
52	0.024	0.024	0.024	0.024	0.023	0.023	0.023	0.023	0.023	0.023
53	0.020	0.019	0.021	0.019	0.019	0.018	0.019	0.018	0.019	0.016
54	0.016	0.015	0.018	0.015	0.016	0.013	0.015	0.013	0.016	0.012
55	0.017	0.015	0.017	0.010	0.013	0.009	0.014	0.010	0.013	0.007
56	0.018	0.015	0.016	0.013	0.016	0.013	0.015	0.012	0.013	0.011
57	0.014	0.017	0.016	0.016	0.013	0.014	0.012	0.015	0.013	0.014
58	0.025	0.025	0.024	0.019	0.017	0.013	0.017	0.019	0.024	0.024
59	0.015	0.017	0.014	0.015	0.013	0.015	0.013	0.015	0.013	0.014
60	0.014	0.012	0.012	0.011	0.012	0.011	0.012	0.010	0.012	0.010
61	0.013	0.014	0.012	0.013	0.011	0.012	0.010	0.012	0.010	0.011
62	0.016	0.012	0.013	0.010	0.012	0.009	0.012	0.011	0.012	0.009
63	0.016	0.013	0.015	0.012	0.014	0.012	0.014	0.012	0.012	0.010

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 13.94 SEC
HRFR = 0.331E-01

GROUP 4

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.012	0.011	0.014	0.013	0.017	0.016	0.019	0.018	0.022	0.019	0.023	0.022	0.026	0.027	0.033	0.060	0.145	0.208	0.235	0.251
65	0.012	0.012	0.012	0.013	0.014	0.017	0.017	0.021	0.020	0.021	0.022	0.024	0.026	0.029	0.035	0.077	0.162	0.215	0.239	0.253
66	0.012	0.012	0.013	0.012	0.017	0.017	0.019	0.019	0.022	0.021	0.023	0.023	0.026	0.029	0.039	0.099	0.179	0.219	0.240	0.253
67	0.012	0.013	0.012	0.015	0.014	0.017	0.019	0.021	0.021	0.022	0.022	0.024	0.026	0.031	0.046	0.118	0.189	0.222	0.239	0.251
68	0.014	0.012	0.014	0.013	0.016	0.017	0.019	0.021	0.023	0.022	0.024	0.023	0.026	0.030	0.051	0.127	0.192	0.219	0.237	0.249
69	0.015	0.015	0.014	0.015	0.016	0.018	0.019	0.022	0.022	0.023	0.023	0.024	0.026	0.031	0.057	0.137	0.194	0.218	0.235	0.246
70	0.015	0.015	0.014	0.015	0.013	0.015	0.019	0.022	0.023	0.024	0.023	0.025	0.026	0.031	0.061	0.141	0.193	0.217	0.232	0.242
71	0.014	0.015	0.014	0.017	0.016	0.019	0.019	0.023	0.021	0.023	0.021	0.024	0.024	0.033	0.070	0.150	0.194	0.216	0.230	0.239
72	0.013	0.014	0.016	0.016	0.015	0.019	0.020	0.023	0.023	0.023	0.023	0.025	0.026	0.038	0.094	0.166	0.198	0.216	0.229	0.236
73	0.012	0.012	0.015	0.013	0.017	0.018	0.022	0.023	0.024	0.023	0.023	0.023	0.027	0.043	0.112	0.174	0.201	0.217	0.229	0.237
74	0.013	0.012	0.012	0.014	0.014	0.018	0.021	0.023	0.023	0.023	0.023	0.023	0.027	0.055	0.129	0.181	0.203	0.217	0.226	0.234
75	0.013	0.013	0.014	0.013	0.015	0.017	0.023	0.023	0.024	0.023	0.023	0.024	0.031	0.067	0.141	0.184	0.203	0.215	0.225	0.232
76	0.012	0.012	0.013	0.013	0.018	0.019	0.023	0.024	0.026	0.023	0.023	0.024	0.032	0.074	0.146	0.185	0.202	0.214	0.222	0.230
77	0.013	0.012	0.014	0.014	0.017	0.018	0.022	0.023	0.024	0.023	0.023	0.024	0.034	0.083	0.152	0.186	0.202	0.214	0.222	0.228
78	0.012	0.012	0.015	0.013	0.016	0.014	0.019	0.021	0.023	0.021	0.023	0.022	0.035	0.087	0.154	0.185	0.202	0.211	0.219	0.225
79	0.012	0.013	0.015	0.013	0.015	0.016	0.021	0.023	0.024	0.021	0.023	0.024	0.041	0.101	0.162	0.187	0.201	0.211	0.218	0.223
80	0.012	0.011	0.014	0.013	0.016	0.016	0.019	0.020	0.023	0.022	0.023	0.024	0.053	0.122	0.171	0.190	0.202	0.210	0.217	0.222
81	0.013	0.015	0.018	0.019	0.016	0.018	0.022	0.023	0.021	0.022	0.022	0.029	0.071	0.141	0.176	0.192	0.202	0.210	0.216	0.221
82	0.021	0.025	0.025	0.026	0.028	0.028	0.027	0.026	0.028	0.023	0.024	0.033	0.090	0.153	0.181	0.194	0.203	0.210	0.215	0.219
83	0.030	0.031	0.029	0.033	0.036	0.036	0.029	0.026	0.023	0.026	0.029	0.045	0.107	0.162	0.182	0.195	0.203	0.209	0.213	0.218
84	0.039	0.034	0.034	0.038	0.037	0.041	0.036	0.033	0.031	0.026	0.028	0.049	0.117	0.166	0.184	0.196	0.202	0.206	0.210	0.213
85	0.046	0.039	0.039	0.048	0.037	0.043	0.034	0.034	0.031	0.031	0.033	0.059	0.124	0.169	0.186	0.196	0.201	0.205	0.207	0.211
86	0.053	0.052	0.060	0.068	0.074	0.062	0.043	0.032	0.030	0.031	0.036	0.062	0.129	0.171	0.188	0.197	0.202	0.204	0.206	0.207
87	0.059	0.061	0.077	0.085	0.093	0.078	0.050	0.033	0.024	0.022	0.029	0.070	0.138	0.173	0.188	0.197	0.202	0.205	0.208	0.208
88	0.052	0.051	0.062	0.072	0.087	0.075	0.047	0.030	0.022	0.019	0.036	0.094	0.155	0.177	0.188	0.194	0.199	0.202	0.206	0.207
89	0.042	0.039	0.042	0.043	0.046	0.045	0.039	0.035	0.031	0.037	0.052	0.092	0.131	0.148	0.158	0.169	0.180	0.190	0.199	0.204
90	0.048	0.041	0.041	0.042	0.044	0.044	0.047	0.046	0.042	0.044	0.048	0.045	0.046	0.047	0.049	0.049	0.051	0.052	0.057	0.059
91	0.022	0.022	0.023	0.027	0.033	0.036	0.035	0.036	0.034	0.035	0.039	0.039	0.038	0.039	0.038	0.039	0.040	0.040	0.039	0.041
92	0.011	0.011	0.014	0.016	0.018	0.015	0.019	0.020	0.024	0.023	0.032	0.033	0.034	0.033	0.034	0.033	0.035	0.035	0.035	0.035
93	0.009	0.011	0.011	0.013	0.012	0.015	0.015	0.019	0.018	0.021	0.026	0.032	0.033	0.033	0.031	0.033	0.031	0.033	0.032	0.033
94	0.010	0.010	0.012	0.010	0.012	0.010	0.012	0.012	0.015	0.020	0.029	0.031	0.032	0.032	0.033	0.031	0.033	0.031	0.033	0.031
95	0.010	0.010	0.010	0.010	0.011	0.010	0.012	0.011	0.013	0.018	0.028	0.030	0.032	0.031	0.033	0.032	0.033	0.030	0.031	0.031
96	0.009	0.009	0.011	0.008	0.012	0.011	0.014	0.013	0.017	0.020	0.027	0.030	0.032	0.031	0.033	0.031	0.031	0.031	0.031	0.029
97	0.014	0.014	0.012	0.013	0.012	0.015	0.017	0.019	0.017	0.023	0.029	0.031	0.031	0.032	0.031	0.031	0.029	0.031	0.030	0.031
98	0.021	0.019	0.021	0.018	0.020	0.018	0.020	0.019	0.023	0.029	0.036	0.034	0.033	0.031	0.032	0.031	0.032	0.031	0.031	0.030

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 13.94 SEC
HRFR = 0.331E-01

GROUP 4

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	0.262	0.268	0.273	0.282	0.292	0.301	0.316	0.332	0.352	0.369	0.379	0.389	0.408	0.425	0.432	0.440	0.446	0.444	0.445	0.456
65	0.263	0.269	0.273	0.282	0.291	0.301	0.314	0.331	0.346	0.363	0.372	0.383	0.400	0.417	0.427	0.437	0.440	0.447	0.444	0.448
66	0.262	0.268	0.275	0.283	0.292	0.301	0.312	0.329	0.350	0.365	0.373	0.385	0.404	0.418	0.424	0.428	0.431	0.442	0.450	0.450
67	0.260	0.266	0.273	0.282	0.289	0.300	0.313	0.328	0.347	0.363	0.373	0.385	0.405	0.419	0.420	0.427	0.430	0.436	0.440	0.447
68	0.257	0.262	0.268	0.275	0.282	0.293	0.307	0.320	0.337	0.356	0.369	0.380	0.404	0.419	0.418	0.424	0.430	0.435	0.437	0.441
69	0.253	0.257	0.263	0.272	0.279	0.289	0.301	0.313	0.327	0.347	0.367	0.378	0.388	0.403	0.410	0.419	0.429	0.436	0.434	0.439
70	0.250	0.255	0.260	0.268	0.276	0.285	0.295	0.307	0.322	0.335	0.353	0.368	0.376	0.382	0.393	0.405	0.415	0.421	0.425	0.436
71	0.246	0.252	0.257	0.265	0.273	0.282	0.292	0.304	0.316	0.331	0.347	0.363	0.374	0.378	0.382	0.392	0.403	0.408	0.415	0.423
72	0.244	0.251	0.257	0.264	0.271	0.281	0.290	0.300	0.312	0.328	0.342	0.359	0.373	0.379	0.384	0.387	0.387	0.390	0.395	0.400
73	0.245	0.250	0.256	0.264	0.272	0.281	0.292	0.299	0.310	0.323	0.339	0.356	0.369	0.375	0.380	0.384	0.386	0.391	0.397	0.400
74	0.240	0.247	0.253	0.261	0.269	0.277	0.289	0.300	0.307	0.318	0.335	0.350	0.363	0.372	0.375	0.377	0.383	0.389	0.393	0.396
75	0.239	0.243	0.248	0.256	0.265	0.270	0.282	0.292	0.303	0.315	0.330	0.343	0.355	0.363	0.368	0.371	0.377	0.383	0.388	0.392
76	0.236	0.241	0.246	0.252	0.258	0.266	0.274	0.286	0.296	0.307	0.320	0.333	0.343	0.352	0.357	0.358	0.361	0.367	0.375	0.381
77	0.234	0.239	0.244	0.250	0.257	0.266	0.276	0.285	0.298	0.308	0.318	0.328	0.338	0.351	0.357	0.354	0.354	0.356	0.360	0.367
78	0.232	0.238	0.244	0.249	0.256	0.263	0.273	0.284	0.294	0.306	0.318	0.326	0.338	0.349	0.355	0.354	0.354	0.353	0.353	0.356
79	0.230	0.234	0.239	0.245	0.254	0.261	0.271	0.280	0.292	0.303	0.315	0.327	0.335	0.339	0.344	0.345	0.349	0.353	0.357	0.359
80	0.227	0.232	0.237	0.244	0.251	0.259	0.270	0.280	0.291	0.299	0.311	0.323	0.333	0.339	0.347	0.352	0.356	0.359	0.363	0.366
81	0.225	0.231	0.236	0.242	0.248	0.256	0.265	0.275	0.285	0.297	0.306	0.314	0.324	0.332	0.339	0.344	0.348	0.351	0.353	0.356
82	0.225	0.228	0.234	0.240	0.247	0.254	0.263	0.275	0.286	0.296	0.306	0.314	0.321	0.325	0.330	0.334	0.339	0.342	0.346	0.349
83	0.223	0.228	0.233	0.239	0.245	0.253	0.261	0.271	0.280	0.291	0.301	0.310	0.316	0.321	0.325	0.330	0.333	0.336	0.338	0.342
84	0.217	0.222	0.229	0.234	0.241	0.248	0.255	0.265	0.276	0.288	0.298	0.308	0.316	0.321	0.324	0.327	0.328	0.329	0.331	0.333
85	0.214	0.217	0.221	0.227	0.233	0.241	0.249	0.258	0.267	0.278	0.288	0.299	0.307	0.313	0.318	0.320	0.322	0.325	0.326	0.327
86	0.210	0.212	0.216	0.221	0.228	0.234	0.242	0.249	0.258	0.268	0.278	0.285	0.293	0.298	0.304	0.306	0.309	0.312	0.315	0.317
87	0.208	0.210	0.213	0.216	0.222	0.228	0.236	0.245	0.254	0.263	0.272	0.280	0.288	0.293	0.299	0.301	0.302	0.304	0.306	0.308
88	0.208	0.209	0.211	0.214	0.218	0.224	0.230	0.239	0.248	0.256	0.264	0.272	0.278	0.283	0.288	0.290	0.293	0.294	0.296	0.297
89	0.206	0.209	0.208	0.210	0.213	0.218	0.223	0.230	0.240	0.249	0.250	0.248	0.249	0.254	0.257	0.257	0.255	0.254	0.252	0.249
90	0.068	0.072	0.079	0.086	0.099	0.108	0.106	0.103	0.103	0.099	0.095	0.083	0.068	0.064	0.061	0.058	0.057	0.055	0.056	0.055
91	0.040	0.041	0.041	0.042	0.043	0.052	0.049	0.045	0.051	0.053	0.055	0.051	0.043	0.043	0.042	0.043	0.043	0.044	0.045	0.045
92	0.036	0.036	0.038	0.036	0.040	0.047	0.047	0.042	0.055	0.059	0.052	0.046	0.040	0.039	0.039	0.038	0.039	0.039	0.040	0.040
93	0.030	0.033	0.031	0.034	0.033	0.043	0.043	0.038	0.035	0.036	0.041	0.043	0.036	0.037	0.034	0.036	0.036	0.037	0.036	0.038
94	0.033	0.031	0.032	0.031	0.033	0.039	0.045	0.037	0.035	0.034	0.042	0.045	0.040	0.036	0.036	0.035	0.036	0.035	0.036	0.034
95	0.033	0.031	0.031	0.031	0.033	0.040	0.047	0.036	0.034	0.033	0.043	0.053	0.086	0.112	0.088	0.050	0.040	0.035	0.035	0.035
96	0.032	0.031	0.031	0.030	0.031	0.030	0.031	0.030	0.032	0.031	0.033	0.045	0.093	0.121	0.094	0.052	0.041	0.035	0.035	0.034
97	0.029	0.030	0.029	0.030	0.028	0.029	0.029	0.029	0.028	0.029	0.029	0.031	0.031	0.033	0.032	0.031	0.031	0.032	0.031	0.033
98	0.031	0.029	0.030	0.029	0.029	0.029	0.030	0.029	0.029	0.026	0.029	0.028	0.030	0.029	0.031	0.030	0.031	0.030	0.032	0.029

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 13.94 SEC
GROUP 4 HRFR = 0.331E-01

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	0.473	0.478	0.487	0.498	0.509	0.513	0.512	0.499	0.472	0.431	0.389	0.354	0.338	0.280	0.169	0.092	0.066	0.052	0.047	0.042
65	0.458	0.467	0.475	0.483	0.494	0.509	0.521	0.524	0.522	0.512	0.472	0.416	0.357	0.319	0.291	0.212	0.118	0.076	0.057	0.049
66	0.456	0.460	0.466	0.472	0.477	0.481	0.494	0.511	0.524	0.524	0.514	0.496	0.456	0.391	0.328	0.285	0.218	0.124	0.076	0.057
67	0.454	0.458	0.462	0.469	0.474	0.477	0.481	0.484	0.485	0.495	0.504	0.510	0.505	0.473	0.420	0.358	0.299	0.221	0.130	0.079
68	0.448	0.455	0.460	0.460	0.465	0.471	0.476	0.479	0.481	0.480	0.476	0.471	0.473	0.484	0.492	0.473	0.416	0.340	0.257	0.156
69	0.446	0.452	0.456	0.459	0.461	0.460	0.465	0.475	0.478	0.476	0.470	0.468	0.464	0.457	0.447	0.432	0.431	0.438	0.407	0.327
70	0.445	0.452	0.453	0.455	0.461	0.470	0.468	0.469	0.470	0.468	0.469	0.465	0.462	0.464	0.463	0.465	0.462	0.430	0.381	0.354
71	0.429	0.439	0.449	0.450	0.451	0.463	0.469	0.470	0.471	0.470	0.469	0.468	0.462	0.460	0.461	0.464	0.465	0.452	0.444	0.427
72	0.402	0.408	0.417	0.425	0.429	0.436	0.444	0.451	0.453	0.454	0.458	0.466	0.468	0.468	0.469	0.462	0.448	0.434	0.418	0.406
73	0.404	0.407	0.410	0.410	0.412	0.414	0.413	0.409	0.404	0.395	0.390	0.394	0.405	0.413	0.428	0.443	0.453	0.455	0.448	0.420
74	0.401	0.405	0.412	0.416	0.412	0.408	0.412	0.414	0.410	0.399	0.382	0.360	0.338	0.318	0.309	0.310	0.325	0.347	0.369	0.401
75	0.396	0.399	0.406	0.406	0.404	0.405	0.412	0.420	0.421	0.420	0.416	0.404	0.387	0.367	0.338	0.306	0.281	0.263	0.253	0.252
76	0.388	0.392	0.390	0.388	0.392	0.397	0.405	0.416	0.426	0.425	0.422	0.421	0.414	0.411	0.405	0.394	0.380	0.353	0.317	0.282
77	0.376	0.379	0.376	0.373	0.373	0.380	0.392	0.399	0.407	0.400	0.395	0.394	0.393	0.396	0.402	0.406	0.409	0.406	0.400	0.387
78	0.359	0.364	0.373	0.373	0.367	0.365	0.366	0.366	0.359	0.349	0.341	0.334	0.328	0.323	0.321	0.321	0.326	0.329	0.336	0.346
79	0.361	0.364	0.370	0.372	0.377	0.380	0.378	0.373	0.368	0.359	0.347	0.332	0.317	0.303	0.291	0.281	0.273	0.264	0.259	0.255
80	0.369	0.373	0.377	0.379	0.380	0.380	0.381	0.377	0.374	0.371	0.366	0.360	0.352	0.340	0.326	0.309	0.291	0.274	0.260	0.248
81	0.360	0.363	0.367	0.370	0.373	0.374	0.377	0.378	0.377	0.375	0.374	0.372	0.369	0.365	0.359	0.354	0.345	0.333	0.318	0.300
82	0.353	0.354	0.358	0.361	0.362	0.362	0.364	0.363	0.364	0.364	0.367	0.369	0.369	0.366	0.365	0.364	0.363	0.362	0.362	0.356
83	0.344	0.349	0.350	0.351	0.351	0.352	0.353	0.355	0.357	0.357	0.360	0.363	0.364	0.364	0.365	0.366	0.365	0.365	0.364	0.360
84	0.335	0.339	0.343	0.344	0.346	0.347	0.347	0.347	0.349	0.351	0.353	0.355	0.357	0.358	0.359	0.359	0.360	0.360	0.358	0.354
85	0.329	0.331	0.333	0.334	0.335	0.337	0.338	0.339	0.338	0.339	0.340	0.340	0.340	0.339	0.340	0.339	0.338	0.338	0.334	0.329
86	0.320	0.321	0.324	0.325	0.327	0.329	0.329	0.329	0.329	0.328	0.327	0.325	0.324	0.321	0.319	0.318	0.317	0.316	0.312	0.307
87	0.311	0.313	0.316	0.318	0.320	0.320	0.321	0.319	0.319	0.318	0.317	0.314	0.312	0.308	0.306	0.303	0.301	0.298	0.296	0.293
88	0.299	0.300	0.304	0.305	0.307	0.309	0.310	0.309	0.308	0.305	0.302	0.299	0.297	0.293	0.289	0.286	0.282	0.278	0.274	0.269
89	0.246	0.243	0.241	0.238	0.236	0.232	0.230	0.232	0.229	0.210	0.192	0.181	0.170	0.160	0.150	0.141	0.132	0.124	0.115	0.107
90	0.056	0.055	0.055	0.055	0.057	0.055	0.058	0.057	0.058	0.056	0.056	0.055	0.055	0.054	0.055	0.054	0.054	0.053	0.054	0.052
91	0.045	0.045	0.046	0.047	0.048	0.048	0.049	0.049	0.048	0.049	0.048	0.048	0.048	0.049	0.048	0.048	0.048	0.049	0.049	0.049
92	0.041	0.041	0.042	0.042	0.043	0.043	0.044	0.043	0.045	0.045	0.045	0.045	0.046	0.045	0.046	0.044	0.045	0.045	0.046	0.046
93	0.038	0.039	0.039	0.041	0.040	0.041	0.041	0.042	0.042	0.043	0.043	0.043	0.043	0.044	0.043	0.043	0.043	0.044	0.044	0.045
94	0.037	0.036	0.039	0.038	0.039	0.039	0.041	0.040	0.042	0.046	0.066	0.074	0.058	0.047	0.043	0.042	0.043	0.042	0.043	0.042
95	0.036	0.035	0.038	0.036	0.038	0.037	0.039	0.039	0.042	0.061	0.116	0.135	0.098	0.059	0.047	0.041	0.042	0.040	0.042	0.040
96	0.035	0.035	0.036	0.036	0.038	0.037	0.038	0.037	0.039	0.041	0.049	0.053	0.046	0.042	0.041	0.039	0.041	0.040	0.041	0.040
97	0.033	0.033	0.033	0.035	0.036	0.036	0.035	0.036	0.035	0.038	0.037	0.039	0.038	0.039	0.036	0.038	0.038	0.039	0.038	0.039
98	0.032	0.031	0.033	0.033	0.035	0.034	0.035	0.035	0.036	0.035	0.038	0.036	0.038	0.036	0.037	0.036	0.038	0.038	0.038	0.036

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 3,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 13.94 SEC
GROUP 4 HRFR = 0.331E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.039	0.036	0.036	0.034	0.034	0.031	0.032	0.030	0.031	0.030	0.030	0.028	0.028	0.027	0.027	0.026	0.027	0.024	0.026	0.023
65	0.043	0.039	0.038	0.036	0.034	0.033	0.032	0.031	0.031	0.030	0.028	0.029	0.027	0.028	0.026	0.026	0.026	0.026	0.024	0.025
66	0.050	0.045	0.040	0.036	0.036	0.034	0.033	0.031	0.031	0.029	0.029	0.028	0.029	0.026	0.026	0.026	0.026	0.026	0.025	0.023
67	0.059	0.050	0.044	0.039	0.035	0.035	0.031	0.031	0.028	0.030	0.027	0.027	0.024	0.026	0.024	0.024	0.023	0.023	0.021	0.023
68	0.089	0.064	0.053	0.046	0.041	0.035	0.034	0.032	0.031	0.029	0.029	0.026	0.027	0.026	0.026	0.024	0.024	0.023	0.024	0.023
69	0.217	0.119	0.074	0.057	0.048	0.042	0.035	0.033	0.031	0.030	0.029	0.029	0.026	0.026	0.024	0.025	0.023	0.023	0.023	0.023
70	0.332	0.257	0.145	0.085	0.063	0.051	0.042	0.037	0.033	0.032	0.030	0.029	0.027	0.027	0.026	0.025	0.024	0.024	0.023	0.023
71	0.381	0.321	0.254	0.170	0.097	0.066	0.052	0.046	0.038	0.034	0.031	0.031	0.029	0.029	0.027	0.026	0.026	0.025	0.024	0.024
72	0.402	0.382	0.329	0.247	0.155	0.089	0.062	0.051	0.045	0.039	0.034	0.031	0.029	0.028	0.026	0.026	0.025	0.025	0.024	0.023
73	0.375	0.335	0.314	0.269	0.238	0.159	0.093	0.063	0.052	0.045	0.039	0.033	0.031	0.028	0.030	0.027	0.026	0.025	0.024	0.023
74	0.427	0.428	0.388	0.328	0.270	0.220	0.155	0.094	0.062	0.052	0.044	0.039	0.030	0.029	0.026	0.026	0.023	0.026	0.025	0.024
75	0.260	0.273	0.300	0.330	0.345	0.320	0.263	0.187	0.112	0.071	0.055	0.046	0.041	0.033	0.029	0.027	0.028	0.026	0.023	0.023
76	0.255	0.235	0.227	0.225	0.226	0.233	0.245	0.242	0.203	0.137	0.084	0.059	0.048	0.042	0.034	0.029	0.026	0.025	0.024	0.023
77	0.364	0.329	0.290	0.254	0.229	0.215	0.209	0.206	0.201	0.183	0.136	0.082	0.058	0.048	0.045	0.038	0.031	0.026	0.026	0.023
78	0.357	0.370	0.37[illegible]	0.370	0.343	0.300	0.255	0.222	0.205	0.193	0.178	0.141	0.091	0.061	0.050	0.043	0.041	0.035	0.030	0.026
79	0.252	0.251	0.[illegible]5	0.265	0.281	0.300	0.311	0.305	0.284	0.248	0.214	0.185	0.149	0.100	0.065	0.050	0.043	0.040	0.038	0.033
80	0.240	0.235	0.230	0.225	0.220	0.216	0.216	0.218	0.226	0.236	0.239	0.228	0.206	0.168	0.115	0.070	0.051	0.042	0.040	0.038
81	0.278	0.259	0.241	0.231	0.224	0.220	0.213	0.208	0.203	0.199	0.196	0.196	0.197	0.200	0.187	0.147	0.091	0.059	0.046	0.041
82	0.347	0.331	0.307	0.283	0.263	0.245	0.230	0.217	0.207	0.200	0.197	0.192	0.187	0.180	0.176	0.166	0.131	0.079	0.055	0.043
83	0.358	0.[illegible]	0.354	0.345	0.334	0.322	0.304	0.283	0.258	0.233	0.214	0.203	0.195	0.187	0.178	0.169	0.153	0.121	0.079	0.055
84	0.351	0.351	0.352	0.351	0.350	0.348	0.348	0.347	0.342	0.330	0.305	0.273	0.246	0.218	0.198	0.184	0.172	0.156	0.129	0.090
85	0.324	0.320	0.319	0.321	0.323	0.325	0.325	0.328	0.332	0.335	0.337	0.338	0.337	0.322	0.294	0.260	0.224	0.193	0.168	0.143
86	0.304	0.298	0.294	0.292	0.292	0.289	0.286	0.282	0.278	0.274	0.270	0.265	0.262	0.258	0.257	0.257	0.255	0.245	0.228	0.205
87	0.290	0.285	0.280	0.274	0.270	0.264	0.260	0.257	0.254	0.249	0.246	0.241	0.236	0.229	0.223	0.216	0.209	0.203	0.197	0.192
88	0.264	0.258	0.251	0.242	0.234	0.226	0.217	0.207	0.198	0.189	0.182	0.174	0.168	0.158	0.148	0.137	0.128	0.120	0.114	0.109
89	0.100	0.093	0.085	0.076	0.071	0.069	0.065	0.064	0.063	0.062	0.064	0.066	0.068	0.068	0.067	0.067	0.064	0.065	0.065	0.068
90	0.054	0.053	0.053	0.052	0.053	0.051	0.053	0.052	0.053	0.053	0.056	0.058	0.061	0.062	0.063	0.062	0.062	0.063	0.065	0.066
91	0.048	0.049	0.049	0.049	0.048	0.049	0.050	0.050	0.050	0.051	0.053	0.057	0.060	0.061	0.062	0.061	0.060	0.061	0.061	0.063
92	0.047	0.046	0.047	0.046	0.048	0.047	0.048	0.047	0.049	0.050	0.054	0.059	0.060	0.060	0.062	0.064	0.063	0.060	0.061	0.062
93	0.045	0.045	0.045	0.046	0.046	0.047	0.050	0.054	0.051	0.050	0.050	0.055	0.058	0.059	0.060	0.061	0.060	0.059	0.060	0.061
94	0.043	0.043	0.045	0.044	0.046	0.052	0.090	0.120	0.099	0.064	0.054	0.053	0.057	0.059	0.060	0.060	0.060	0.058	0.058	0.058
95	0.042	0.041	0.043	0.042	0.044	0.043	0.055	0.066	0.059	0.047	0.047	0.049	0.054	0.056	0.059	0.058	0.058	0.055	0.056	0.055
96	0.041	0.041	0.041	0.041	0.042	0.041	0.043	0.041	0.042	0.041	0.044	0.047	0.052	0.053	0.055	0.055	0.055	0.051	0.050	0.048
97	0.039	0.039	0.039	0.041	0.040	0.041	0.041	0.041	0.039	0.040	0.042	0.047	0.051	0.054	0.055	0.055	0.052	0.049	0.046	0.045
98	0.038	0.038	0.039	0.038	0.040	0.039	0.040	0.038	0.039	0.039	0.042	0.046	0.052	0.053	0.056	0.054	0.052	0.046	0.042	0.041

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 3,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 13.94 SEC
HRFR = 0.331E-01

GROUP 4

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.026	0.023	0.024	0.023	0.023	0.022	0.023	0.021	0.023	0.020	0.022	0.018	0.019	0.018	0.019	0.017	0.019	0.015	0.017	0.014
65	0.024	0.024	0.023	0.023	0.022	0.023	0.021	0.021	0.019	0.020	0.019	0.020	0.018	0.018	0.016	0.017	0.016	0.017	0.015	0.014
66	0.023	0.023	0.023	0.022	0.022	0.021	0.022	0.020	0.021	0.019	0.019	0.018	0.019	0.017	0.017	0.015	0.016	0.015	0.015	0.013
67	0.023	0.023	0.021	0.022	0.020	0.021	0.019	0.020	0.018	0.019	0.018	0.019	0.016	0.016	0.014	0.015	0.014	0.014	0.012	0.012
68	0.023	0.020	0.021	0.019	0.021	0.016	0.019	0.016	0.019	0.015	0.018	0.013	0.015	0.012	0.015	0.012	0.014	0.012	0.013	0.012
69	0.022	0.023	0.021	0.020	0.019	0.020	0.019	0.019	0.017	0.017	0.016	0.016	0.015	0.014	0.013	0.013	0.012	0.012	0.012	0.012
70	0.022	0.022	0.021	0.022	0.021	0.020	0.018	0.019	0.017	0.018	0.017	0.018	0.015	0.015	0.013	0.013	0.012	0.013	0.012	0.012
71	0.023	0.023	0.023	0.023	0.021	0.020	0.019	0.020	0.019	0.019	0.017	0.018	0.015	0.016	0.014	0.016	0.013	0.015	0.013	0.013
72	0.022	0.022	0.021	0.022	0.021	0.021	0.020	0.019	0.018	0.018	0.016	0.018	0.016	0.017	0.014	0.015	0.013	0.013	0.011	0.012
73	0.023	0.023	0.023	0.022	0.022	0.021	0.020	0.019	0.019	0.017	0.018	0.016	0.018	0.015	0.016	0.013	0.015	0.012	0.013	0.012
74	0.022	0.022	0.022	0.021	0.021	0.021	0.020	0.020	0.018	0.018	0.016	0.017	0.015	0.016	0.015	0.015	0.014	0.013	0.012	0.012
75	0.022	0.022	0.021	0.022	0.021	0.021	0.021	0.020	0.019	0.018	0.018	0.019	0.018	0.017	0.016	0.019	0.015	0.013	0.011	0.012
76	0.023	0.023	0.022	0.021	0.020	0.020	0.019	0.020	0.019	0.019	0.018	0.017	0.015	0.016	0.015	0.015	0.014	0.014	0.011	0.012
77	0.024	0.023	0.023	0.022	0.022	0.020	0.021	0.019	0.021	0.019	0.019	0.017	0.018	0.015	0.018	0.015	0.016	0.013	0.014	0.012
78	0.026	0.023	0.023	0.021	0.022	0.020	0.022	0.019	0.020	0.017	0.019	0.017	0.017	0.016	0.017	0.013	0.015	0.013	0.014	0.012
79	0.028	0.023	0.022	0.021	0.021	0.019	0.020	0.018	0.018	0.016	0.019	0.016	0.016	0.013	0.015	0.013	0.014	0.012	0.012	0.012
80	0.036	0.032	0.028	0.023	0.023	0.020	0.019	0.018	0.019	0.017	0.019	0.016	0.017	0.016	0.017	0.015	0.016	0.014	0.015	0.014
81	0.036	0.036	0.035	0.034	0.029	0.026	0.023	0.021	0.019	0.018	0.015	0.016	0.014	0.015	0.014	0.014	0.012	0.012	0.012	0.013
82	0.040	0.035	0.035	0.032	0.033	0.030	0.031	0.029	0.030	0.026	0.026	0.022	0.021	0.019	0.019	0.015	0.017	0.012	0.013	0.011
83	0.045	0.041	0.037	0.036	0.034	0.033	0.031	0.031	0.031	0.032	0.029	0.031	0.029	0.029	0.027	0.027	0.023	0.025	0.019	0.020
84	0.061	0.047	0.041	0.036	0.036	0.034	0.035	0.033	0.033	0.031	0.031	0.031	0.031	0.031	0.033	0.032	0.033	0.031	0.032	0.029
85	0.104	0.070	0.052	0.045	0.039	0.038	0.035	0.036	0.034	0.035	0.033	0.034	0.033	0.034	0.034	0.036	0.035	0.037	0.034	0.033
86	0.177	0.138	0.095	0.064	0.051	0.044	0.042	0.039	0.040	0.039	0.038	0.036	0.037	0.036	0.037	0.035	0.037	0.036	0.038	0.035
87	0.187	0.179	0.157	0.113	0.073	0.055	0.048	0.045	0.043	0.041	0.041	0.040	0.041	0.041	0.041	0.039	0.039	0.038	0.039	0.036
88	0.106	0.105	0.103	0.090	0.068	0.055	0.052	0.052	0.052	0.052	0.050	0.049	0.048	0.046	0.046	0.043	0.043	0.042	0.041	0.039
89	0.069	0.070	0.067	0.064	0.059	0.057	0.054	0.053	0.052	0.055	0.055	0.055	0.053	0.052	0.049	0.048	0.047	0.046	0.044	0.043
90	0.068	0.066	0.064	0.058	0.057	0.059	0.060	0.059	0.059	0.060	0.062	0.063	0.062	0.059	0.058	0.055	0.055	0.052	0.052	0.050
91	0.064	0.064	0.061	0.057	0.057	0.060	0.062	0.062	0.059	0.058	0.059	0.062	0.063	0.064	0.064	0.065	0.064	0.064	0.062	0.062
92	0.063	0.061	0.061	0.059	0.058	0.058	0.059	0.059	0.059	0.057	0.057	0.057	0.059	0.060	0.063	0.064	0.067	0.066	0.067	0.065
93	0.061	0.061	0.059	0.059	0.058	0.058	0.057	0.057	0.056	0.056	0.055	0.056	0.057	0.058	0.059	0.062	0.065	0.067	0.065	0.064
94	0.059	0.058	0.059	0.059	0.059	0.058	0.058	0.056	0.057	0.056	0.056	0.055	0.055	0.055	0.058	0.060	0.062	0.063	0.064	0.063
95	0.057	0.057	0.060	0.060	0.062	0.061	0.061	0.061	0.061	0.061	0.061	0.060	0.059	0.059	0.060	0.061	0.062	0.061	0.063	0.062
96	0.050	0.050	0.053	0.053	0.056	0.057	0.060	0.060	0.062	0.063	0.064	0.063	0.064	0.064	0.065	0.066	0.066	0.066	0.066	0.065
97	0.045	0.046	0.046	0.047	0.047	0.048	0.050	0.052	0.053	0.056	0.058	0.060	0.060	0.062	0.061	0.062	0.060	0.061	0.059	0.060
98	0.042	0.041	0.043	0.042	0.043	0.042	0.044	0.045	0.046	0.047	0.048	0.047	0.049	0.049	0.049	0.048	0.050	0.047	0.048	0.046

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IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 13.94 SEC
GROUP 4 HRFR = 0.331E-01

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.016	0.013	0.016	0.013	0.014	0.012	0.013	0.011	0.013	0.010
65	0.013	0.015	0.012	0.014	0.012	0.012	0.010	0.012	0.010	0.012
66	0.014	0.012	0.013	0.010	0.012	0.010	0.012	0.010	0.010	0.007
67	0.012	0.012	0.010	0.011	0.009	0.010	0.009	0.010	0.006	0.008
68	0.012	0.010	0.011	0.009	0.011	0.009	0.009	0.006	0.008	0.006
69	0.006	0.010	0.006	0.010	0.006	0.008	0.002	0.007	0.002	0.007
70	0.010	0.011	0.009	0.010	0.008	0.010	0.007	0.008	0.004	0.006
71	0.011	0.012	0.010	0.011	0.010	0.010	0.008	0.008	0.006	0.007
72	0.010	0.012	0.010	0.011	0.008	0.009	0.006	0.007	0.006	0.007
73	0.012	0.010	0.012	0.009	0.011	0.006	0.009	0.006	0.008	0.006
74	0.011	0.012	0.010	0.012	0.009	0.010	0.007	0.007	0.006	0.009
75	0.012	0.011	0.012	0.012	0.010	0.010	0.009	0.008	0.008	0.007
76	0.008	0.012	0.007	0.010	0.007	0.010	0.006	0.008	0.004	0.006
77	0.013	0.012	0.013	0.011	0.012	0.008	0.010	0.008	0.009	0.009
78	0.014	0.012	0.012	0.010	0.012	0.010	0.011	0.008	0.009	0.006
79	0.013	0.012	0.012	0.009	0.011	0.008	0.011	0.007	0.008	0.006
80	0.016	0.013	0.014	0.012	0.013	0.012	0.013	0.012	0.012	0.011
81	0.011	0.011	0.009	0.011	0.008	0.010	0.007	0.008	0.006	0.008
82	0.012	0.010	0.010	0.008	0.011	0.007	0.009	0.006	0.007	0.006
83	0.015	0.017	0.012	0.014	0.009	0.010	0.004	0.009	0.003	0.008
84	0.030	0.028	0.027	0.024	0.023	0.019	0.019	0.016	0.017	0.015
85	0.031	0.031	0.030	0.030	0.028	0.026	0.024	0.023	0.022	0.021
86	0.034	0.033	0.034	0.034	0.034	0.031	0.030	0.026	0.025	0.022
87	0.036	0.033	0.034	0.034	0.033	0.030	0.027	0.026	0.025	0.023
88	0.038	0.035	0.035	0.035	0.035	0.033	0.032	0.029	0.029	0.025
89	0.042	0.041	0.039	0.039	0.039	0.040	0.036	0.037	0.035	0.033
90	0.050	0.047	0.047	0.045	0.048	0.047	0.047	0.045	0.044	0.042
91	0.060	0.058	0.057	0.058	0.056	0.058	0.058	0.058	0.056	0.057
92	0.064	0.064	0.064	0.066	0.069	0.072	0.080	0.089	0.098	0.101
93	0.063	0.064	0.067	0.072	0.081	0.106	0.143	0.173	0.187	0.186
94	0.064	0.064	0.068	0.072	0.082	0.110	0.150	0.181	0.194	0.193
95	0.064	0.065	0.067	0.068	0.072	0.077	0.089	0.106	0.119	0.124
96	0.067	0.065	0.065	0.064	0.065	0.065	0.067	0.067	0.068	0.068
97	0.056	0.057	0.053	0.054	0.051	0.053	0.052	0.055	0.055	0.056
98	0.046	0.044	0.045	0.043	0.044	0.043	0.045	0.044	0.046	0.045

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

GROUP 7

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
33 12	593.892	593.936	593.936	593.936	0.000	591.671
33 13	594.284	594.371	593.936	594.328	0.000	591.671
33 14	594.806	594.981	593.936	594.806	0.000	591.671
33 15	595.155	595.242	593.936	595.111	0.000	591.671
33 16	595.329	595.503	593.936	595.372	0.000	591.671
33 16	595.459	595.590	593.936	595.372	0.000	591.671
33 17	595.590	595.721	593.936	595.590	0.000	591.671
33 18	595.808	595.982	593.936	595.764	0.000	591.671
33 19	595.895	596.112	593.936	595.895	0.000	591.671
33 20	596.069	596.199	593.936	595.938	0.000	591.671
33 20	596.069	596.199	593.936	595.982	0.000	591.671
33 21	596.199	596.330	593.936	596.069	0.000	591.671
33 22	596.286	596.417	593.936	596.112	0.000	591.671
33 23	596.373	596.548	593.936	596.199	0.000	591.671
33 24	596.504	596.591	593.936	596.286	0.000	591.671
33 25	596.548	596.678	593.936	596.330	0.000	591.671

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

GROUP	* * * * MODEL DESCRIPTION * * * * TITLE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
7	RSI FOPWARD	0.01	0.000	-10.10	40.10	0.053	0	32	31

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/F FT-1	HREF BTU/FT2-SEC-R	INITIAL TEMP DEG R
8.00	799.39	1337.67	96.93	0.0819	3861.	0.709E-04	0.780E-07	0.351E+07	0.398E-01	532.7

IR CAMERA INFORMATION

MOUNTING LOCATION	260
F STOP	2.5
LENS-DEG	15
SENSITIVITY	1000.
BLACK LEVEL VOLTAGE	2.3752
LINE SCAN PHI	90
MODEL EMISSIVITY	0.96
REF EMISSIVITY	0.94
WINDOW FACTOR	0.840

TIME RECORDS

LIFT OFF	0.00
CENTER LINE	1.00
IR SCAN TIME	7.96
DELTA TIME,SEC	7.40
PHOTO 1 TIME	33
PHOTO 2 TIME	0
PHOTO 3 TIME	0
PHOTO 4 TIME	0

REFERENCE TARGET INFORMATION

TCR5	500.70
TCR6	-228.49

DIGITAL DATA AREA PRINTOUT LOCATION

LINE 29 THROUGH 98
POINT 1 THROUGH 110

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NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP COPP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 7.40 SEC
INITIAL TEMP 532.7 DEG. R

GROUP 7

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	1.122	1.134	1.151	1.160	1.171	1.169	1.169	1.167	1.170	1.163	1.164	1.161	1.159	1.160	1.160	1.164	1.167	1.173	1.174	1.174
30	1.142	1.155	1.164	1.166	1.167	1.165	1.160	1.159	1.160	1.161	1.159	1.159	1.160	1.163	1.166	1.170	1.172	1.174	1.176	1.174
31	1.161	1.166	1.170	1.167	1.160	1.155	1.154	1.160	1.161	1.166	1.166	1.167	1.170	1.172	1.169	1.166	1.171	1.174	1.175	1.173
32	1.166	1.163	1.160	1.159	1.157	1.158	1.160	1.166	1.167	1.170	1.169	1.171	1.170	1.173	1.172	1.174	1.172	1.169	1.163	1.159
33	1.163	1.158	1.158	1.161	1.166	1.167	1.171	1.170	1.171	1.170	1.171	1.170	1.171	1.172	1.170	1.163	1.154	1.148	1.142	1.138
34	1.159	1.160	1.164	1.166	1.171	1.170	1.167	1.165	1.165	1.169	1.169	1.161	1.155	1.148	1.142	1.140	1.144	1.145	1.146	1.148
35	1.167	1.170	1.169	1.161	1.164	1.159	1.163	1.158	1.157	1.149	1.144	1.134	1.134	1.134	1.142	1.148	1.150	1.154	1.155	1.157
36	1.170	1.167	1.164	1.160	1.157	1.154	1.148	1.144	1.135	1.137	1.137	1.144	1.144	1.148	1.146	1.151	1.155	1.158	1.155	1.159
37	1.157	1.155	1.153	1.145	1.138	1.131	1.132	1.134	1.141	1.141	1.142	1.145	1.150	1.150	1.154	1.154	1.155	1.151	1.145	1.127
38	1.145	1.135	1.128	1.130	1.131	1.137	1.138	1.142	1.144	1.148	1.148	1.153	1.151	1.154	1.148	1.140	1.120	1.106	1.084	1.073
39	1.128	1.127	1.134	1.134	1.138	1.140	1.145	1.145	1.149	1.149	1.150	1.148	1.144	1.127	1.106	1.084	1.075	1.071	1.071	1.071
40	1.130	1.134	1.137	1.141	1.142	1.146	1.146	1.150	1.148	1.146	1.130	1.114	1.091	1.082	1.073	1.073	1.069	1.075	1.073	1.075
41	1.138	1.140	1.138	1.144	1.148	1.148	1.145	1.138	1.117	1.101	1.082	1.080	1.075	1.077	1.073	1.077	1.073	1.075	1.073	1.077
42	1.145	1.148	1.145	1.153	1.140	1.130	1.102	1.086	1.071	1.075	1.067	1.075	1.071	1.075	1.073	1.077	1.073	1.077	1.077	1.080
43	1.159	1.160	1.150	1.132	1.101	1.084	1.073	1.077	1.075	1.077	1.075	1.080	1.075	1.077	1.077	1.080	1.073	1.082	1.073	1.082
44	1.153	1.131	1.104	1.084	1.080	1.075	1.075	1.075	1.075	1.075	1.060	1.080	1.082	1.082	1.082	1.082	1.084	1.082	1.086	1.082
45	1.102	1.086	1.080	1.080	1.077	1.080	1.080	1.077	1.082	1.086	1.082	1.086	1.084	1.086	1.082	1.088	1.089	1.093	1.091	1.093
46	1.089	1.084	1.086	1.082	1.089	1.088	1.089	1.088	1.089	1.088	1.088	1.091	1.095	1.095	1.097	1.097	1.099	1.104	1.104	1.106
47	1.093	1.091	1.095	1.097	1.095	1.095	1.095	1.097	1.097	1.102	1.102	1.104	1.102	1.109	1.106	1.111	1.111	1.119	1.150	1.231
48	1.099	1.101	1.102	1.102	1.106	1.104	1.106	1.106	1.109	1.107	1.107	1.109	1.114	1.114	1.116	1.116	1.122	1.131	1.220	1.400
49	1.101	1.102	1.104	1.102	1.107	1.104	1.106	1.102	1.109	1.104	1.112	1.111	1.114	1.116	1.120	1.120	1.125	1.137	1.237	1.418
50	1.107	1.106	1.107	1.106	1.111	1.109	1.114	1.109	1.112	1.112	1.116	1.117	1.122	1.117	1.124	1.124	1.132	1.148	1.278	1.450
51	1.109	1.111	1.111	1.111	1.114	1.112	1.117	1.114	1.117	1.117	1.124	1.124	1.127	1.127	1.131	1.132	1.141	1.174	1.336	1.484
52	1.109	1.111	1.111	1.112	1.112	1.117	1.116	1.120	1.117	1.120	1.120	1.123	1.127	1.131	1.131	1.137	1.145	1.205	1.385	1.508
53	1.102	1.099	1.102	1.104	1.109	1.106	1.111	1.111	1.114	1.111	1.116	1.116	1.120	1.124	1.130	1.132	1.148	1.252	1.435	1.528
54	1.084	1.084	1.086	1.088	1.088	1.093	1.091	1.097	1.095	1.099	1.101	1.106	1.104	1.111	1.112	1.124	1.146	1.296	1.463	1.535
55	1.073	1.073	1.077	1.077	1.077	1.075	1.082	1.086	1.088	1.089	1.095	1.095	1.097	1.099	1.107	1.111	1.149	1.314	1.473	1.535
56	1.073	1.073	1.064	1.075	1.069	1.080	1.073	1.084	1.082	1.091	1.091	1.095	1.095	1.102	1.106	1.116	1.154	1.329	1.480	1.537
57	1.071	1.073	1.073	1.077	1.075	1.080	1.080	1.084	1.086	1.088	1.093	1.097	1.093	1.104	1.104	1.117	1.163	1.349	1.488	1.539
58	1.069	1.069	1.073	1.073	1.082	1.080	1.084	1.086	1.095	1.091	1.095	1.093	1.097	1.101	1.107	1.120	1.186	1.377	1.499	1.544
59	1.064	1.067	1.069	1.073	1.073	1.077	1.073	1.080	1.090	1.086	1.088	1.091	1.091	1.099	1.104	1.120	1.227	1.417	1.512	1.548
60	1.060	1.062	1.064	1.064	1.067	1.069	1.071	1.073	1.075	1.077	1.080	1.084	1.088	1.091	1.099	1.124	1.270	1.447	1.523	1.552
61	1.057	1.062	1.060	1.062	1.064	1.069	1.071	1.073	1.071	1.077	1.075	1.084	1.088	1.091	1.097	1.144	1.320	1.472	1.528	1.552
62	1.055	1.060	1.062	1.057	1.067	1.069	1.071	1.073	1.073	1.077	1.080	1.084	1.088	1.091	1.106	1.172	1.366	1.487	1.531	1.552
63	1.050	1.055	1.055	1.050	1.062	1.057	1.069	1.069	1.073	1.073	1.080	1.082	1.086	1.091	1.109	1.187	1.379	1.487	1.526	1.549

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 7

IR SCAN TIME 7.40 SEC
INITIAL TEMP 532.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	1.173	1.180	1.176	1.181	1.180	1.184	1.176	1.172	1.161	1.159	1.150	1.148	1.140	1.140	1.137	1.144	1.145	1.145	1.144	1.149
30	1.176	1.179	1.180	1.178	1.175	1.169	1.163	1.157	1.151	1.149	1.146	1.144	1.144	1.144	1.145	1.148	1.153	1.150	1.155	1.157
31	1.173	1.167	1.161	1.157	1.151	1.146	1.144	1.142	1.145	1.150	1.151	1.154	1.157	1.157	1.160	1.164	1.167	1.167	1.167	1.169
32	1.154	1.148	1.142	1.145	1.146	1.150	1.150	1.153	1.155	1.163	1.165	1.167	1.169	1.170	1.171	1.172	1.170	1.164	1.153	1.146
33	1.141	1.145	1.150	1.154	1.158	1.159	1.161	1.160	1.164	1.167	1.171	1.170	1.166	1.155	1.146	1.134	1.124	1.106	1.091	1.077
34	1.150	1.153	1.157	1.159	1.163	1.165	1.164	1.160	1.157	1.148	1.137	1.127	1.112	1.088	1.075	1.064	1.062	1.062	1.062	1.060
35	1.158	1.159	1.163	1.160	1.155	1.142	1.130	1.111	1.095	1.080	1.069	1.062	1.062	1.060	1.062	1.060	1.062	1.060	1.064	1.062
36	1.153	1.148	1.128	1.116	1.089	1.080	1.062	1.067	1.057	1.062	1.055	1.062	1.055	1.067	1.062	1.064	1.062	1.064	1.064	1.069
37	1.107	1.086	1.073	1.069	1.067	1.064	1.067	1.062	1.062	1.060	1.064	1.064	1.064	1.060	1.064	1.050	1.067	1.052	1.064	1.050
38	1.069	1.073	1.069	1.071	1.069	1.069	1.064	1.069	1.067	1.071	1.064	1.069	1.064	1.069	1.067	1.069	1.067	1.067	1.067	1.069
39	1.073	1.069	1.073	1.069	1.071	1.069	1.071	1.071	1.071	1.069	1.071	1.069	1.071	1.071	1.073	1.071	1.071	1.069	1.071	1.071
40	1.073	1.075	1.071	1.073	1.071	1.075	1.073	1.075	1.073	1.077	1.073	1.077	1.075	1.080	1.075	1.080	1.082	1.080	1.075	1.075
41	1.075	1.080	1.077	1.080	1.075	1.077	1.077	1.080	1.080	1.086	1.082	1.084	1.080	1.084	1.080	1.084	1.082	1.086	1.082	1.084
42	1.077	1.080	1.080	1.082	1.082	1.084	1.080	1.086	1.084	1.088	1.086	1.088	1.086	1.086	1.084	1.086	1.086	1.088	1.086	1.086
43	1.077	1.086	1.080	1.088	1.084	1.088	1.084	1.091	1.086	1.091	1.084	1.089	1.089	1.089	1.088	1.091	1.091	1.091	1.088	1.088
44	1.089	1.091	1.089	1.091	1.091	1.091	1.097	1.093	1.095	1.095	1.095	1.093	1.097	1.088	1.091	1.084	1.091	1.088	1.093	1.088
45	1.091	1.097	1.095	1.101	1.099	1.104	1.101	1.104	1.099	1.104	1.101	1.102	1.102	1.104	1.099	1.101	1.095	1.097	1.101	1.099
46	1.112	1.112	1.116	1.114	1.117	1.114	1.117	1.116	1.119	1.117	1.117	1.112	1.117	1.112	1.116	1.111	1.114	1.109	1.111	1.106
47	1.278	1.285	1.272	1.250	1.220	1.196	1.174	1.160	1.149	1.146	1.138	1.137	1.132	1.132	1.130	1.130	1.125	1.127	1.124	1.125
48	1.506	1.545	1.566	1.578	1.584	1.581	1.570	1.544	1.502	1.442	1.361	1.269	1.204	1.169	1.154	1.144	1.140	1.134	1.134	1.132
49	1.520	1.557	1.578	1.595	1.606	1.634	1.653	1.671	1.684	1.689	1.683	1.657	1.602	1.516	1.398	1.278	1.199	1.163	1.148	1.142
50	1.534	1.567	1.587	1.603	1.622	1.639	1.659	1.679	1.697	1.706	1.710	1.707	1.699	1.694	1.681	1.617	1.471	1.304	1.215	1.171
51	1.544	1.572	1.594	1.610	1.626	1.642	1.662	1.681	1.695	1.705	1.713	1.717	1.716	1.714	1.715	1.709	1.663	1.518	1.337	1.237
52	1.552	1.578	1.596	1.612	1.628	1.646	1.664	1.682	1.698	1.715	1.731	1.739	1.742	1.744	1.742	1.737	1.727	1.693	1.562	1.365
53	1.562	1.580	1.594	1.612	1.631	1.649	1.669	1.689	1.710	1.725	1.732	1.736	1.739	1.742	1.746	1.748	1.747	1.741	1.715	1.600
54	1.562	1.581	1.594	1.607	1.624	1.642	1.660	1.681	1.704	1.720	1.726	1.733	1.739	1.745	1.752	1.758	1.763	1.765	1.761	1.744
55	1.561	1.577	1.589	1.602	1.617	1.634	1.656	1.677	1.699	1.717	1.728	1.735	1.741	1.746	1.753	1.762	1.774	1.773	1.767	1.757
56	1.561	1.577	1.587	1.599	1.614	1.633	1.653	1.674	1.694	1.714	1.729	1.739	1.744	1.749	1.755	1.758	1.761	1.765	1.767	1.770
57	1.561	1.577	1.586	1.597	1.610	1.628	1.647	1.667	1.686	1.707	1.722	1.733	1.739	1.746	1.752	1.756	1.763	1.766	1.769	1.772
58	1.563	1.578	1.588	1.598	1.610	1.626	1.643	1.663	1.684	1.702	1.712	1.720	1.725	1.729	1.734	1.740	1.749	1.759	1.768	1.775
59	1.567	1.579	1.586	1.598	1.610	1.626	1.643	1.662	1.678	1.695	1.708	1.717	1.723	1.731	1.736	1.737	1.738	1.743	1.750	1.760
60	1.569	1.578	1.584	1.594	1.608	1.624	1.640	1.658	1.678	1.695	1.705	1.710	1.722	1.732	1.734	1.734	1.738	1.740	1.744	1.748
61	1.567	1.577	1.583	1.594	1.607	1.620	1.636	1.655	1.674	1.689	1.697	1.704	1.716	1.726	1.728	1.729	1.737	1.742	1.740	1.744
62	1.566	1.575	1.582	1.592	1.603	1.616	1.633	1.649	1.668	1.682	1.689	1.700	1.714	1.725	1.725	1.725	1.734	1.738	1.739	1.742
63	1.563	1.570	1.577	1.589	1.599	1.610	1.626	1.643	1.661	1.674	1.683	1.692	1.708	1.718	1.722	1.727	1.728	1.729	1.733	1.741

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 7

IR SCAN TIME 7.40 SEC
INITIAL TEMP 532.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	1.149	1.150	1.148	1.150	1.150	1.155	1.159	1.163	1.160	1.157	1.153	1.155	1.155	1.155	1.155	1.153	1.150	1.146	1.141	1.132
30	1.165	1.163	1.163	1.161	1.166	1.169	1.166	1.164	1.159	1.151	1.145	1.144	1.131	1.134	1.130	1.130	1.119	1.112	1.109	1.097
31	1.172	1.170	1.165	1.160	1.153	1.146	1.141	1.130	1.119	1.106	1.097	1.091	1.084	1.077	1.071	1.060	1.062	1.052	1.060	1.052
32	1.135	1.130	1.114	1.107	1.091	1.080	1.069	1.067	1.060	1.057	1.055	1.060	1.055	1.057	1.050	1.055	1.050	1.057	1.055	1.057
33	1.069	1.062	1.064	1.062	1.062	1.057	1.055	1.055	1.057	1.057	1.060	1.055	1.055	1.052	1.057	1.052	1.055	1.052	1.055	1.050
34	1.060	1.057	1.060	1.057	1.060	1.057	1.057	1.055	1.055	1.055	1.057	1.052	1.052	1.050	1.052	1.052	1.055	1.047	1.052	1.047
35	1.062	1.060	1.062	1.060	1.062	1.060	1.060	1.057	1.060	1.057	1.057	1.052	1.057	1.055	1.057	1.052	1.055	1.050	1.055	1.055
36	1.060	1.064	1.064	1.069	1.064	1.067	1.060	1.064	1.062	1.064	1.060	1.060	1.057	1.060	1.057	1.060	1.055	1.057	1.052	1.057
37	1.067	1.050	1.064	1.052	1.064	1.050	1.067	1.055	1.062	1.047	1.062	1.062	1.062	1.060	1.060	1.055	1.057	1.055	1.060	1.057
38	1.067	1.071	1.067	1.069	1.064	1.069	1.067	1.069	1.064	1.067	1.060	1.064	1.062	1.064	1.055	1.062	1.052	1.060	1.052	1.060
39	1.071	1.071	1.073	1.069	1.069	1.069	1.069	1.069	1.071	1.069	1.071	1.064	1.067	1.062	1.067	1.064	1.064	1.062	1.064	1.060
40	1.073	1.075	1.073	1.075	1.073	1.075	1.071	1.073	1.069	1.071	1.069	1.069	1.069	1.073	1.069	1.071	1.064	1.067	1.064	1.069
41	1.080	1.080	1.075	1.082	1.075	1.077	1.073	1.077	1.073	1.075	1.073	1.073	1.071	1.073	1.071	1.073	1.069	1.073	1.064	1.069
42	1.082	1.084	1.080	1.082	1.080	1.082	1.080	1.082	1.077	1.080	1.075	1.077	1.071	1.075	1.071	1.075	1.071	1.075	1.071	1.071
43	1.084	1.088	1.086	1.088	1.084	1.086	1.084	1.084	1.080	1.082	1.080	1.080	1.075	1.080	1.077	1.080	1.075	1.075	1.073	1.073
44	1.088	1.084	1.088	1.084	1.088	1.082	1.086	1.082	1.088	1.084	1.084	1.080	1.082	1.080	1.080	1.077	1.077	1.075	1.075	1.073
45	1.095	1.097	1.091	1.093	1.091	1.091	1.091	1.089	1.086	1.091	1.086	1.084	1.077	1.084	1.077	1.082	1.073	1.082	1.073	1.077
46	1.109	1.104	1.107	1.104	1.104	1.099	1.101	1.097	1.097	1.095	1.097	1.093	1.093	1.091	1.093	1.091	1.093	1.091	1.091	1.088
47	1.122	1.122	1.117	1.117	1.114	1.116	1.111	1.112	1.109	1.109	1.106	1.107	1.104	1.107	1.104	1.104	1.101	1.102	1.101	1.102
48	1.135	1.131	1.132	1.127	1.127	1.124	1.119	1.117	1.119	1.114	1.114	1.109	1.111	1.107	1.111	1.106	1.107	1.104	1.107	1.104
49	1.141	1.141	1.141	1.134	1.134	1.128	1.128	1.124	1.122	1.117	1.119	1.117	1.117	1.112	1.112	1.109	1.112	1.109	1.112	1.107
50	1.153	1.146	1.146	1.142	1.142	1.137	1.134	1.130	1.130	1.127	1.128	1.124	1.124	1.120	1.122	1.119	1.119	1.116	1.117	1.112
51	1.194	1.161	1.153	1.144	1.145	1.138	1.141	1.135	1.135	1.134	1.132	1.130	1.128	1.125	1.127	1.125	1.127	1.120	1.122	1.117
52	1.243	1.199	1.175	1.161	1.151	1.150	1.145	1.144	1.140	1.138	1.132	1.137	1.130	1.132	1.125	1.128	1.122	1.127	1.120	1.127
53	1.398	1.255	1.194	1.165	1.157	1.148	1.145	1.141	1.138	1.134	1.134	1.130	1.130	1.127	1.127	1.124	1.125	1.120	1.120	1.117
54	1.656	1.477	1.305	1.212	1.170	1.153	1.137	1.131	1.124	1.124	1.117	1.117	1.111	1.112	1.106	1.107	1.104	1.106	1.104	1.109
55	1.750	1.701	1.524	1.317	1.222	1.174	1.155	1.137	1.128	1.119	1.117	1.111	1.111	1.106	1.109	1.104	1.106	1.101	1.104	1.104
56	1.773	1.769	1.727	1.573	1.359	1.240	1.185	1.160	1.141	1.134	1.125	1.127	1.117	1.119	1.111	1.114	1.104	1.109	1.111	1.119
57	1.774	1.775	1.776	1.754	1.639	1.427	1.273	1.204	1.166	1.150	1.140	1.131	1.131	1.127	1.122	1.120	1.120	1.120	1.119	1.127
58	1.779	1.779	1.778	1.778	1.772	1.702	1.509	1.314	1.224	1.179	1.157	1.144	1.132	1.128	1.122	1.122	1.117	1.120	1.120	1.127
59	1.771	1.776	1.779	1.781	1.779	1.773	1.724	1.560	1.346	1.242	1.186	1.163	1.140	1.131	1.120	1.124	1.119	1.124	1.119	1.125
60	1.750	1.753	1.762	1.773	1.780	1.779	1.773	1.747	1.632	1.430	1.277	1.204	1.170	1.144	1.128	1.119	1.119	1.112	1.112	1.106
61	1.749	1.748	1.744	1.745	1.754	1.767	1.775	1.774	1.753	1.636	1.414	1.267	1.200	1.167	1.144	1.130	1.119	1.117	1.109	1.107
62	1.748	1.755	1.756	1.750	1.744	1.742	1.747	1.760	1.769	1.759	1.667	1.459	1.284	1.210	1.171	1.145	1.131	1.119	1.117	1.111
63	1.744	1.750	1.759	1.763	1.762	1.755	1.747	1.742	1.740	1.748	1.755	1.701	1.516	1.313	1.224	1.175	1.151	1.132	1.127	1.117

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 7

IR SCAN TIME 7.40 SEC
INITIAL TEMP 532.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	1.119	1.114	1.107	1.111	1.112	1.117	1.114	1.112	1.107	1.109	1.112	1.124	1.120	1.120	1.116	1.112	1.104	1.102	1.097	1.097
30	1.093	1.086	1.077	1.077	1.075	1.077	1.077	1.073	1.073	1.073	1.071	1.071	1.071	1.069	1.073	1.071	1.071	1.071	1.064	1.069
31	1.057	1.050	1.057	1.050	1.057	1.047	1.052	1.045	1.055	1.047	1.055	1.055	1.055	1.050	1.055	1.055	1.057	1.055	1.060	1.055
32	1.052	1.055	1.047	1.052	1.047	1.055	1.052	1.052	1.050	1.050	1.045	1.052	1.047	1.055	1.042	1.055	1.045	1.052	1.042	1.052
33	1.055	1.050	1.055	1.052	1.052	1.047	1.047	1.045	1.050	1.047	1.050	1.045	1.050	1.047	1.050	1.047	1.052	1.047	1.047	1.045
34	1.055	1.050	1.052	1.045	1.050	1.047	1.052	1.045	1.047	1.047	1.047	1.045	1.047	1.045	1.045	1.045	1.047	1.045	1.045	1.042
35	1.055	1.047	1.055	1.050	1.052	1.050	1.050	1.045	1.050	1.050	1.052	1.045	1.047	1.045	1.050	1.045	1.047	1.042	1.047	1.045
36	1.055	1.057	1.052	1.055	1.050	1.055	1.055	1.052	1.050	1.052	1.050	1.055	1.047	1.050	1.045	1.050	1.047	1.052	1.042	1.045
37	1.057	1.052	1.057	1.055	1.055	1.055	1.055	1.052	1.052	1.052	1.055	1.052	1.052	1.050	1.052	1.050	1.050	1.045	1.047	1.045
38	1.052	1.060	1.050	1.057	1.050	1.057	1.050	1.057	1.047	1.055	1.052	1.057	1.052	1.057	1.050	1.055	1.047	1.052	1.050	1.055
39	1.062	1.057	1.062	1.062	1.060	1.060	1.060	1.055	1.057	1.055	1.057	1.052	1.060	1.047	1.055	1.045	1.055	1.047	1.052	1.045
40	1.064	1.067	1.064	1.064	1.060	1.062	1.060	1.064	1.060	1.064	1.060	1.062	1.055	1.060	1.055	1.060	1.057	1.060	1.055	1.055
41	1.067	1.071	1.067	1.069	1.064	1.069	1.064	1.067	1.062	1.064	1.060	1.067	1.062	1.064	1.060	1.064	1.057	1.062	1.057	1.060
42	1.069	1.071	1.069	1.071	1.071	1.071	1.069	1.069	1.064	1.067	1.064	1.069	1.064	1.069	1.064	1.067	1.062	1.064	1.057	1.064
43	1.071	1.073	1.071	1.073	1.071	1.073	1.069	1.073	1.067	1.071	1.069	1.071	1.069	1.069	1.064	1.067	1.060	1.057	1.062	1.067
44	1.073	1.073	1.075	1.073	1.075	1.073	1.073	1.073	1.071	1.069	1.071	1.069	1.071	1.071	1.069	1.069	1.069	1.067	1.067	1.064
45	1.071	1.077	1.071	1.080	1.071	1.077	1.069	1.075	1.073	1.075	1.073	1.075	1.073	1.075	1.069	1.071	1.069	1.073	1.069	1.073
46	1.088	1.089	1.088	1.088	1.088	1.084	1.084	1.082	1.084	1.069	1.086	1.071	1.082	1.069	1.080	1.069	1.080	1.067	1.082	1.064
47	1.097	1.097	1.095	1.097	1.095	1.095	1.093	1.091	1.091	1.093	1.093	1.093	1.091	1.089	1.088	1.091	1.089	1.093	1.088	1.088
48	1.106	1.102	1.104	1.102	1.104	1.101	1.099	1.097	1.097	1.099	1.099	1.095	1.097	1.095	1.097	1.095	1.093	1.093	1.093	1.093
49	1.109	1.106	1.107	1.104	1.106	1.102	1.104	1.104	1.106	1.102	1.101	1.099	1.101	1.099	1.102	1.097	1.097	1.095	1.097	1.097
50	1.117	1.112	1.112	1.109	1.111	1.107	1.111	1.104	1.107	1.104	1.107	1.104	1.107	1.102	1.106	1.102	1.106	1.104	1.102	1.102
51	1.120	1.117	1.120	1.116	1.116	1.112	1.114	1.112	1.114	1.111	1.111	1.109	1.109	1.109	1.111	1.106	1.107	1.104	1.107	1.106
52	1.119	1.122	1.117	1.120	1.116	1.120	1.117	1.119	1.114	1.117	1.112	1.116	1.111	1.116	1.111	1.112	1.107	1.111	1.106	1.111
53	1.119	1.117	1.122	1.119	1.122	1.117	1.119	1.111	1.117	1.111	1.117	1.111	1.117	1.109	1.112	1.107	1.111	1.106	1.111	1.106
54	1.109	1.114	1.112	1.119	1.117	1.120	1.119	1.122	1.117	1.120	1.117	1.119	1.116	1.117	1.116	1.117	1.112	1.114	1.109	1.111
55	1.114	1.114	1.122	1.122	1.124	1.124	1.127	1.122	1.125	1.122	1.127	1.124	1.124	1.124	1.124	1.119	1.119	1.116	1.116	1.111
56	1.120	1.127	1.127	1.130	1.128	1.130	1.128	1.131	1.128	1.134	1.130	1.131	1.127	1.130	1.125	1.125	1.122	1.124	1.117	1.120
57	1.128	1.134	1.135	1.130	1.135	1.137	1.137	1.135	1.134	1.134	1.134	1.134	1.135	1.132	1.132	1.135	1.128	1.125	1.120	1.122
58	1.124	1.131	1.128	1.130	1.128	1.130	1.127	1.130	1.127	1.127	1.122	1.124	1.120	1.122	1.119	1.120	1.114	1.116	1.109	1.111
59	1.120	1.124	1.119	1.125	1.124	1.127	1.122	1.125	1.120	1.127	1.120	1.125	1.120	1.124	1.119	1.119	1.114	1.117	1.112	1.116
60	1.107	1.106	1.106	1.102	1.104	1.093	1.097	1.091	1.097	1.091	1.095	1.088	1.091	1.084	1.088	1.082	1.084	1.077	1.080	1.073
61	1.104	1.104	1.102	1.099	1.095	1.095	1.093	1.095	1.091	1.089	1.086	1.088	1.084	1.086	1.080	1.080	1.075	1.077	1.075	1.075
62	1.109	1.104	1.106	1.102	1.104	1.093	1.095	1.091	1.095	1.093	1.091	1.086	1.088	1.084	1.084	1.080	1.080	1.077	1.080	1.075
63	1.114	1.109	1.109	1.104	1.106	1.099	1.099	1.095	1.095	1.093	1.093	1.086	1.089	1.086	1.088	1.084	1.084	1.080	1.080	1.075

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 7

IR SCAN TIME 7.40 SEC
INITIAL TEMP 532.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	1.093	1.091	1.091	1.091	1.086	1.091	1.088	1.088	1.084	1.088	1.086	1.088	1.086	1.089	1.084	1.084	1.082	1.082	1.082	1.084
30	1.069	1.064	1.062	1.057	1.060	1.060	1.057	1.057	1.062	1.057	1.060	1.057	1.047	1.057	1.057	1.055	1.055	1.052	1.052	1.045
31	1.057	1.052	1.055	1.052	1.057	1.055	1.060	1.057	1.055	1.052	1.052	1.050	1.052	1.050	1.055	1.050	1.050	1.042	1.045	1.045
32	1.045	1.057	1.045	1.052	1.042	1.052	1.045	1.052	1.045	1.055	1.052	1.052	1.045	1.050	1.045	1.047	1.045	1.045	1.045	1.042
33	1.050	1.047	1.052	1.050	1.047	1.045	1.050	1.047	1.050	1.050	1.050	1.039	1.047	1.039	1.047	1.037	1.045	1.034	1.039	1.034
34	1.045	1.042	1.047	1.045	1.045	1.039	1.047	1.042	1.045	1.045	1.042	1.039	1.045	1.045	1.042	1.037	1.039	1.037	1.039	1.037
35	1.047	1.042	1.045	1.042	1.045	1.042	1.047	1.042	1.039	1.039	1.045	1.042	1.042	1.037	1.042	1.039	1.039	1.037	1.037	1.034
36	1.045	1.047	1.045	1.047	1.039	1.045	1.042	1.045	1.042	1.042	1.037	1.045	1.039	1.045	1.039	1.039	1.037	1.039	1.039	1.042
37	1.047	1.047	1.047	1.042	1.045	1.042	1.045	1.042	1.045	1.039	1.042	1.042	1.045	1.039	1.039	1.037	1.042	1.039	1.042	1.037
38	1.045	1.050	1.045	1.050	1.045	1.050	1.045	1.050	1.042	1.047	1.045	1.047	1.045	1.047	1.042	1.047	1.042	1.045	1.042	1.047
39	1.052	1.045	1.050	1.042	1.047	1.045	1.052	1.050	1.055	1.047	1.047	1.045	1.047	1.045	1.052	1.047	1.050	1.047	1.047	1.045
40	1.052	1.055	1.052	1.055	1.050	1.055	1.052	1.055	1.050	1.047	1.042	1.052	1.045	1.052	1.045	1.050	1.042	1.050	1.039	1.047
41	1.057	1.062	1.060	1.060	1.055	1.060	1.052	1.057	1.052	1.057	1.052	1.060	1.052	1.055	1.050	1.052	1.047	1.057	1.052	1.055
42	1.060	1.062	1.060	1.067	1.062	1.062	1.057	1.057	1.052	1.060	1.055	1.060	1.057	1.057	1.055	1.055	1.052	1.055	1.052	1.055
43	1.062	1.067	1.062	1.062	1.060	1.064	1.057	1.060	1.060	1.060	1.057	1.062	1.055	1.057	1.055	1.060	1.055	1.060	1.055	1.062
44	1.069	1.067	1.067	1.062	1.062	1.060	1.060	1.062	1.062	1.060	1.064	1.060	1.060	1.055	1.057	1.055	1.060	1.057	1.062	1.060
45	1.069	1.071	1.064	1.069	1.069	1.069	1.069	1.071	1.069	1.069	1.064	1.067	1.064	1.069	1.064	1.067	1.064	1.067	1.060	1.064
46	1.075	1.067	1.077	1.067	1.080	1.080	1.077	1.075	1.075	1.075	1.077	1.075	1.075	1.073	1.075	1.073	1.075	1.073	1.075	1.071
47	1.086	1.091	1.091	1.091	1.088	1.088	1.086	1.089	1.084	1.088	1.084	1.086	1.080	1.088	1.082	1.088	1.080	1.086	1.080	1.086
48	1.095	1.093	1.097	1.097	1.097	1.095	1.093	1.091	1.093	1.091	1.093	1.088	1.091	1.091	1.093	1.091	1.089	1.088	1.088	1.091
49	1.097	1.097	1.104	1.102	1.104	1.095	1.095	1.091	1.095	1.095	1.093	1.093	1.093	1.091	1.093	1.093	1.091	1.088	1.091	1.091
50	1.106	1.104	1.106	1.104	1.104	1.104	1.102	1.102	1.101	1.097	1.099	1.095	1.101	1.097	1.097	1.093	1.099	1.097	1.097	1.095
51	1.107	1.104	1.106	1.104	1.106	1.104	1.106	1.102	1.102	1.101	1.102	1.102	1.104	1.099	1.101	1.099	1.101	1.099	1.101	1.097
52	1.107	1.111	1.107	1.107	1.106	1.109	1.106	1.109	1.106	1.107	1.104	1.107	1.102	1.104	1.104	1.106	1.102	1.102	1.099	1.101
53	1.111	1.104	1.107	1.104	1.106	1.101	1.104	1.097	1.101	1.095	1.097	1.093	1.097	1.093	1.095	1.091	1.093	1.091	1.089	1.091
54	1.107	1.107	1.102	1.106	1.095	1.095	1.084	1.086	1.077	1.084	1.073	1.082	1.075	1.084	1.077	1.080	1.071	1.073	1.069	1.077
55	1.112	1.109	1.107	1.104	1.101	1.091	1.086	1.082	1.077	1.077	1.077	1.077	1.075	1.071	1.071	1.069	1.069	1.069	1.071	1.069
56	1.116	1.116	1.107	1.109	1.101	1.101	1.089	1.088	1.082	1.084	1.080	1.080	1.073	1.075	1.071	1.073	1.069	1.073	1.069	1.073
57	1.119	1.116	1.116	1.112	1.109	1.104	1.095	1.089	1.086	1.082	1.082	1.077	1.071	1.075	1.075	1.071	1.073	1.069	1.073	1.069
58	1.104	1.107	1.102	1.104	1.097	1.097	1.088	1.088	1.080	1.084	1.075	1.080	1.073	1.073	1.071	1.071	1.069	1.071	1.069	1.071
59	1.112	1.112	1.109	1.109	1.106	1.109	1.104	1.107	1.102	1.102	1.095	1.097	1.091	1.093	1.095	1.097	1.093	1.095	1.091	1.091
60	1.077	1.075	1.077	1.073	1.073	1.069	1.071	1.064	1.069	1.064	1.067	1.060	1.060	1.057	1.060	1.057	1.060	1.055	1.052	1.052
61	1.071	1.073	1.069	1.071	1.064	1.069	1.057	1.064	1.057	1.064	1.052	1.057	1.050	1.057	1.050	1.055	1.042	1.052	1.045	1.055
62	1.077	1.073	1.073	1.069	1.073	1.069	1.069	1.064	1.069	1.062	1.064	1.060	1.060	1.055	1.057	1.055	1.057	1.052	1.052	1.047
63	1.080	1.073	1.073	1.071	1.073	1.071	1.073	1.069	1.069	1.064	1.067	1.062	1.062	1.057	1.060	1.057	1.060	1.052	1.055	1.047

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 7

IR SCAN TIME 7.40 SEC
INITIAL TEMP 532.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	1.082	1.086	1.084	1.084	1.080	1.082	1.077	1.084	1.080	1.084
30	1.050	1.050	1.047	1.031	1.050	1.047	1.047	1.047	1.045	1.045
31	1.045	1.042	1.045	1.042	1.039	1.037	1.042	1.037	1.042	1.037
32	1.039	1.042	1.037	1.042	1.037	1.042	1.037	1.037	1.037	1.037
33	1.042	1.034	1.037	1.034	1.034	1.028	1.034	1.037	1.037	1.034
34	1.034	1.034	1.034	1.031	1.034	1.028	1.028	1.028	1.034	1.022
35	1.037	1.037	1.037	1.034	1.034	1.034	1.034	1.034	1.031	1.028
36	1.034	1.039	1.034	1.042	1.037	1.037	1.031	1.037	1.031	1.039
37	1.039	1.037	1.039	1.037	1.039	1.031	1.039	1.034	1.037	1.034
38	1.042	1.045	1.039	1.045	1.042	1.045	1.039	1.042	1.037	1.042
39	1.047	1.045	1.050	1.047	1.047	1.045	1.047	1.042	1.045	1.047
40	1.042	1.052	1.042	1.057	1.045	1.050	1.045	1.050	1.045	1.052
41	1.052	1.055	1.047	1.052	1.047	1.052	1.047	1.057	1.045	1.052
42	1.055	1.055	1.052	1.055	1.052	1.055	1.050	1.055	1.050	1.057
43	1.055	1.057	1.052	1.057	1.055	1.057	1.055	1.060	1.057	1.057
44	1.057	1.055	1.057	1.055	1.060	1.057	1.060	1.057	1.060	1.055
45	1.062	1.067	1.057	1.067	1.062	1.064	1.057	1.064	1.062	1.067
46	1.075	1.073	1.073	1.073	1.073	1.073	1.073	1.071	1.071	1.069
47	1.082	1.084	1.077	1.086	1.082	1.086	1.082	1.082	1.077	1.082
48	1.089	1.088	1.089	1.086	1.088	1.082	1.086	1.082	1.086	1.082
49	1.093	1.091	1.089	1.091	1.091	1.088	1.091	1.086	1.088	1.088
50	1.095	1.093	1.095	1.095	1.095	1.093	1.093	1.091	1.093	1.093
51	1.097	1.095	1.097	1.097	1.097	1.093	1.095	1.093	1.097	1.093
52	1.097	1.101	1.099	1.101	1.095	1.095	1.093	1.097	1.093	1.097
53	1.089	1.088	1.089	1.089	1.089	1.088	1.086	1.086	1.084	1.084
54	1.069	1.077	1.073	1.077	1.069	1.073	1.069	1.069	1.069	1.071
55	1.067	1.064	1.069	1.050	1.062	1.045	1.062	1.047	1.060	1.045
56	1.064	1.064	1.062	1.062	1.060	1.062	1.057	1.060	1.055	1.055
57	1.069	1.064	1.064	1.057	1.060	1.060	1.055	1.060	1.055	1.055
58	1.069	1.069	1.060	1.062	1.057	1.060	1.057	1.060	1.052	1.057
59	1.088	1.091	1.088	1.091	1.084	1.086	1.082	1.086	1.082	1.084
60	1.055	1.052	1.052	1.047	1.047	1.047	1.045	1.045	1.045	1.042
61	1.047	1.047	1.039	1.047	1.042	1.047	1.039	1.042	1.037	1.042
62	1.050	1.042	1.047	1.037	1.045	1.037	1.045	1.034	1.039	1.031
63	1.052	1.047	1.050	1.042	1.045	1.042	1.045	1.042	1.042	1.037

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 7

IR SCAN TIME 7.40 SEC
INITIAL TEMP 532.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	1.045	1.045	1.047	1.055	1.052	1.057	1.057	1.071	1.069	1.073	1.069	1.077	1.077	1.091	1.104	1.216	1.400	1.493	1.528	1.548
65	1.039	1.050	1.045	1.055	1.055	1.060	1.057	1.067	1.069	1.073	1.073	1.080	1.080	1.093	1.111	1.235	1.411	1.492	1.524	1.543
66	1.042	1.047	1.047	1.052	1.050	1.060	1.062	1.069	1.069	1.075	1.071	1.077	1.084	1.095	1.120	1.266	1.429	1.494	1.522	1.541
67	1.042	1.045	1.047	1.055	1.052	1.060	1.064	1.069	1.069	1.075	1.071	1.082	1.084	1.097	1.142	1.325	1.453	1.500	1.526	1.542
68	1.050	1.047	1.047	1.045	1.052	1.057	1.067	1.071	1.073	1.073	1.073	1.073	1.084	1.097	1.175	1.361	1.464	1.501	1.524	1.539
69	1.052	1.055	1.050	1.050	1.050	1.057	1.067	1.071	1.071	1.075	1.073	1.077	1.084	1.102	1.210	1.388	1.469	1.503	1.523	1.535
70	1.052	1.052	1.055	1.045	1.057	1.062	1.069	1.069	1.073	1.071	1.075	1.080	1.089	1.111	1.251	1.410	1.474	1.501	1.521	1.531
71	1.052	1.052	1.050	1.055	1.052	1.060	1.067	1.075	1.069	1.075	1.069	1.077	1.080	1.119	1.271	1.420	1.472	1.500	1.517	1.528
72	1.050	1.055	1.055	1.055	1.055	1.060	1.071	1.069	1.077	1.075	1.075	1.080	1.089	1.130	1.297	1.428	1.475	1.499	1.515	1.527
73	1.047	1.050	1.047	1.055	1.055	1.064	1.069	1.077	1.075	1.077	1.073	1.080	1.088	1.140	1.308	1.430	1.473	1.497	1.512	1.523
74	1.045	1.047	1.047	1.055	1.055	1.064	1.071	1.080	1.077	1.080	1.073	1.082	1.088	1.166	1.339	1.441	1.476	1.497	1.512	1.522
75	1.045	1.050	1.050	1.052	1.052	1.062	1.071	1.080	1.077	1.077	1.071	1.080	1.099	1.216	1.377	1.452	1.480	1.499	1.511	1.519
76	1.045	1.050	1.052	1.050	1.055	1.062	1.073	1.077	1.077	1.073	1.075	1.082	1.117	1.260	1.401	1.458	1.482	1.498	1.509	1.518
77	1.045	1.050	1.045	1.052	1.052	1.060	1.073	1.080	1.077	1.077	1.073	1.084	1.144	1.313	1.424	1.465	1.486	1.499	1.508	1.517
78	1.042	1.045	1.050	1.050	1.055	1.055	1.071	1.071	1.077	1.071	1.077	1.082	1.179	1.347	1.435	1.466	1.485	1.497	1.507	1.513
79	1.045	1.045	1.052	1.052	1.055	1.057	1.071	1.073	1.075	1.073	1.075	1.084	1.191	1.358	1.437	1.466	1.484	1.495	1.504	1.511
80	1.047	1.060	1.071	1.073	1.064	1.075	1.086	1.089	1.080	1.077	1.073	1.095	1.212	1.374	1.440	1.466	1.482	1.494	1.501	1.508
81	1.069	1.082	1.073	1.091	1.106	1.107	1.091	1.086	1.088	1.091	1.077	1.097	1.226	1.381	1.439	1.465	1.480	1.490	1.497	1.504
82	1.084	1.099	1.097	1.127	1.124	1.122	1.107	1.097	1.080	1.082	1.091	1.124	1.265	1.399	1.443	1.466	1.478	1.486	1.492	1.498
83	1.104	1.111	1.112	1.158	1.142	1.131	1.109	1.104	1.099	1.101	1.099	1.150	1.309	1.415	1.450	1.468	1.478	1.484	1.489	1.494
84	1.160	1.157	1.178	1.210	1.231	1.183	1.135	1.116	1.102	1.093	1.111	1.180	1.337	1.422	1.452	1.467	1.477	1.481	1.485	1.488
85	1.280	1.208	1.212	1.242	1.273	1.220	1.154	1.116	1.093	1.106	1.117	1.213	1.361	1.425	1.449	1.463	1.472	1.478	1.482	1.485
86	1.291	1.210	1.203	1.232	1.282	1.233	1.158	1.104	1.080	1.077	1.124	1.264	1.389	1.430	1.447	1.457	1.464	1.470	1.476	1.478
87	1.190	1.154	1.151	1.150	1.173	1.170	1.145	1.116	1.101	1.104	1.153	1.304	1.432	1.479	1.499	1.506	1.511	1.511	1.505	1.497
88	1.153	1.142	1.140	1.145	1.148	1.149	1.154	1.149	1.137	1.141	1.150	1.148	1.150	1.164	1.176	1.195	1.226	1.269	1.313	1.352
89	1.131	1.114	1.101	1.099	1.112	1.125	1.124	1.120	1.114	1.117	1.128	1.134	1.128	1.131	1.130	1.135	1.135	1.138	1.137	1.141
90	1.073	1.071	1.071	1.073	1.071	1.077	1.080	1.088	1.095	1.109	1.124	1.127	1.117	1.120	1.116	1.119	1.117	1.124	1.119	1.122
91	1.042	1.050	1.050	1.057	1.052	1.067	1.069	1.080	1.088	1.104	1.116	1.117	1.109	1.117	1.109	1.112	1.109	1.114	1.112	1.114
92	1.039	1.042	1.045	1.042	1.050	1.042	1.052	1.045	1.064	1.080	1.106	1.106	1.111	1.104	1.107	1.104	1.109	1.107	1.111	1.106
93	1.037	1.042	1.039	1.045	1.037	1.045	1.037	1.050	1.055	1.060	1.099	1.107	1.104	1.109	1.104	1.109	1.104	1.106	1.104	1.107
94	1.034	1.037	1.042	1.037	1.039	1.034	1.042	1.039	1.055	1.069	1.091	1.102	1.106	1.106	1.107	1.104	1.107	1.102	1.104	1.104
95	1.037	1.034	1.034	1.034	1.034	1.045	1.045	1.055	1.047	1.067	1.084	1.107	1.102	1.109	1.104	1.107	1.104	1.104	1.097	1.101
96	1.064	1.060	1.057	1.050	1.052	1.052	1.062	1.062	1.069	1.073	1.093	1.107	1.106	1.101	1.106	1.104	1.107	1.102	1.101	1.099
97	1.080	1.077	1.077	1.077	1.073	1.073	1.073	1.069	1.071	1.077	1.095	1.106	1.104	1.102	1.106	1.102	1.104	1.099	1.101	1.099
98	1.089	1.082	1.084	1.086	1.091	1.088	1.082	1.080	1.084	1.093	1.112	1.111	1.106	1.104	1.107	1.104	1.107	1.106	1.106	1.104

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 7

IR SCAN TIME 7.40 SEC
INITIAL TEMP 532.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	1.561	1.569	1.574	1.585	1.595	1.606	1.620	1.636	1.652	1.666	1.675	1.686	1.701	1.713	1.721	1.728	1.731	1.730	1.727	1.735
65	1.555	1.563	1.570	1.580	1.589	1.599	1.610	1.628	1.647	1.662	1.668	1.680	1.695	1.709	1.714	1.719	1.722	1.730	1.730	1.733
66	1.554	1.562	1.569	1.579	1.585	1.596	1.609	1.623	1.640	1.656	1.665	1.674	1.689	1.702	1.707	1.714	1.717	1.723	1.728	1.733
67	1.551	1.558	1.565	1.575	1.581	1.593	1.606	1.619	1.635	1.652	1.660	1.670	1.685	1.694	1.698	1.706	1.711	1.717	1.720	1.727
68	1.549	1.554	1.562	1.572	1.580	1.591	1.603	1.615	1.629	1.646	1.662	1.668	1.677	1.686	1.690	1.698	1.706	1.709	1.710	1.716
69	1.545	1.552	1.559	1.568	1.577	1.588	1.599	1.613	1.627	1.641	1.657	1.668	1.671	1.677	1.686	1.693	1.700	1.702	1.706	1.712
70	1.540	1.548	1.555	1.565	1.573	1.582	1.593	1.606	1.621	1.636	1.652	1.666	1.673	1.675	1.680	1.690	1.695	1.697	1.703	1.707
71	1.536	1.546	1.554	1.563	1.571	1.582	1.591	1.600	1.613	1.628	1.643	1.659	1.670	1.675	1.679	1.680	1.682	1.687	1.692	1.695
72	1.536	1.544	1.552	1.561	1.571	1.581	1.594	1.601	1.610	1.622	1.638	1.653	1.664	1.668	1.673	1.675	1.677	1.682	1.687	1.690
73	1.533	1.541	1.547	1.556	1.566	1.572	1.584	1.597	1.605	1.614	1.630	1.644	1.655	1.663	1.666	1.668	1.673	1.678	1.681	1.683
74	1.530	1.537	1.543	1.551	1.560	1.566	1.576	1.589	1.598	1.611	1.626	1.637	1.648	1.656	1.659	1.661	1.666	1.672	1.675	1.678
75	1.527	1.535	1.541	1.548	1.555	1.566	1.575	1.587	1.599	1.609	1.621	1.632	1.641	1.650	1.654	1.655	1.657	1.662	1.668	1.673
76	1.527	1.534	1.541	1.547	1.555	1.565	1.579	1.590	1.601	1.612	1.622	1.632	1.641	1.652	1.656	1.654	1.654	1.656	1.661	1.669
77	1.525	1.531	1.538	1.546	1.554	1.563	1.573	1.586	1.598	1.611	1.621	1.630	1.639	1.648	1.652	1.655	1.656	1.655	1.656	1.659
78	1.521	1.526	1.534	1.543	1.553	1.563	1.574	1.584	1.595	1.605	1.618	1.629	1.636	1.641	1.644	1.646	1.650	1.654	1.657	1.658
79	1.518	1.525	1.533	1.538	1.546	1.556	1.568	1.579	1.591	1.601	1.612	1.623	1.634	1.640	1.645	1.650	1.655	1.657	1.660	1.663
80	1.514	1.521	1.528	1.536	1.544	1.553	1.564	1.577	1.588	1.600	1.608	1.618	1.625	1.633	1.640	1.645	1.649	1.652	1.654	1.656
81	1.512	1.519	1.526	1.533	1.541	1.550	1.560	1.573	1.584	1.597	1.608	1.616	1.623	1.628	1.632	1.636	1.640	1.644	1.648	1.651
82	1.503	1.511	1.520	1.529	1.536	1.545	1.554	1.566	1.578	1.590	1.602	1.613	1.621	1.626	1.628	1.633	1.636	1.639	1.641	1.645
83	1.498	1.503	1.510	1.518	1.527	1.536	1.545	1.557	1.570	1.584	1.598	1.610	1.619	1.625	1.629	1.633	1.634	1.636	1.638	1.641
84	1.492	1.496	1.501	1.507	1.516	1.526	1.536	1.547	1.557	1.569	1.581	1.592	1.600	1.609	1.615	1.620	1.625	1.629	1.632	1.635
85	1.486	1.489	1.491	1.496	1.503	1.513	1.524	1.535	1.546	1.557	1.567	1.577	1.584	1.590	1.595	1.600	1.604	1.608	1.612	1.616
86	1.482	1.482	1.486	1.488	1.496	1.503	1.513	1.523	1.534	1.545	1.555	1.563	1.570	1.575	1.581	1.583	1.586	1.588	1.592	1.594
87	1.492	1.489	1.487	1.487	1.490	1.495	1.502	1.510	1.520	1.531	1.542	1.552	1.559	1.563	1.568	1.571	1.574	1.575	1.576	1.576
88	1.388	1.428	1.448	1.464	1.485	1.499	1.495	1.477	1.455	1.446	1.454	1.477	1.496	1.507	1.511	1.513	1.517	1.521	1.526	1.533
89	1.140	1.144	1.144	1.148	1.148	1.149	1.151	1.150	1.149	1.151	1.150	1.155	1.157	1.160	1.159	1.163	1.163	1.166	1.166	1.169
90	1.119	1.125	1.122	1.127	1.124	1.128	1.127	1.128	1.127	1.130	1.127	1.130	1.130	1.135	1.137	1.140	1.137	1.142	1.141	1.145
91	1.109	1.112	1.111	1.114	1.112	1.117	1.116	1.119	1.119	1.124	1.119	1.120	1.119	1.125	1.124	1.127	1.124	1.128	1.128	1.132
92	1.107	1.106	1.107	1.106	1.111	1.106	1.109	1.107	1.111	1.109	1.116	1.111	1.117	1.117	1.119	1.119	1.124	1.120	1.122	1.124
93	1.099	1.107	1.097	1.104	1.099	1.107	1.097	1.106	1.101	1.111	1.106	1.122	1.145	1.158	1.127	1.120	1.117	1.119	1.117	1.124
94	1.106	1.104	1.104	1.097	1.102	1.101	1.104	1.106	1.106	1.104	1.116	1.190	1.334	1.362	1.267	1.163	1.131	1.114	1.116	1.111
95	1.101	1.104	1.099	1.102	1.099	1.101	1.097	1.101	1.099	1.104	1.104	1.127	1.210	1.257	1.203	1.140	1.114	1.112	1.109	1.114
96	1.102	1.101	1.101	1.095	1.097	1.095	1.097	1.095	1.099	1.095	1.102	1.099	1.104	1.102	1.107	1.104	1.109	1.106	1.107	1.104
97	1.101	1.102	1.099	1.091	1.089	1.091	1.093	1.093	1.093	1.091	1.095	1.093	1.095	1.095	1.104	1.102	1.106	1.104	1.107	1.104
98	1.099	1.099	1.097	1.093	1.093	1.091	1.093	1.091	1.089	1.091	1.091	1.091	1.097	1.095	1.097	1.099	1.102	1.099	1.104	1.102

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 7

IR SCAN TIME 7.40 SEC
INITIAL TEMP 532.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	1.740	1.742	1.746	1.754	1.762	1.768	1.767	1.761	1.750	1.741	1.735	1.737	1.712	1.573	1.358	1.243	1.189	1.159	1.138	1.127
65	1.737	1.742	1.742	1.743	1.745	1.752	1.760	1.764	1.767	1.762	1.751	1.739	1.729	1.723	1.654	1.472	1.296	1.218	1.173	1.148
66	1.736	1.738	1.742	1.744	1.744	1.741	1.741	1.745	1.751	1.756	1.759	1.759	1.748	1.737	1.730	1.716	1.580	1.358	1.239	1.189
67	1.734	1.739	1.742	1.744	1.748	1.749	1.746	1.741	1.734	1.732	1.732	1.741	1.749	1.751	1.745	1.737	1.711	1.580	1.365	1.246
68	1.724	1.730	1.735	1.737	1.739	1.744	1.749	1.750	1.746	1.737	1.727	1.719	1.718	1.727	1.739	1.747	1.744	1.734	1.641	1.425
69	1.716	1.721	1.724	1.730	1.736	1.739	1.743	1.747	1.749	1.746	1.740	1.732	1.721	1.713	1.713	1.719	1.728	1.733	1.735	1.677
70	1.712	1.715	1.715	1.715	1.724	1.729	1.731	1.737	1.739	1.740	1.743	1.741	1.742	1.739	1.730	1.723	1.719	1.717	1.718	1.726
71	1.698	1.705	1.711	1.711	1.713	1.721	1.727	1.728	1.727	1.730	1.736	1.739	1.741	1.745	1.748	1.748	1.737	1.723	1.714	1.713
72	1.693	1.697	1.700	1.703	1.709	1.714	1.718	1.721	1.721	1.718	1.721	1.726	1.728	1.731	1.735	1.737	1.741	1.745	1.742	1.733
73	1.686	1.691	1.697	1.700	1.698	1.700	1.707	1.709	1.710	1.712	1.712	1.714	1.714	1.712	1.714	1.719	1.722	1.727	1.733	1.743
74	1.681	1.684	1.689	1.689	1.687	1.689	1.696	1.703	1.706	1.707	1.706	1.704	1.703	1.702	1.701	1.701	1.704	1.703	1.702	1.709
75	1.679	1.682	1.678	1.677	1.680	1.686	1.693	1.701	1.704	1.704	1.703	1.701	1.700	1.702	1.699	1.698	1.701	1.703	1.702	1.700
76	1.676	1.678	1.676	1.675	1.680	1.691	1.697	1.700	1.703	1.700	1.699	1.695	1.691	1.694	1.694	1.698	1.701	1.700	1.699	1.700
77	1.663	1.672	1.678	1.676	1.676	1.683	1.690	1.694	1.693	1.693	1.690	1.688	1.687	1.687	1.686	1.686	1.685	1.685	1.686	1.688
78	1.661	1.667	1.671	1.675	1.680	1.684	1.684	1.685	1.685	1.684	1.683	1.682	1.680	1.679	1.680	1.678	1.674	1.672	1.671	1.670
79	1.666	1.669	1.673	1.675	1.677	1.678	1.679	1.677	1.676	1.674	1.673	1.675	1.674	1.673	1.674	1.675	1.674	1.674	1.672	1.669
80	1.658	1.661	1.664	1.667	1.668	1.669	1.670	1.671	1.670	1.671	1.670	1.669	1.667	1.666	1.664	1.664	1.661	1.660	1.659	1.658
81	1.654	1.657	1.660	1.662	1.663	1.663	1.663	1.662	1.661	1.663	1.665	1.665	1.664	1.662	1.661	1.661	1.661	1.663	1.664	1.662
82	1.648	1.652	1.653	1.654	1.654	1.655	1.656	1.657	1.659	1.661	1.663	1.663	1.661	1.660	1.659	1.659	1.658	1.659	1.659	1.658
83	1.643	1.648	1.651	1.652	1.653	1.653	1.654	1.656	1.658	1.660	1.661	1.664	1.665	1.665	1.665	1.664	1.664	1.662	1.658	1.653
84	1.638	1.642	1.645	1.648	1.650	1.653	1.656	1.658	1.660	1.662	1.663	1.664	1.665	1.666	1.667	1.666	1.668	1.667	1.663	1.658
85	1.620	1.625	1.630	1.634	1.640	1.646	1.650	1.654	1.656	1.658	1.659	1.661	1.662	1.663	1.666	1.668	1.669	1.668	1.664	1.662
86	1.598	1.601	1.606	1.610	1.614	1.619	1.623	1.626	1.631	1.637	1.642	1.647	1.652	1.656	1.659	1.661	1.665	1.668	1.669	1.668
87	1.578	1.579	1.582	1.584	1.586	1.588	1.589	1.590	1.592	1.593	1.595	1.598	1.603	1.608	1.616	1.625	1.635	1.645	1.655	1.663
88	1.539	1.547	1.554	1.559	1.560	1.559	1.556	1.550	1.543	1.536	1.528	1.522	1.515	1.512	1.509	1.510	1.513	1.519	1.527	1.540
89	1.169	1.172	1.174	1.179	1.180	1.183	1.183	1.185	1.183	1.182	1.181	1.182	1.181	1.181	1.181	1.180	1.180	1.183	1.184	1.187
90	1.144	1.148	1.146	1.151	1.154	1.158	1.158	1.159	1.157	1.160	1.158	1.159	1.155	1.158	1.155	1.159	1.157	1.158	1.158	1.163
91	1.131	1.134	1.131	1.138	1.141	1.145	1.145	1.148	1.145	1.148	1.146	1.148	1.146	1.146	1.145	1.146	1.148	1.150	1.149	1.153
92	1.127	1.127	1.131	1.131	1.135	1.135	1.138	1.137	1.141	1.140	1.141	1.140	1.142	1.141	1.144	1.144	1.145	1.144	1.148	1.148
93	1.119	1.127	1.120	1.130	1.128	1.134	1.132	1.137	1.135	1.153	1.175	1.172	1.149	1.144	1.142	1.142	1.142	1.145	1.144	1.146
94	1.119	1.112	1.122	1.119	1.127	1.127	1.128	1.128	1.148	1.249	1.361	1.341	1.235	1.167	1.148	1.141	1.142	1.142	1.145	1.144
95	1.114	1.119	1.117	1.122	1.120	1.127	1.124	1.128	1.131	1.161	1.231	1.243	1.183	1.149	1.141	1.140	1.137	1.142	1.141	1.142
96	1.112	1.111	1.117	1.117	1.122	1.122	1.125	1.124	1.128	1.128	1.132	1.132	1.140	1.137	1.138	1.137	1.140	1.137	1.141	1.142
97	1.104	1.104	1.111	1.111	1.117	1.117	1.120	1.122	1.125	1.124	1.130	1.128	1.132	1.132	1.135	1.132	1.137	1.134	1.135	1.138
98	1.109	1.104	1.111	1.106	1.114	1.114	1.117	1.117	1.124	1.124	1.128	1.128	1.131	1.128	1.130	1.128	1.134	1.134	1.138	1.137

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 7

IR SCAN TIME 7.40 SEC
INITIAL TEMP 532.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	1.117	1.119	1.109	1.111	1.104	1.104	1.099	1.099	1.095	1.095	1.091	1.091	1.088	1.091	1.088	1.088	1.084	1.084	1.080	1.082
65	1.130	1.124	1.117	1.116	1.111	1.111	1.106	1.104	1.099	1.099	1.095	1.097	1.095	1.091	1.088	1.091	1.088	1.091	1.086	1.088
66	1.153	1.137	1.125	1.120	1.116	1.114	1.111	1.109	1.104	1.104	1.097	1.097	1.095	1.097	1.093	1.095	1.091	1.089	1.088	1.086
67	1.190	1.161	1.135	1.128	1.111	1.112	1.101	1.107	1.099	1.104	1.095	1.097	1.088	1.091	1.086	1.093	1.084	1.088	1.082	1.086
68	1.271	1.203	1.163	1.137	1.125	1.116	1.112	1.109	1.106	1.102	1.099	1.093	1.091	1.088	1.089	1.086	1.088	1.086	1.084	1.080
69	1.482	1.295	1.216	1.170	1.142	1.124	1.112	1.109	1.102	1.102	1.097	1.097	1.091	1.091	1.088	1.086	1.082	1.082	1.080	1.080
70	1.696	1.526	1.319	1.228	1.175	1.145	1.125	1.111	1.109	1.104	1.101	1.095	1.093	1.091	1.089	1.088	1.088	1.080	1.080	1.075
71	1.718	1.710	1.594	1.386	1.250	1.190	1.150	1.130	1.111	1.109	1.102	1.102	1.095	1.095	1.091	1.091	1.086	1.084	1.080	1.080
72	1.723	1.715	1.704	1.605	1.399	1.255	1.195	1.159	1.134	1.116	1.109	1.104	1.104	1.097	1.095	1.091	1.091	1.084	1.086	1.082
73	1.748	1.746	1.730	1.709	1.643	1.471	1.290	1.212	1.167	1.142	1.119	1.112	1.104	1.102	1.095	1.095	1.093	1.091	1.086	1.086
74	1.719	1.725	1.730	1.733	1.721	1.675	1.526	1.327	1.220	1.175	1.140	1.122	1.104	1.106	1.093	1.095	1.088	1.093	1.089	1.084
75	1.690	1.683	1.686	1.697	1.710	1.715	1.688	1.555	1.350	1.233	1.179	1.146	1.120	1.111	1.104	1.097	1.093	1.093	1.091	1.088
76	1.699	1.693	1.689	1.683	1.676	1.674	1.677	1.665	1.561	1.374	1.247	1.187	1.151	1.124	1.111	1.102	1.097	1.091	1.089	1.086
77	1.693	1.696	1.696	1.692	1.683	1.671	1.661	1.650	1.633	1.543	1.361	1.232	1.181	1.153	1.127	1.109	1.102	1.097	1.091	1.089
78	1.673	1.678	1.684	1.688	1.689	1.687	1.682	1.670	1.650	1.621	1.536	1.369	1.234	1.179	1.153	1.131	1.112	1.101	1.093	1.088
79	1.664	1.658	1.657	1.659	1.665	1.670	1.672	1.677	1.676	1.663	1.634	1.563	1.408	1.253	1.184	1.155	1.141	1.120	1.106	1.095
80	1.659	1.659	1.658	1.657	1.652	1.651	1.650	1.651	1.654	1.659	1.657	1.639	1.580	1.441	1.276	1.194	1.155	1.142	1.128	1.117
81	1.659	1.654	1.650	1.651	1.650	1.649	1.645	1.642	1.640	1.636	1.633	1.633	1.627	1.598	1.496	1.334	1.219	1.167	1.142	1.135
82	1.659	1.656	1.649	1.647	1.649	1.650	1.647	1.640	1.633	1.632	1.630	1.625	1.616	1.607	1.601	1.555	1.404	1.244	1.173	1.146
83	1.653	1.653	1.651	1.646	1.643	1.646	1.650	1.654	1.651	1.643	1.634	1.627	1.619	1.610	1.599	1.580	1.515	1.373	1.234	1.172
84	1.653	1.652	1.651	1.649	1.646	1.644	1.645	1.646	1.649	1.650	1.646	1.644	1.639	1.628	1.615	1.600	1.581	1.531	1.407	1.257
85	1.658	1.654	1.653	1.654	1.654	1.653	1.652	1.653	1.654	1.652	1.650	1.652	1.652	1.648	1.643	1.634	1.614	1.589	1.548	1.441
86	1.665	1.662	1.662	1.664	1.666	1.666	1.666	1.665	1.665	1.665	1.666	1.666	1.663	1.660	1.657	1.653	1.645	1.630	1.609	1.578
87	1.670	1.673	1.674	1.673	1.672	1.670	1.670	1.671	1.671	1.672	1.672	1.672	1.670	1.666	1.664	1.660	1.654	1.646	1.639	1.636
88	1.556	1.578	1.603	1.629	1.654	1.681	1.704	1.721	1.725	1.724	1.723	1.722	1.718	1.713	1.708	1.705	1.704	1.704	1.705	1.711
89	1.189	1.195	1.197	1.205	1.210	1.220	1.228	1.239	1.244	1.249	1.254	1.261	1.269	1.274	1.273	1.271	1.266	1.265	1.265	1.272
90	1.164	1.167	1.166	1.169	1.170	1.173	1.173	1.176	1.175	1.178	1.182	1.190	1.195	1.202	1.198	1.196	1.189	1.183	1.179	1.178
91	1.153	1.157	1.155	1.158	1.155	1.158	1.157	1.159	1.159	1.163	1.165	1.173	1.180	1.185	1.185	1.184	1.175	1.170	1.164	1.166
92	1.150	1.148	1.150	1.148	1.151	1.150	1.153	1.151	1.154	1.157	1.170	1.182	1.181	1.183	1.192	1.205	1.199	1.174	1.167	1.164
93	1.145	1.149	1.148	1.150	1.150	1.165	1.203	1.209	1.176	1.164	1.165	1.172	1.174	1.182	1.184	1.189	1.183	1.176	1.171	1.170
94	1.148	1.146	1.149	1.148	1.158	1.230	1.347	1.359	1.268	1.192	1.173	1.174	1.181	1.185	1.190	1.190	1.187	1.181	1.178	1.174
95	1.142	1.146	1.141	1.148	1.148	1.160	1.194	1.215	1.183	1.167	1.165	1.176	1.183	1.192	1.196	1.199	1.194	1.189	1.184	1.185
96	1.146	1.146	1.149	1.149	1.151	1.153	1.154	1.154	1.157	1.160	1.172	1.180	1.190	1.195	1.202	1.201	1.203	1.195	1.196	1.194
97	1.142	1.142	1.146	1.149	1.154	1.157	1.159	1.158	1.158	1.160	1.171	1.182	1.192	1.200	1.208	1.211	1.209	1.200	1.197	1.195
98	1.145	1.145	1.148	1.149	1.157	1.159	1.163	1.161	1.163	1.165	1.171	1.185	1.196	1.204	1.212	1.213	1.211	1.198	1.190	1.188

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 7

IR SCAN TIME 7.40 SEC
INITIAL TEMP 532.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	1.080	1.077	1.073	1.077	1.073	1.075	1.071	1.071	1.069	1.069	1.064	1.069	1.062	1.067	1.055	1.064	1.057	1.060	1.050	1.055
65	1.080	1.082	1.080	1.082	1.077	1.077	1.073	1.071	1.069	1.071	1.067	1.069	1.064	1.064	1.060	1.062	1.060	1.062	1.060	1.057
66	1.086	1.086	1.082	1.084	1.080	1.080	1.075	1.075	1.071	1.071	1.069	1.071	1.067	1.067	1.060	1.064	1.057	1.062	1.057	1.060
67	1.082	1.080	1.077	1.077	1.075	1.073	1.073	1.073	1.069	1.069	1.064	1.067	1.060	1.064	1.057	1.062	1.057	1.055	1.052	1.050
68	1.080	1.071	1.075	1.069	1.073	1.069	1.071	1.064	1.069	1.060	1.060	1.052	1.060	1.052	1.055	1.047	1.055	1.052	1.050	1.045
69	1.077	1.080	1.073	1.073	1.069	1.069	1.064	1.069	1.064	1.067	1.060	1.060	1.055	1.055	1.050	1.052	1.050	1.052	1.045	1.050
70	1.075	1.075	1.073	1.071	1.071	1.069	1.067	1.064	1.062	1.060	1.062	1.055	1.057	1.052	1.052	1.045	1.047	1.045	1.047	1.042
71	1.075	1.077	1.073	1.075	1.071	1.071	1.067	1.069	1.062	1.067	1.060	1.064	1.060	1.057	1.050	1.050	1.047	1.050	1.045	1.047
72	1.084	1.080	1.080	1.073	1.073	1.069	1.069	1.069	1.069	1.067	1.064	1.060	1.062	1.055	1.055	1.052	1.055	1.050	1.052	1.045
73	1.080	1.082	1.080	1.080	1.075	1.073	1.069	1.071	1.069	1.071	1.067	1.067	1.057	1.060	1.055	1.057	1.050	1.055	1.045	1.050
74	1.084	1.082	1.077	1.082	1.075	1.075	1.071	1.073	1.069	1.071	1.067	1.064	1.060	1.062	1.060	1.060	1.055	1.055	1.050	1.055
75	1.077	1.082	1.073	1.080	1.069	1.073	1.064	1.075	1.067	1.069	1.060	1.067	1.057	1.064	1.055	1.060	1.052	1.057	1.050	1.055
76	1.088	1.086	1.084	1.077	1.077	1.075	1.073	1.073	1.071	1.069	1.069	1.064	1.067	1.062	1.060	1.057	1.057	1.047	1.052	1.042
77	1.084	1.086	1.082	1.082	1.075	1.075	1.073	1.073	1.071	1.071	1.069	1.069	1.064	1.067	1.060	1.060	1.055	1.057	1.052	1.055
78	1.088	1.084	1.084	1.080	1.082	1.073	1.073	1.073	1.073	1.071	1.071	1.064	1.067	1.060	1.062	1.057	1.060	1.052	1.055	1.047
79	1.089	1.084	1.082	1.080	1.077	1.073	1.075	1.071	1.071	1.064	1.067	1.064	1.064	1.062	1.062	1.055	1.055	1.052	1.055	1.047
80	1.102	1.089	1.084	1.082	1.075	1.073	1.069	1.071	1.069	1.069	1.062	1.064	1.057	1.060	1.055	1.055	1.050	1.055	1.047	1.052
81	1.125	1.117	1.101	1.091	1.084	1.082	1.077	1.073	1.069	1.073	1.069	1.071	1.069	1.071	1.067	1.064	1.062	1.064	1.062	1.064
82	1.127	1.127	1.116	1.114	1.099	1.093	1.080	1.075	1.064	1.064	1.055	1.060	1.052	1.060	1.055	1.057	1.047	1.052	1.045	1.047
83	1.140	1.127	1.117	1.119	1.116	1.117	1.109	1.109	1.099	1.091	1.082	1.075	1.069	1.064	1.057	1.057	1.042	1.050	1.034	1.045
84	1.176	1.144	1.127	1.124	1.112	1.111	1.111	1.111	1.111	1.109	1.109	1.106	1.101	1.093	1.097	1.084	1.075	1.067	1.060	1.052
85	1.288	1.189	1.144	1.127	1.116	1.112	1.109	1.111	1.106	1.107	1.102	1.107	1.104	1.107	1.104	1.107	1.101	1.101	1.093	1.089
86	1.484	1.324	1.204	1.149	1.128	1.116	1.116	1.109	1.109	1.104	1.104	1.102	1.106	1.106	1.109	1.109	1.111	1.106	1.106	1.102
87	1.621	1.542	1.393	1.246	1.170	1.137	1.122	1.112	1.112	1.109	1.111	1.107	1.109	1.104	1.104	1.104	1.111	1.109	1.109	1.104
88	1.715	1.702	1.633	1.469	1.282	1.188	1.144	1.130	1.120	1.122	1.120	1.122	1.119	1.117	1.111	1.112	1.111	1.114	1.111	1.109
89	1.277	1.282	1.267	1.230	1.180	1.158	1.144	1.140	1.131	1.131	1.124	1.127	1.120	1.119	1.114	1.116	1.109	1.109	1.104	1.104
90	1.174	1.173	1.166	1.159	1.151	1.146	1.141	1.140	1.134	1.132	1.127	1.127	1.117	1.119	1.109	1.112	1.104	1.109	1.102	1.106
91	1.163	1.160	1.153	1.148	1.144	1.146	1.142	1.144	1.140	1.141	1.135	1.134	1.127	1.127	1.117	1.120	1.112	1.114	1.106	1.107
92	1.164	1.159	1.154	1.148	1.149	1.148	1.150	1.149	1.150	1.145	1.144	1.140	1.137	1.134	1.134	1.128	1.128	1.120	1.119	1.114
93	1.165	1.165	1.160	1.160	1.160	1.163	1.159	1.159	1.157	1.158	1.155	1.155	1.149	1.151	1.146	1.144	1.140	1.140	1.132	1.132
94	1.174	1.172	1.174	1.175	1.176	1.179	1.180	1.178	1.179	1.174	1.175	1.174	1.174	1.170	1.170	1.165	1.163	1.158	1.154	1.149
95	1.184	1.190	1.193	1.200	1.203	1.207	1.206	1.210	1.207	1.207	1.203	1.201	1.196	1.196	1.193	1.193	1.188	1.186	1.183	1.182
96	1.199	1.202	1.209	1.210	1.212	1.212	1.216	1.215	1.217	1.214	1.212	1.207	1.205	1.202	1.204	1.205	1.206	1.206	1.205	1.204
97	1.200	1.202	1.204	1.203	1.202	1.202	1.203	1.202	1.202	1.201	1.200	1.196	1.199	1.196	1.202	1.202	1.209	1.209	1.214	1.215
98	1.191	1.193	1.196	1.197	1.198	1.195	1.195	1.193	1.193	1.193	1.196	1.196	1.200	1.200	1.203	1.206	1.211	1.217	1.221	1.225

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 7

IR SCAN TIME 7.40 SEC
INITIAL TEMP 532.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	1.047	1.055	1.047	1.055	1.042	1.047	1.042	1.047	1.042	1.042
65	1.047	1.052	1.047	1.052	1.047	1.050	1.045	1.045	1.042	1.042
66	1.052	1.055	1.047	1.052	1.045	1.050	1.050	1.045	1.042	1.039
67	1.047	1.050	1.047	1.047	1.037	1.045	1.037	1.037	1.034	1.037
68	1.047	1.039	1.045	1.042	1.045	1.037	1.037	1.034	1.031	1.028
69	1.031	1.042	1.028	1.039	1.022	1.034	1.025	1.031	1.022	1.028
70	1.045	1.037	1.039	1.034	1.031	1.028	1.028	1.028	1.028	1.028
71	1.042	1.042	1.037	1.037	1.031	1.034	1.028	1.031	1.025	1.031
72	1.045	1.039	1.042	1.037	1.039	1.034	1.034	1.028	1.028	1.028
73	1.042	1.047	1.042	1.042	1.037	1.037	1.031	1.031	1.028	1.031
74	1.047	1.050	1.042	1.042	1.034	1.039	1.034	1.034	1.025	1.028
75	1.045	1.047	1.042	1.045	1.037	1.037	1.031	1.031	1.028	1.034
76	1.047	1.039	1.047	1.037	1.039	1.031	1.034	1.028	1.031	1.022
77	1.047	1.045	1.042	1.045	1.042	1.039	1.031	1.034	1.028	1.031
78	1.052	1.047	1.047	1.042	1.039	1.037	1.037	1.034	1.031	1.028
79	1.050	1.045	1.047	1.042	1.042	1.037	1.039	1.034	1.034	1.028
80	1.045	1.047	1.039	1.045	1.037	1.039	1.034	1.034	1.028	1.031
81	1.062	1.064	1.060	1.060	1.055	1.057	1.052	1.055	1.050	1.052
82	1.042	1.045	1.042	1.042	1.037	1.037	1.028	1.031	1.028	1.028
83	1.034	1.042	1.031	1.039	1.028	1.034	1.019	1.031	1.015	1.028
84	1.050	1.045	1.039	1.039	1.034	1.028	1.029	1.025	1.022	1.028
85	1.084	1.080	1.071	1.069	1.057	1.050	1.039	1.039	1.031	1.034
86	1.104	1.099	1.095	1.088	1.084	1.077	1.073	1.069	1.069	1.055
87	1.102	1.099	1.104	1.104	1.101	1.093	1.088	1.084	1.082	1.077
88	1.102	1.101	1.102	1.104	1.095	1.093	1.089	1.086	1.080	1.080
89	1.093	1.093	1.088	1.089	1.088	1.086	1.082	1.077	1.071	1.073
90	1.093	1.097	1.088	1.095	1.088	1.093	1.082	1.082	1.071	1.075
91	1.102	1.104	1.102	1.104	1.102	1.104	1.095	1.095	1.084	1.088
92	1.112	1.109	1.109	1.107	1.112	1.109	1.111	1.106	1.107	1.101
93	1.127	1.127	1.122	1.127	1.124	1.128	1.127	1.131	1.127	1.127
94	1.149	1.148	1.150	1.149	1.151	1.150	1.155	1.154	1.151	1.148
95	1.179	1.182	1.182	1.184	1.183	1.187	1.188	1.190	1.185	1.184
96	1.206	1.207	1.211	1.212	1.217	1.223	1.228	1.231	1.233	1.231
97	1.222	1.224	1.231	1.242	1.268	1.306	1.350	1.370	1.380	1.387
98	1.233	1.241	1.253	1.279	1.335	1.402	1.463	1.486	1.491	1.480

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 7.40 SEC
HRFR = 0.398E-01

GROUP 7

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	0.046	0.051	0.058	0.062	0.066	0.065	0.065	0.065	0.066	0.063	0.063	0.062	0.061	0.062	0.062	0.063	0.065	0.067	0.068	0.068
30	0.054	0.060	0.063	0.064	0.065	0.064	0.062	0.061	0.062	0.062	0.061	0.061	0.062	0.063	0.064	0.066	0.067	0.068	0.069	0.068
31	0.062	0.064	0.066	0.065	0.062	0.060	0.059	0.062	0.062	0.064	0.064	0.065	0.066	0.067	0.065	0.064	0.066	0.068	0.068	0.067
32	0.064	0.063	0.062	0.061	0.060	0.061	0.062	0.064	0.065	0.066	0.065	0.066	0.066	0.067	0.067	0.068	0.067	0.065	0.063	0.061
33	0.063	0.061	0.061	0.062	0.064	0.065	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.067	0.066	0.063	0.059	0.056	0.054	0.052
34	0.061	0.062	0.063	0.064	0.066	0.066	0.065	0.064	0.064	0.065	0.065	0.062	0.060	0.056	0.054	0.053	0.055	0.055	0.056	0.056
35	0.065	0.066	0.065	0.062	0.063	0.061	0.063	0.061	0.060	0.057	0.055	0.051	0.051	0.051	0.054	0.056	0.057	0.059	0.060	0.060
36	0.066	0.065	0.063	0.062	0.060	0.059	0.056	0.055	0.051	0.052	0.052	0.055	0.055	0.056	0.056	0.058	0.060	0.061	0.060	0.061
37	0.060	0.060	0.059	0.055	0.052	0.049	0.050	0.051	0.053	0.053	0.054	0.055	0.057	0.057	0.059	0.059	0.060	0.058	0.055	0.048
38	0.055	0.051	0.048	0.049	0.049	0.052	0.052	0.054	0.055	0.056	0.056	0.059	0.058	0.059	0.056	0.053	0.045	0.039	0.031	0.027
39	0.048	0.048	0.051	0.051	0.052	0.053	0.055	0.055	0.057	0.057	0.057	0.056	0.055	0.048	0.039	0.031	0.027	0.026	0.026	0.026
40	0.049	0.051	0.052	0.053	0.054	0.056	0.056	0.057	0.056	0.056	0.049	0.043	0.034	0.030	0.027	0.027	0.025	0.027	0.027	0.027
41	0.052	0.053	0.052	0.055	0.056	0.056	0.055	0.052	0.044	0.037	0.030	0.029	0.027	0.028	0.027	0.028	0.027	0.027	0.027	0.028
42	0.055	0.056	0.055	0.059	0.053	0.049	0.038	0.031	0.026	0.027	0.024	0.027	0.026	0.027	0.027	0.028	0.027	0.028	0.028	0.029
43	0.061	0.062	0.057	0.050	0.037	0.031	0.027	0.028	0.027	0.028	0.027	0.029	0.027	0.028	0.028	0.029	0.027	0.030	0.027	0.030
44	0.059	0.049	0.039	0.031	0.029	0.027	0.027	0.027	0.027	0.027	0.029	0.029	0.030	0.030	0.030	0.030	0.031	0.030	0.031	0.030
45	0.038	0.031	0.029	0.029	0.028	0.029	0.029	0.028	0.030	0.031	0.030	0.031	0.031	0.031	0.030	0.032	0.033	0.034	0.034	0.034
46	0.033	0.031	0.031	0.030	0.032	0.032	0.033	0.032	0.033	0.032	0.032	0.034	0.035	0.035	0.036	0.036	0.036	0.039	0.039	0.039
47	0.034	0.034	0.035	0.036	0.035	0.035	0.035	0.036	0.036	0.038	0.038	0.039	0.038	0.041	0.039	0.041	0.041	0.044	0.057	0.094
48	0.036	0.037	0.038	0.038	0.039	0.039	0.039	0.039	0.041	0.040	0.040	0.041	0.043	0.043	0.043	0.043	0.046	0.049	0.068	0.187
49	0.037	0.038	0.039	0.038	0.040	0.039	0.039	0.038	0.041	0.039	0.042	0.041	0.043	0.043	0.045	0.045	0.047	0.052	0.097	0.199
50	0.040	0.039	0.040	0.039	0.041	0.041	0.043	0.041	0.042	0.042	0.043	0.044	0.046	0.044	0.046	0.046	0.050	0.056	0.117	0.221
51	0.041	0.041	0.041	0.041	0.043	0.042	0.044	0.043	0.044	0.044	0.046	0.046	0.048	0.048	0.049	0.050	0.053	0.068	0.149	0.246
52	0.041	0.041	0.041	0.042	0.042	0.044	0.043	0.045	0.044	0.045	0.045	0.048	0.048	0.049	0.049	0.052	0.055	0.082	0.177	0.265
53	0.038	0.036	0.038	0.039	0.041	0.039	0.041	0.041	0.043	0.041	0.043	0.043	0.045	0.046	0.049	0.050	0.056	0.104	0.210	0.281
54	0.031	0.031	0.031	0.032	0.032	0.034	0.034	0.036	0.035	0.036	0.037	0.039	0.039	0.041	0.042	0.046	0.056	0.126	0.230	0.287
55	0.027	0.027	0.028	0.028	0.028	0.027	0.030	0.031	0.032	0.033	0.035	0.035	0.036	0.036	0.040	0.041	0.057	0.136	0.238	0.287
56	0.027	0.027	0.023	0.027	0.025	0.029	0.027	0.031	0.030	0.034	0.034	0.035	0.035	0.038	0.039	0.043	0.059	0.145	0.243	0.289
57	0.026	0.027	0.027	0.028	0.027	0.029	0.029	0.031	0.031	0.032	0.034	0.036	0.034	0.039	0.039	0.044	0.063	0.156	0.249	0.290
58	0.025	0.025	0.027	0.027	0.030	0.029	0.031	0.031	0.035	0.034	0.035	0.034	0.036	0.037	0.040	0.045	0.073	0.173	0.259	0.294
59	0.023	0.024	0.025	0.027	0.027	0.028	0.027	0.029	0.029	0.031	0.032	0.034	0.034	0.036	0.039	0.045	0.092	0.198	0.268	0.298
60	0.021	0.022	0.023	0.023	0.024	0.025	0.026	0.027	0.027	0.028	0.029	0.031	0.032	0.034	0.036	0.046	0.113	0.218	0.277	0.302
61	0.021	0.022	0.021	0.022	0.023	0.025	0.026	0.027	0.026	0.028	0.027	0.031	0.032	0.034	0.036	0.055	0.139	0.237	0.281	0.302
62	0.020	0.021	0.022	0.021	0.024	0.025	0.026	0.027	0.027	0.028	0.029	0.031	0.032	0.034	0.039	0.067	0.166	0.248	0.283	0.301
63	0.018	0.020	0.020	0.018	0.022	0.021	0.025	0.025	0.027	0.027	0.029	0.030	0.031	0.034	0.041	0.074	0.174	0.248	0.280	0.299

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 7.40 SEC
GROUP 7 HRFR = 0.398E-01

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	0.067	0.070	0.069	0.071	0.070	0.072	0.069	0.067	0.062	0.061	0.057	0.056	0.053	0.053	0.052	0.055	0.055	0.055	0.055	0.057
30	0.069	0.070	0.070	0.069	0.068	0.065	0.063	0.060	0.058	0.057	0.056	0.055	0.055	0.055	0.055	0.056	0.059	0.057	0.060	0.060
31	0.067	0.065	0.062	0.060	0.058	0.056	0.055	0.054	0.055	0.057	0.058	0.059	0.060	0.060	0.062	0.063	0.065	0.065	0.065	0.065
32	0.059	0.056	0.054	0.055	0.056	0.057	0.057	0.059	0.060	0.063	0.064	0.065	0.065	0.066	0.066	0.067	0.066	0.063	0.059	0.056
33	0.053	0.055	0.057	0.059	0.061	0.061	0.062	0.062	0.063	0.065	0.066	0.066	0.064	0.060	0.056	0.051	0.046	0.039	0.034	0.028
34	0.057	0.059	0.060	0.061	0.063	0.064	0.063	0.062	0.060	0.056	0.052	0.048	0.042	0.032	0.027	0.023	0.022	0.022	0.022	0.021
35	0.061	0.061	0.063	0.062	0.060	0.054	0.049	0.041	0.035	0.029	0.025	0.022	0.022	0.021	0.022	0.021	0.022	0.021	0.023	0.022
36	0.059	0.056	0.048	0.043	0.033	0.029	0.022	0.024	0.021	0.022	0.020	0.022	0.020	0.024	0.022	0.023	0.022	0.023	0.023	0.025
37	0.040	0.031	0.027	0.025	0.024	0.023	0.024	0.022	0.022	0.021	0.023	0.023	0.023	0.021	0.023	0.018	0.024	0.019	0.023	0.018
38	0.025	0.027	0.025	0.026	0.025	0.025	0.023	0.025	0.024	0.026	0.023	0.025	0.023	0.025	0.024	0.025	0.024	0.024	0.024	0.025
39	0.027	0.025	0.027	0.025	0.026	0.025	0.026	0.026	0.026	0.025	0.026	0.025	0.026	0.026	0.027	0.026	0.026	0.025	0.026	0.026
40	0.027	0.027	0.026	0.027	0.026	0.027	0.027	0.027	0.027	0.028	0.027	0.028	0.027	0.029	0.027	0.029	0.030	0.029	0.027	0.027
41	0.027	0.029	0.028	0.029	0.027	0.028	0.028	0.029	0.029	0.031	0.030	0.031	0.029	0.031	0.029	0.031	0.030	0.031	0.030	0.031
42	0.028	0.029	0.029	0.030	0.030	0.031	0.029	0.031	0.031	0.032	0.031	0.032	0.031	0.031	0.031	0.031	0.031	0.032	0.031	0.031
43	0.028	0.031	0.029	0.032	0.031	0.032	0.031	0.034	0.031	0.034	0.031	0.033	0.033	0.033	0.032	0.034	0.034	0.034	0.032	0.032
44	0.033	0.034	0.033	0.034	0.034	0.034	0.036	0.034	0.035	0.035	0.035	0.034	0.036	0.032	0.034	0.031	0.034	0.032	0.034	0.032
45	0.034	0.036	0.035	0.037	0.036	0.039	0.037	0.039	0.036	0.039	0.037	0.038	0.038	0.039	0.036	0.037	0.035	0.036	0.037	0.036
46	0.042	0.042	0.043	0.043	0.044	0.043	0.044	0.043	0.044	0.044	0.044	0.042	0.044	0.042	0.043	0.041	0.043	0.041	0.041	0.039
47	0.117	0.121	0.114	0.103	0.089	0.078	0.068	0.062	0.057	0.056	0.052	0.052	0.050	0.050	0.049	0.049	0.047	0.048	0.046	0.047
48	0.263	0.296	0.314	0.326	0.331	0.329	0.318	0.295	0.260	0.215	0.163	0.113	0.081	0.065	0.059	0.055	0.053	0.051	0.051	0.050
49	0.274	0.306	0.326	0.342	0.363	0.383	0.405	0.426	0.442	0.449	0.441	0.409	0.349	0.271	0.186	0.117	0.079	0.063	0.056	0.054
50	0.286	0.315	0.334	0.350	0.369	0.388	0.411	0.435	0.459	0.471	0.477	0.473	0.462	0.455	0.439	0.365	0.236	0.131	0.086	0.066
51	0.294	0.320	0.341	0.357	0.373	0.391	0.415	0.439	0.456	0.470	0.482	0.486	0.485	0.482	0.483	0.475	0.415	0.273	0.149	0.097
52	0.302	0.325	0.343	0.359	0.376	0.396	0.417	0.440	0.460	0.484	0.506	0.518	0.524	0.525	0.524	0.515	0.501	0.454	0.311	0.165
53	0.311	0.328	0.341	0.359	0.380	0.400	0.424	0.449	0.477	0.497	0.507	0.514	0.518	0.522	0.529	0.533	0.530	0.521	0.483	0.347
54	0.311	0.328	0.341	0.354	0.371	0.392	0.412	0.438	0.468	0.490	0.500	0.510	0.519	0.528	0.538	0.548	0.556	0.559	0.553	0.525
55	0.310	0.325	0.336	0.348	0.365	0.383	0.407	0.434	0.462	0.487	0.502	0.513	0.521	0.530	0.540	0.555	0.575	0.574	0.563	0.546
56	0.310	0.325	0.334	0.346	0.361	0.382	0.404	0.429	0.455	0.483	0.504	0.519	0.526	0.534	0.544	0.548	0.553	0.559	0.564	0.568
57	0.310	0.325	0.333	0.343	0.357	0.376	0.397	0.421	0.446	0.472	0.493	0.509	0.519	0.529	0.539	0.544	0.556	0.562	0.566	0.571
58	0.312	0.325	0.335	0.344	0.357	0.374	0.393	0.416	0.442	0.465	0.480	0.491	0.498	0.503	0.511	0.520	0.533	0.551	0.564	0.577
59	0.315	0.326	0.334	0.344	0.357	0.374	0.393	0.415	0.435	0.456	0.475	0.486	0.495	0.506	0.515	0.516	0.518	0.525	0.536	0.552
60	0.316	0.325	0.331	0.341	0.355	0.371	0.389	0.410	0.435	0.456	0.470	0.477	0.493	0.508	0.510	0.511	0.517	0.521	0.527	0.533
61	0.315	0.324	0.330	0.341	0.354	0.368	0.385	0.406	0.430	0.449	0.460	0.469	0.484	0.500	0.502	0.504	0.515	0.524	0.519	0.525
62	0.315	0.322	0.330	0.339	0.349	0.363	0.381	0.399	0.422	0.439	0.449	0.463	0.482	0.498	0.498	0.498	0.510	0.518	0.519	0.523
63	0.312	0.318	0.325	0.336	0.346	0.357	0.374	0.393	0.414	0.430	0.441	0.453	0.474	0.488	0.494	0.500	0.502	0.503	0.510	0.521

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NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 7.40 SEC
HRFR = 0.398E-01

GROUP 7

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	0.057	0.057	0.056	0.057	0.057	0.060	0.061	0.063	0.062	0.060	0.059	0.060	0.060	0.060	0.060	0.059	0.057	0.056	0.053	0.050
30	0.064	0.063	0.063	0.062	0.064	0.065	0.064	0.063	0.061	0.058	0.055	0.055	0.049	0.051	0.049	0.049	0.044	0.042	0.041	0.036
31	0.067	0.066	0.064	0.062	0.059	0.056	0.053	0.049	0.044	0.039	0.036	0.034	0.031	0.028	0.026	0.021	0.022	0.019	0.021	0.019
32	0.051	0.049	0.043	0.040	0.034	0.029	0.025	0.024	0.021	0.021	0.020	0.021	0.020	0.021	0.018	0.020	0.018	0.021	0.020	0.021
33	0.025	0.022	0.023	0.022	0.022	0.021	0.020	0.020	0.021	0.021	0.021	0.020	0.020	0.019	0.021	0.019	0.020	0.019	0.020	0.018
34	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.020	0.020	0.020	0.021	0.019	0.019	0.018	0.019	0.019	0.020	0.017	0.019	0.017
35	0.022	0.021	0.022	0.021	0.022	0.021	0.021	0.021	0.021	0.021	0.021	0.019	0.021	0.020	0.021	0.019	0.020	0.018	0.020	0.020
36	0.021	0.023	0.023	0.025	0.023	0.024	0.021	0.023	0.022	0.023	0.021	0.021	0.021	0.021	0.021	0.021	0.020	0.021	0.019	0.021
37	0.024	0.018	0.023	0.019	0.023	0.018	0.024	0.020	0.022	0.017	0.022	0.022	0.022	0.021	0.021	0.020	0.021	0.020	0.021	0.021
38	0.024	0.026	0.024	0.025	0.023	0.025	0.024	0.025	0.023	0.024	0.021	0.023	0.022	0.023	0.020	0.022	0.019	0.021	0.019	0.021
39	0.026	0.026	0.027	0.025	0.025	0.025	0.025	0.025	0.026	0.025	0.026	0.023	0.024	0.022	0.024	0.023	0.023	0.022	0.023	0.021
40	0.027	0.027	0.027	0.027	0.027	0.027	0.026	0.027	0.025	0.026	0.025	0.025	0.025	0.027	0.025	0.026	0.023	0.024	0.023	0.025
41	0.029	0.029	0.027	0.030	0.027	0.028	0.027	0.028	0.027	0.027	0.027	0.027	0.026	0.027	0.026	0.027	0.025	0.027	0.023	0.025
42	0.030	0.031	0.029	0.030	0.029	0.030	0.029	0.030	0.028	0.029	0.027	0.028	0.026	0.027	0.026	0.027	0.026	0.027	0.026	0.026
43	0.031	0.032	0.031	0.032	0.031	0.031	0.031	0.031	0.029	0.030	0.029	0.029	0.027	0.029	0.028	0.029	0.027	0.027	0.027	0.027
44	0.032	0.031	0.032	0.031	0.032	0.030	0.031	0.030	0.032	0.031	0.031	0.029	0.030	0.029	0.029	0.028	0.028	0.027	0.027	0.027
45	0.035	0.036	0.034	0.034	0.034	0.034	0.034	0.033	0.031	0.034	0.031	0.031	0.028	0.031	0.028	0.030	0.027	0.030	0.027	0.028
46	0.041	0.039	0.040	0.039	0.039	0.036	0.037	0.036	0.036	0.035	0.036	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.032
47	0.046	0.046	0.044	0.044	0.043	0.043	0.041	0.042	0.041	0.041	0.039	0.040	0.039	0.040	0.039	0.039	0.037	0.038	0.037	0.038
48	0.051	0.049	0.050	0.048	0.048	0.046	0.044	0.044	0.044	0.043	0.043	0.041	0.041	0.040	0.041	0.039	0.040	0.039	0.040	0.039
49	0.053	0.053	0.053	0.051	0.051	0.048	0.048	0.046	0.046	0.044	0.044	0.044	0.044	0.042	0.042	0.041	0.042	0.041	0.042	0.040
50	0.059	0.056	0.056	0.054	0.054	0.052	0.051	0.049	0.049	0.048	0.048	0.046	0.046	0.045	0.046	0.044	0.044	0.043	0.044	0.042
51	0.077	0.062	0.059	0.055	0.055	0.052	0.053	0.051	0.051	0.051	0.050	0.049	0.048	0.047	0.048	0.047	0.048	0.045	0.046	0.044
52	0.099	0.079	0.068	0.062	0.058	0.057	0.055	0.055	0.053	0.052	0.050	0.052	0.049	0.050	0.047	0.048	0.046	0.048	0.045	0.048
53	0.186	0.105	0.077	0.064	0.060	0.056	0.055	0.053	0.052	0.051	0.051	0.049	0.049	0.048	0.048	0.046	0.047	0.045	0.045	0.044
54	0.407	0.240	0.131	0.085	0.066	0.059	0.052	0.049	0.046	0.046	0.044	0.044	0.041	0.042	0.039	0.040	0.039	0.039	0.039	0.041
55	0.535	0.465	0.277	0.138	0.090	0.068	0.060	0.052	0.048	0.044	0.044	0.041	0.041	0.039	0.041	0.039	0.039	0.037	0.039	0.039
56	0.572	0.567	0.500	0.320	0.162	0.098	0.073	0.062	0.053	0.051	0.047	0.048	0.044	0.044	0.041	0.043	0.039	0.041	0.041	0.044
57	0.575	0.576	0.578	0.542	0.388	0.205	0.115	0.081	0.064	0.057	0.053	0.049	0.049	0.048	0.046	0.045	0.045	0.045	0.044	0.048
58	0.583	0.584	0.582	0.581	0.571	0.466	0.265	0.136	0.090	0.070	0.060	0.055	0.050	0.048	0.046	0.046	0.044	0.045	0.045	0.048
59	0.569	0.579	0.583	0.587	0.584	0.573	0.496	0.308	0.154	0.099	0.073	0.063	0.053	0.049	0.045	0.046	0.044	0.046	0.044	0.047
60	0.536	0.541	0.554	0.573	0.586	0.584	0.574	0.531	0.381	0.207	0.117	0.081	0.066	0.055	0.048	0.044	0.044	0.042	0.042	0.039
61	0.534	0.533	0.527	0.528	0.541	0.563	0.576	0.575	0.540	0.384	0.196	0.111	0.079	0.065	0.055	0.049	0.044	0.044	0.041	0.040
62	0.533	0.543	0.544	0.535	0.527	0.522	0.531	0.551	0.566	0.550	0.420	0.227	0.120	0.084	0.066	0.055	0.049	0.044	0.044	0.041
63	0.526	0.535	0.549	0.556	0.554	0.543	0.531	0.522	0.519	0.532	0.543	0.464	0.271	0.135	0.090	0.068	0.058	0.050	0.048	0.044

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 7.40 SEC
GROUP 7 HRFR = 0.398E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.044	0.043	0.040	0.041	0.042	0.044	0.043	0.042	0.040	0.041	0.042	0.046	0.045	0.045	0.043	0.042	0.039	0.038	0.036	0.036
30	0.034	0.031	0.028	0.028	0.027	0.028	0.028	0.027	0.027	0.027	0.026	0.026	0.026	0.025	0.027	0.026	0.026	0.026	0.023	0.025
31	0.021	0.018	0.021	0.018	0.021	0.017	0.019	0.016	0.020	0.017	0.020	0.020	0.020	0.018	0.020	0.020	0.021	0.020	0.021	0.020
32	0.019	0.020	0.017	0.019	0.017	0.020	0.019	0.019	0.018	0.018	0.016	0.019	0.017	0.020	0.015	0.020	0.016	0.019	0.015	0.019
33	0.020	0.018	0.020	0.019	0.019	0.017	0.017	0.016	0.018	0.017	0.018	0.016	0.018	0.017	0.018	0.017	0.019	0.017	0.017	0.016
34	0.020	0.018	0.019	0.016	0.018	0.017	0.019	0.016	0.017	0.017	0.017	0.016	0.017	0.016	0.015	0.016	0.017	0.016	0.016	0.015
35	0.020	0.017	0.020	0.018	0.019	0.018	0.018	0.016	0.018	0.018	0.019	0.016	0.017	0.016	0.018	0.016	0.017	0.015	0.017	0.016
36	0.020	0.021	0.019	0.020	0.018	0.020	0.020	0.019	0.018	0.019	0.018	0.020	0.017	0.018	0.016	0.018	0.017	0.019	0.015	0.016
37	0.021	0.019	0.021	0.020	0.020	0.020	0.020	0.019	0.019	0.019	0.020	0.019	0.019	0.018	0.019	0.018	0.018	0.016	0.017	0.016
38	0.019	0.021	0.018	0.021	0.018	0.021	0.018	0.021	0.017	0.020	0.019	0.021	0.019	0.021	0.018	0.020	0.017	0.019	0.018	0.020
39	0.022	0.021	0.022	0.022	0.021	0.021	0.021	0.020	0.021	0.020	0.021	0.019	0.021	0.017	0.020	0.016	0.020	0.017	0.019	0.016
40	0.023	0.024	0.023	0.023	0.021	0.022	0.021	0.023	0.021	0.023	0.021	0.022	0.020	0.021	0.020	0.021	0.021	0.021	0.020	0.020
41	0.024	0.026	0.024	0.025	0.023	0.025	0.023	0.024	0.022	0.023	0.021	0.024	0.022	0.023	0.021	0.023	0.021	0.022	0.021	0.021
42	0.025	0.026	0.025	0.026	0.026	0.026	0.025	0.025	0.023	0.024	0.023	0.025	0.023	0.025	0.023	0.024	0.022	0.023	0.021	0.023
43	0.026	0.027	0.026	0.027	0.026	0.027	0.025	0.027	0.024	0.026	0.025	0.026	0.025	0.025	0.023	0.024	0.021	0.024	0.022	0.024
44	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.026	0.025	0.026	0.025	0.026	0.026	0.025	0.025	0.025	0.024	0.024	0.023
45	0.026	0.028	0.026	0.029	0.026	0.028	0.025	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.025	0.026	0.025	0.027	0.025	0.027
46	0.032	0.032	0.032	0.032	0.032	0.031	0.031	0.030	0.031	0.025	0.031	0.026	0.030	0.025	0.029	0.025	0.029	0.024	0.030	0.023
47	0.036	0.036	0.035	0.036	0.035	0.035	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.033	0.032	0.034	0.033	0.034	0.032	0.032
48	0.039	0.038	0.039	0.038	0.039	0.037	0.036	0.036	0.036	0.036	0.036	0.035	0.036	0.035	0.036	0.035	0.034	0.034	0.034	0.034
49	0.041	0.039	0.040	0.039	0.039	0.038	0.039	0.039	0.039	0.038	0.037	0.036	0.037	0.036	0.038	0.036	0.036	0.035	0.036	0.036
50	0.044	0.042	0.042	0.041	0.041	0.040	0.041	0.039	0.040	0.039	0.040	0.039	0.040	0.038	0.039	0.038	0.039	0.039	0.038	0.038
51	0.045	0.044	0.045	0.043	0.043	0.042	0.043	0.042	0.043	0.041	0.041	0.041	0.041	0.041	0.041	0.039	0.040	0.039	0.040	0.039
52	0.044	0.046	0.044	0.045	0.043	0.045	0.044	0.044	0.043	0.044	0.042	0.043	0.041	0.043	0.041	0.042	0.040	0.041	0.039	0.041
53	0.044	0.044	0.046	0.044	0.046	0.044	0.044	0.041	0.044	0.041	0.044	0.041	0.044	0.041	0.042	0.040	0.041	0.039	0.041	0.039
54	0.041	0.043	0.042	0.044	0.044	0.045	0.044	0.046	0.044	0.045	0.044	0.044	0.043	0.044	0.043	0.044	0.042	0.043	0.041	0.041
55	0.043	0.043	0.046	0.046	0.046	0.046	0.048	0.046	0.047	0.046	0.048	0.046	0.046	0.046	0.046	0.044	0.044	0.043	0.043	0.041
56	0.045	0.048	0.048	0.049	0.048	0.049	0.048	0.049	0.048	0.051	0.049	0.049	0.049	0.049	0.047	0.047	0.046	0.046	0.044	0.045
57	0.048	0.051	0.051	0.049	0.051	0.052	0.052	0.051	0.051	0.051	0.051	0.051	0.051	0.050	0.050	0.051	0.048	0.047	0.045	0.046
58	0.046	0.049	0.048	0.049	0.048	0.049	0.048	0.049	0.048	0.048	0.046	0.046	0.045	0.046	0.044	0.045	0.043	0.043	0.041	0.041
59	0.045	0.046	0.044	0.047	0.046	0.048	0.046	0.047	0.045	0.048	0.045	0.047	0.045	0.046	0.044	0.044	0.043	0.044	0.042	0.043
60	0.040	0.039	0.039	0.038	0.039	0.034	0.036	0.034	0.036	0.034	0.035	0.032	0.034	0.031	0.032	0.030	0.031	0.028	0.029	0.027
61	0.039	0.039	0.038	0.036	0.035	0.035	0.034	0.035	0.034	0.033	0.031	0.032	0.031	0.031	0.029	0.029	0.027	0.028	0.027	0.027
62	0.041	0.039	0.039	0.038	0.039	0.034	0.035	0.034	0.035	0.034	0.034	0.031	0.032	0.031	0.031	0.029	0.029	0.028	0.029	0.027
63	0.043	0.041	0.041	0.039	0.039	0.036	0.036	0.035	0.035	0.034	0.034	0.031	0.033	0.031	0.032	0.031	0.031	0.029	0.029	0.027

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 7.40 SEC
HRFR = 0.398E-01

GROUP 7

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.034	0.034	0.034	0.034	0.031	0.034	0.032	0.032	0.031	0.032	0.031	0.032	0.031	0.033	0.031	0.031	0.030	0.030	0.030	0.031
30	0.025	0.023	0.022	0.021	0.021	0.021	0.021	0.021	0.022	0.021	0.021	0.021	0.017	0.021	0.021	0.020	0.020	0.019	0.019	0.016
31	0.021	0.019	0.020	0.019	0.021	0.020	0.021	0.021	0.020	0.019	0.019	0.018	0.019	0.018	0.020	0.018	0.018	0.015	0.016	0.016
32	0.016	0.021	0.016	0.019	0.015	0.019	0.016	0.019	0.016	0.020	0.019	0.019	0.016	0.018	0.016	0.017	0.016	0.016	0.016	0.015
33	0.018	0.017	0.019	0.018	0.017	0.016	0.018	0.017	0.018	0.018	0.018	0.014	0.017	0.014	0.017	0.013	0.016	0.012	0.014	0.012
34	0.016	0.015	0.017	0.016	0.016	0.014	0.017	0.015	0.016	0.016	0.015	0.014	0.016	0.016	0.015	0.013	0.014	0.013	0.014	0.013
35	0.017	0.015	0.016	0.015	0.016	0.015	0.017	0.015	0.014	0.014	0.016	0.015	0.015	0.013	0.015	0.014	0.014	0.013	0.013	0.012
36	0.016	0.017	0.016	0.017	0.014	0.016	0.015	0.016	0.015	0.015	0.013	0.016	0.014	0.016	0.014	0.014	0.013	0.014	0.014	0.015
37	0.017	0.017	0.017	0.015	0.016	0.015	0.016	0.015	0.016	0.014	0.015	0.015	0.016	0.014	0.014	0.013	0.015	0.014	0.015	0.013
38	0.016	0.018	0.016	0.018	0.016	0.018	0.016	0.018	0.015	0.017	0.016	0.017	0.016	0.017	0.015	0.017	0.015	0.016	0.015	0.017
39	0.019	0.016	0.018	0.015	0.017	0.016	0.019	0.018	0.020	0.017	0.017	0.016	0.017	0.016	0.019	0.017	0.018	0.017	0.017	0.016
40	0.019	0.020	0.019	0.020	0.018	0.020	0.019	0.020	0.018	0.017	0.015	0.019	0.016	0.019	0.016	0.018	0.015	0.018	0.014	0.017
41	0.021	0.022	0.021	0.021	0.020	0.021	0.019	0.021	0.019	0.021	0.019	0.021	0.019	0.020	0.018	0.019	0.017	0.021	0.019	0.020
42	0.021	0.022	0.021	0.024	0.022	0.022	0.021	0.021	0.019	0.021	0.020	0.021	0.021	0.021	0.020	0.020	0.019	0.020	0.019	0.020
43	0.022	0.024	0.022	0.022	0.021	0.023	0.021	0.021	0.021	0.021	0.021	0.022	0.020	0.021	0.020	0.021	0.020	0.021	0.020	0.022
44	0.025	0.024	0.024	0.022	0.022	0.021	0.021	0.022	0.022	0.021	0.023	0.021	0.021	0.020	0.021	0.020	0.021	0.021	0.022	0.021
45	0.025	0.026	0.023	0.025	0.025	0.025	0.025	0.026	0.025	0.025	0.023	0.024	0.023	0.025	0.023	0.024	0.023	0.024	0.021	0.023
46	0.027	0.024	0.028	0.024	0.029	0.029	0.028	0.027	0.027	0.027	0.028	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.026
47	0.031	0.034	0.034	0.034	0.032	0.032	0.031	0.033	0.031	0.032	0.031	0.031	0.029	0.032	0.030	0.032	0.029	0.031	0.029	0.031
48	0.035	0.034	0.036	0.036	0.036	0.035	0.034	0.034	0.034	0.034	0.034	0.032	0.034	0.034	0.034	0.034	0.033	0.032	0.032	0.034
49	0.036	0.036	0.039	0.038	0.039	0.035	0.035	0.034	0.035	0.035	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.032	0.034	0.034
50	0.039	0.039	0.039	0.039	0.039	0.039	0.038	0.038	0.037	0.036	0.036	0.035	0.037	0.036	0.036	0.034	0.036	0.036	0.036	0.035
51	0.040	0.039	0.039	0.039	0.039	0.039	0.039	0.038	0.038	0.037	0.038	0.038	0.039	0.036	0.037	0.036	0.037	0.036	0.037	0.036
52	0.040	0.041	0.040	0.040	0.039	0.041	0.039	0.041	0.039	0.040	0.039	0.040	0.038	0.039	0.039	0.039	0.038	0.038	0.036	0.037
53	0.041	0.039	0.040	0.039	0.039	0.037	0.039	0.036	0.037	0.035	0.036	0.034	0.036	0.034	0.035	0.034	0.034	0.034	0.033	0.034
54	0.040	0.040	0.038	0.039	0.035	0.035	0.031	0.031	0.028	0.031	0.027	0.030	0.027	0.031	0.028	0.029	0.026	0.027	0.025	0.028
55	0.042	0.041	0.040	0.039	0.037	0.034	0.031	0.030	0.028	0.028	0.028	0.028	0.027	0.026	0.026	0.025	0.025	0.025	0.026	0.025
56	0.043	0.043	0.040	0.041	0.037	0.037	0.033	0.032	0.030	0.031	0.029	0.029	0.027	0.027	0.026	0.027	0.025	0.027	0.025	0.027
57	0.044	0.043	0.043	0.042	0.041	0.039	0.035	0.033	0.031	0.030	0.030	0.028	0.026	0.027	0.027	0.026	0.027	0.025	0.027	0.025
58	0.039	0.040	0.038	0.039	0.036	0.036	0.032	0.032	0.029	0.031	0.027	0.029	0.027	0.027	0.026	0.026	0.025	0.026	0.025	0.026
59	0.042	0.042	0.041	0.041	0.039	0.041	0.039	0.040	0.038	0.038	0.035	0.036	0.034	0.034	0.035	0.036	0.034	0.035	0.034	0.034
60	0.028	0.027	0.028	0.027	0.027	0.025	0.026	0.023	0.025	0.023	0.024	0.021	0.021	0.021	0.021	0.021	0.021	0.020	0.019	0.019
61	0.026	0.027	0.025	0.026	0.023	0.025	0.021	0.023	0.021	0.023	0.019	0.021	0.018	0.021	0.018	0.020	0.015	0.019	0.016	0.020
62	0.028	0.027	0.027	0.025	0.027	0.025	0.025	0.023	0.025	0.022	0.023	0.021	0.021	0.020	0.021	0.020	0.021	0.019	0.019	0.017
63	0.029	0.027	0.027	0.026	0.027	0.026	0.027	0.025	0.025	0.023	0.024	0.022	0.022	0.021	0.021	0.021	0.021	0.019	0.020	0.017

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 7.40 SEC
GROUP 7 HREF = 0.398E-01

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.030	0.031	0.031	0.031	0.029	0.030	0.028	0.031	0.029	0.031
30	0.018	0.018	0.017	0.011	0.018	0.017	0.017	0.017	0.016	0.016
31	0.016	0.015	0.016	0.015	0.014	0.013	0.015	0.013	0.015	0.013
32	0.014	0.015	0.013	0.015	0.013	0.015	0.013	0.013	0.013	0.013
33	0.015	0.012	0.013	0.012	0.012	0.010	0.012	0.013	0.013	0.012
34	0.012	0.012	0.012	0.011	0.012	0.010	0.010	0.010	0.012	0.008
35	0.013	0.013	0.013	0.012	0.012	0.012	0.012	0.012	0.011	0.010
36	0.012	0.014	0.012	0.015	0.013	0.013	0.011	0.013	0.011	0.014
37	0.014	0.013	0.014	0.013	0.014	0.011	0.014	0.012	0.013	0.012
38	0.015	0.016	0.014	0.016	0.015	0.016	0.014	0.015	0.013	0.015
39	0.017	0.016	0.018	0.017	0.017	0.016	0.017	0.015	0.016	0.017
40	0.015	0.019	0.015	0.021	0.016	0.018	0.016	0.018	0.016	0.019
41	0.019	0.020	0.017	0.019	0.017	0.019	0.017	0.021	0.016	0.019
42	0.020	0.020	0.019	0.020	0.019	0.020	0.018	0.020	0.018	0.021
43	0.020	0.021	0.019	0.021	0.020	0.021	0.020	0.021	0.021	0.021
44	0.021	0.020	0.021	0.020	0.021	0.021	0.021	0.021	0.021	0.020
45	0.022	0.024	0.021	0.024	0.022	0.023	0.021	0.023	0.022	0.024
46	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.026	0.026	0.025
47	0.030	0.031	0.028	0.031	0.030	0.031	0.030	0.030	0.028	0.030
48	0.033	0.032	0.033	0.031	0.032	0.030	0.031	0.030	0.031	0.030
49	0.034	0.034	0.033	0.034	0.034	0.032	0.034	0.031	0.032	0.032
50	0.035	0.034	0.035	0.035	0.035	0.034	0.034	0.034	0.034	0.034
51	0.036	0.035	0.036	0.036	0.036	0.034	0.035	0.034	0.036	0.034
52	0.036	0.037	0.036	0.037	0.035	0.035	0.034	0.036	0.034	0.036
53	0.033	0.032	0.033	0.033	0.033	0.032	0.031	0.031	0.031	0.031
54	0.025	0.028	0.027	0.028	0.025	0.027	0.025	0.025	0.025	0.026
55	0.024	0.023	0.025	0.018	0.022	0.016	0.022	0.017	0.021	0.016
56	0.023	0.023	0.022	0.022	0.021	0.022	0.021	0.021	0.020	0.020
57	0.025	0.023	0.023	0.021	0.021	0.021	0.020	0.021	0.020	0.020
58	0.025	0.025	0.021	0.022	0.021	0.021	0.021	0.021	0.019	0.021
59	0.032	0.034	0.032	0.034	0.031	0.031	0.030	0.031	0.030	0.031
60	0.020	0.019	0.019	0.017	0.017	0.017	0.016	0.016	0.016	0.015
61	0.017	0.017	0.014	0.017	0.015	0.017	0.014	0.015	0.013	0.015
62	0.018	0.015	0.017	0.013	0.016	0.013	0.016	0.012	0.014	0.011
63	0.019	0.017	0.018	0.015	0.016	0.015	0.016	0.015	0.015	0.013

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 7.40 SEC
GROUP 7 HRFR = 0.398E-01

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.016	0.016	0.017	0.020	0.019	0.021	0.021	0.026	0.025	0.027	0.025	0.028	0.028	0.034	0.039	0.087	0.187	0.252	0.281	0.298
65	0.014	0.018	0.016	0.020	0.020	0.021	0.021	0.024	0.025	0.027	0.027	0.029	0.029	0.034	0.041	0.095	0.194	0.252	0.277	0.293
66	0.015	0.017	0.017	0.019	0.018	0.021	0.022	0.025	0.025	0.027	0.026	0.028	0.031	0.035	0.045	0.111	0.206	0.254	0.276	0.292
67	0.015	0.016	0.017	0.020	0.019	0.021	0.023	0.025	0.025	0.027	0.026	0.030	0.031	0.036	0.054	0.142	0.223	0.258	0.279	0.293
68	0.018	0.017	0.017	0.016	0.019	0.021	0.024	0.026	0.027	0.027	0.027	0.027	0.031	0.036	0.068	0.163	0.231	0.259	0.277	0.290
69	0.019	0.020	0.018	0.018	0.018	0.021	0.024	0.026	0.026	0.027	0.027	0.028	0.031	0.038	0.084	0.180	0.235	0.261	0.277	0.287
70	0.019	0.019	0.020	0.016	0.021	0.022	0.025	0.025	0.027	0.026	0.027	0.029	0.033	0.041	0.103	0.194	0.238	0.259	0.275	0.284
71	0.019	0.019	0.018	0.020	0.019	0.021	0.024	0.027	0.025	0.027	0.025	0.028	0.029	0.044	0.114	0.200	0.237	0.258	0.271	0.281
72	0.018	0.020	0.020	0.020	0.020	0.021	0.026	0.025	0.028	0.027	0.027	0.029	0.033	0.049	0.127	0.205	0.239	0.257	0.270	0.280
73	0.017	0.018	0.017	0.020	0.020	0.023	0.025	0.028	0.027	0.028	0.027	0.029	0.032	0.053	0.133	0.207	0.238	0.255	0.268	0.277
74	0.016	0.017	0.017	0.020	0.020	0.023	0.026	0.029	0.028	0.029	0.027	0.030	0.032	0.064	0.150	0.215	0.240	0.256	0.267	0.276
75	0.016	0.018	0.018	0.019	0.019	0.022	0.026	0.029	0.028	0.028	0.026	0.029	0.036	0.087	0.173	0.222	0.243	0.258	0.267	0.274
76	0.016	0.018	0.019	0.018	0.020	0.022	0.027	0.028	0.028	0.027	0.027	0.030	0.044	0.108	0.188	0.226	0.244	0.257	0.265	0.273
77	0.016	0.018	0.016	0.019	0.019	0.021	0.027	0.029	0.028	0.028	0.027	0.031	0.055	0.136	0.203	0.232	0.247	0.257	0.265	0.272
78	0.015	0.016	0.018	0.018	0.020	0.020	0.026	0.026	0.028	0.026	0.028	0.030	0.070	0.155	0.210	0.233	0.246	0.256	0.264	0.269
79	0.016	0.016	0.019	0.019	0.020	0.021	0.026	0.027	0.027	0.027	0.027	0.031	0.075	0.161	0.212	0.232	0.245	0.254	0.261	0.267
80	0.017	0.021	0.026	0.027	0.023	0.027	0.031	0.033	0.029	0.028	0.027	0.035	0.085	0.171	0.214	0.232	0.244	0.253	0.259	0.265
81	0.025	0.030	0.027	0.034	0.039	0.040	0.034	0.031	0.032	0.034	0.028	0.036	0.092	0.175	0.213	0.231	0.242	0.251	0.256	0.261
82	0.031	0.036	0.036	0.048	0.046	0.046	0.040	0.036	0.029	0.030	0.034	0.046	0.110	0.186	0.216	0.232	0.241	0.247	0.252	0.257
83	0.039	0.041	0.042	0.061	0.054	0.049	0.041	0.039	0.036	0.037	0.036	0.057	0.133	0.197	0.221	0.234	0.241	0.246	0.249	0.253
84	0.062	0.060	0.069	0.084	0.094	0.072	0.051	0.043	0.038	0.034	0.041	0.070	0.149	0.202	0.222	0.233	0.240	0.244	0.247	0.249
85	0.118	0.083	0.085	0.099	0.114	0.088	0.059	0.043	0.034	0.039	0.044	0.085	0.163	0.204	0.220	0.230	0.236	0.241	0.244	0.247
86	0.124	0.084	0.081	0.094	0.119	0.095	0.061	0.039	0.029	0.028	0.046	0.110	0.180	0.207	0.219	0.226	0.231	0.235	0.239	0.241
87	0.075	0.059	0.058	0.057	0.067	0.066	0.055	0.043	0.037	0.039	0.059	0.131	0.209	0.242	0.257	0.263	0.267	0.267	0.262	0.255
88	0.059	0.054	0.053	0.055	0.056	0.057	0.059	0.057	0.052	0.053	0.057	0.056	0.057	0.063	0.069	0.077	0.091	0.112	0.136	0.158
89	0.049	0.043	0.037	0.036	0.042	0.047	0.046	0.045	0.043	0.044	0.048	0.051	0.048	0.049	0.049	0.051	0.051	0.052	0.052	0.053
90	0.027	0.026	0.026	0.027	0.026	0.028	0.029	0.032	0.035	0.041	0.046	0.048	0.044	0.045	0.043	0.044	0.044	0.046	0.044	0.046
91	0.015	0.018	0.018	0.021	0.019	0.024	0.025	0.029	0.032	0.039	0.043	0.044	0.041	0.044	0.041	0.042	0.041	0.043	0.042	0.043
92	0.014	0.015	0.016	0.015	0.018	0.015	0.019	0.016	0.023	0.029	0.039	0.039	0.041	0.039	0.040	0.039	0.041	0.040	0.041	0.039
93	0.013	0.015	0.014	0.016	0.013	0.016	0.013	0.018	0.020	0.029	0.036	0.040	0.039	0.041	0.039	0.041	0.039	0.039	0.039	0.040
94	0.012	0.013	0.015	0.013	0.014	0.012	0.015	0.014	0.020	0.025	0.034	0.038	0.039	0.039	0.040	0.039	0.040	0.038	0.039	0.039
95	0.013	0.012	0.012	0.012	0.012	0.016	0.016	0.020	0.017	0.024	0.031	0.040	0.038	0.041	0.039	0.040	0.039	0.039	0.036	0.037
96	0.023	0.021	0.021	0.018	0.019	0.019	0.022	0.022	0.025	0.027	0.034	0.040	0.039	0.037	0.039	0.039	0.040	0.038	0.037	0.036
97	0.029	0.028	0.028	0.028	0.027	0.027	0.027	0.025	0.026	0.028	0.035	0.039	0.039	0.038	0.039	0.038	0.039	0.036	0.037	0.036
98	0.033	0.030	0.031	0.031	0.034	0.032	0.030	0.029	0.031	0.034	0.042	0.041	0.039	0.039	0.040	0.039	0.040	0.039	0.039	0.039

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 7.40 SEC
GROUP 7 HREF = 0.398E-01

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	0.310	0.317	0.322	0.333	0.342	0.353	0.367	0.385	0.403	0.420	0.431	0.445	0.465	0.481	0.493	0.502	0.507	0.504	0.500	0.512
65	0.304	0.312	0.318	0.328	0.336	0.346	0.357	0.376	0.397	0.415	0.422	0.437	0.457	0.475	0.482	0.489	0.493	0.505	0.506	0.510
66	0.303	0.310	0.317	0.326	0.332	0.343	0.356	0.370	0.389	0.407	0.418	0.430	0.449	0.465	0.473	0.482	0.486	0.495	0.502	0.509
67	0.301	0.307	0.314	0.322	0.329	0.340	0.353	0.367	0.383	0.402	0.412	0.424	0.443	0.455	0.461	0.471	0.479	0.487	0.491	0.500
68	0.299	0.304	0.311	0.320	0.328	0.338	0.350	0.362	0.377	0.396	0.415	0.422	0.433	0.445	0.451	0.460	0.471	0.475	0.477	0.486
69	0.296	0.302	0.308	0.316	0.325	0.335	0.346	0.360	0.375	0.390	0.409	0.422	0.426	0.433	0.445	0.454	0.463	0.466	0.471	0.480
70	0.291	0.298	0.304	0.313	0.321	0.330	0.340	0.353	0.368	0.385	0.403	0.420	0.428	0.430	0.438	0.451	0.457	0.459	0.467	0.473
71	0.289	0.296	0.303	0.312	0.319	0.330	0.338	0.347	0.360	0.376	0.393	0.411	0.425	0.431	0.436	0.437	0.440	0.446	0.453	0.457
72	0.288	0.295	0.302	0.310	0.319	0.328	0.341	0.347	0.357	0.370	0.387	0.404	0.417	0.422	0.428	0.431	0.434	0.439	0.446	0.449
73	0.285	0.292	0.297	0.305	0.314	0.320	0.331	0.344	0.352	0.361	0.378	0.394	0.407	0.416	0.419	0.422	0.428	0.434	0.438	0.441
74	0.283	0.288	0.294	0.300	0.309	0.315	0.323	0.336	0.345	0.358	0.374	0.396	0.398	0.407	0.411	0.413	0.419	0.427	0.431	0.435
75	0.280	0.287	0.292	0.298	0.304	0.315	0.323	0.334	0.346	0.356	0.368	0.381	0.391	0.400	0.406	0.406	0.409	0.415	0.423	0.429
76	0.280	0.286	0.292	0.297	0.304	0.314	0.326	0.337	0.348	0.359	0.369	0.381	0.391	0.403	0.408	0.405	0.405	0.407	0.414	0.424
77	0.279	0.284	0.289	0.297	0.304	0.311	0.321	0.333	0.345	0.358	0.368	0.378	0.388	0.398	0.403	0.406	0.407	0.407	0.407	0.411
78	0.275	0.280	0.286	0.294	0.302	0.312	0.322	0.331	0.342	0.352	0.366	0.378	0.385	0.390	0.394	0.396	0.400	0.406	0.409	0.410
79	0.272	0.279	0.285	0.289	0.297	0.305	0.316	0.326	0.338	0.347	0.359	0.371	0.383	0.389	0.395	0.400	0.406	0.409	0.412	0.415
80	0.269	0.275	0.281	0.288	0.294	0.303	0.313	0.325	0.335	0.346	0.355	0.365	0.373	0.382	0.389	0.394	0.399	0.403	0.405	0.408
81	0.268	0.273	0.279	0.285	0.292	0.300	0.309	0.320	0.331	0.343	0.355	0.364	0.370	0.376	0.380	0.385	0.390	0.394	0.398	0.402
82	0.261	0.267	0.274	0.281	0.288	0.295	0.304	0.315	0.326	0.337	0.349	0.360	0.369	0.374	0.376	0.381	0.384	0.388	0.390	0.394
83	0.256	0.261	0.266	0.273	0.280	0.288	0.295	0.306	0.318	0.332	0.344	0.357	0.366	0.373	0.378	0.381	0.382	0.385	0.387	0.390
84	0.252	0.255	0.259	0.264	0.271	0.279	0.288	0.297	0.306	0.317	0.329	0.339	0.347	0.356	0.362	0.368	0.373	0.377	0.380	0.383
85	0.247	0.249	0.251	0.255	0.261	0.269	0.277	0.287	0.296	0.306	0.315	0.324	0.331	0.337	0.342	0.347	0.351	0.355	0.359	0.363
86	0.244	0.244	0.247	0.249	0.255	0.260	0.268	0.276	0.286	0.295	0.304	0.312	0.318	0.323	0.328	0.331	0.333	0.335	0.339	0.341
87	0.252	0.250	0.248	0.248	0.250	0.254	0.260	0.266	0.274	0.283	0.293	0.301	0.307	0.312	0.316	0.319	0.321	0.323	0.324	0.324
88	0.179	0.206	0.219	0.231	0.247	0.257	0.254	0.241	0.225	0.218	0.224	0.241	0.255	0.263	0.267	0.269	0.272	0.275	0.279	0.285
89	0.053	0.055	0.055	0.056	0.056	0.057	0.058	0.057	0.057	0.058	0.057	0.060	0.060	0.062	0.061	0.063	0.063	0.064	0.064	0.065
90	0.044	0.047	0.046	0.048	0.046	0.048	0.048	0.048	0.048	0.049	0.048	0.049	0.049	0.051	0.052	0.053	0.052	0.054	0.053	0.055
91	0.041	0.042	0.041	0.043	0.042	0.044	0.043	0.044	0.044	0.046	0.044	0.045	0.044	0.047	0.046	0.048	0.046	0.048	0.048	0.050
92	0.040	0.039	0.040	0.039	0.041	0.039	0.041	0.040	0.041	0.041	0.043	0.041	0.044	0.044	0.044	0.044	0.046	0.045	0.046	0.046
93	0.036	0.040	0.036	0.039	0.036	0.040	0.036	0.039	0.037	0.041	0.039	0.046	0.055	0.061	0.048	0.045	0.044	0.044	0.044	0.046
94	0.039	0.039	0.039	0.036	0.038	0.037	0.039	0.039	0.039	0.039	0.043	0.075	0.147	0.164	0.112	0.063	0.049	0.043	0.043	0.041
95	0.037	0.039	0.036	0.038	0.036	0.037	0.036	0.037	0.036	0.039	0.039	0.048	0.084	0.106	0.081	0.053	0.043	0.042	0.041	0.043
96	0.038	0.037	0.037	0.035	0.036	0.035	0.036	0.035	0.036	0.035	0.038	0.036	0.039	0.038	0.040	0.039	0.041	0.039	0.040	0.039
97	0.037	0.038	0.036	0.034	0.033	0.034	0.034	0.034	0.034	0.034	0.035	0.034	0.035	0.035	0.039	0.038	0.039	0.039	0.040	0.039
98	0.036	0.036	0.036	0.034	0.034	0.034	0.034	0.034	0.033	0.034	0.034	0.034	0.036	0.035	0.036	0.036	0.038	0.036	0.039	0.038

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 7.40 SEC
HRFR = 0.398E-01

GROUP 7

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	0.519	0.523	0.529	0.542	0.555	0.564	0.563	0.553	0.536	0.521	0.512	0.516	0.480	0.320	0.161	0.100	0.074	0.061	0.052	0.048
65	0.516	0.522	0.523	0.524	0.528	0.539	0.551	0.558	0.562	0.554	0.536	0.518	0.504	0.495	0.405	0.236	0.126	0.087	0.067	0.056
66	0.513	0.517	0.522	0.527	0.525	0.521	0.522	0.527	0.536	0.545	0.550	0.549	0.533	0.515	0.505	0.484	0.328	0.161	0.098	0.074
67	0.511	0.519	0.522	0.527	0.532	0.534	0.530	0.521	0.511	0.508	0.508	0.521	0.534	0.536	0.528	0.515	0.478	0.328	0.165	0.101
68	0.497	0.506	0.513	0.516	0.519	0.526	0.533	0.536	0.529	0.516	0.501	0.489	0.488	0.501	0.518	0.530	0.526	0.511	0.390	0.204
69	0.485	0.492	0.497	0.505	0.514	0.518	0.525	0.531	0.534	0.530	0.519	0.508	0.492	0.481	0.481	0.490	0.502	0.510	0.512	0.433
70	0.479	0.483	0.483	0.484	0.496	0.504	0.506	0.515	0.519	0.521	0.524	0.522	0.523	0.519	0.505	0.495	0.489	0.486	0.488	0.493
71	0.461	0.469	0.478	0.478	0.481	0.492	0.501	0.502	0.500	0.505	0.514	0.518	0.521	0.528	0.532	0.532	0.515	0.495	0.482	0.480
72	0.454	0.459	0.463	0.467	0.476	0.482	0.488	0.492	0.492	0.488	0.492	0.499	0.502	0.506	0.513	0.516	0.521	0.527	0.523	0.510
73	0.445	0.451	0.459	0.463	0.460	0.464	0.472	0.475	0.477	0.479	0.479	0.483	0.483	0.480	0.482	0.489	0.494	0.500	0.510	0.524
74	0.439	0.443	0.449	0.449	0.446	0.449	0.458	0.468	0.472	0.473	0.472	0.469	0.467	0.466	0.465	0.465	0.468	0.467	0.465	0.476
75	0.435	0.439	0.435	0.434	0.438	0.445	0.454	0.465	0.468	0.468	0.467	0.465	0.463	0.466	0.461	0.461	0.464	0.467	0.466	0.463
76	0.433	0.434	0.432	0.431	0.437	0.452	0.459	0.464	0.467	0.463	0.462	0.456	0.451	0.456	0.456	0.461	0.464	0.463	0.462	0.463
77	0.416	0.427	0.435	0.433	0.432	0.441	0.451	0.455	0.454	0.454	0.450	0.448	0.446	0.446	0.444	0.445	0.443	0.443	0.445	0.448
78	0.413	0.421	0.426	0.431	0.438	0.443	0.443	0.443	0.444	0.442	0.441	0.440	0.437	0.436	0.437	0.435	0.430	0.427	0.426	0.425
79	0.419	0.424	0.429	0.431	0.434	0.435	0.436	0.434	0.433	0.429	0.429	0.431	0.429	0.428	0.430	0.431	0.430	0.429	0.427	0.424
80	0.410	0.414	0.416	0.420	0.422	0.424	0.425	0.426	0.425	0.425	0.425	0.424	0.421	0.420	0.417	0.416	0.414	0.413	0.411	0.410
81	0.405	0.408	0.412	0.415	0.415	0.415	0.415	0.414	0.414	0.416	0.419	0.419	0.417	0.415	0.414	0.413	0.413	0.415	0.417	0.415
82	0.398	0.403	0.405	0.405	0.406	0.406	0.407	0.408	0.411	0.414	0.415	0.416	0.414	0.412	0.411	0.411	0.410	0.412	0.412	0.410
83	0.393	0.398	0.402	0.403	0.404	0.404	0.405	0.407	0.410	0.412	0.414	0.417	0.418	0.418	0.418	0.417	0.416	0.414	0.410	0.405
84	0.387	0.392	0.395	0.398	0.401	0.404	0.407	0.410	0.413	0.414	0.416	0.417	0.419	0.420	0.421	0.419	0.422	0.421	0.416	0.409
85	0.367	0.372	0.378	0.383	0.389	0.396	0.400	0.405	0.408	0.410	0.411	0.414	0.415	0.416	0.420	0.422	0.423	0.423	0.417	0.415
86	0.345	0.348	0.353	0.357	0.362	0.366	0.370	0.374	0.379	0.386	0.392	0.397	0.403	0.407	0.411	0.414	0.419	0.422	0.423	0.422
87	0.325	0.327	0.330	0.331	0.333	0.335	0.336	0.337	0.339	0.340	0.342	0.345	0.350	0.355	0.364	0.373	0.384	0.395	0.406	0.416
88	0.290	0.297	0.303	0.308	0.308	0.308	0.305	0.300	0.293	0.288	0.281	0.276	0.270	0.268	0.265	0.266	0.268	0.273	0.280	0.292
89	0.065	0.067	0.068	0.070	0.070	0.072	0.072	0.073	0.072	0.071	0.071	0.071	0.071	0.071	0.071	0.070	0.070	0.072	0.072	0.074
90	0.055	0.056	0.056	0.058	0.059	0.061	0.061	0.061	0.060	0.062	0.061	0.061	0.060	0.061	0.060	0.061	0.060	0.061	0.061	0.063
91	0.049	0.051	0.049	0.052	0.053	0.056	0.055	0.056	0.055	0.056	0.056	0.056	0.056	0.056	0.055	0.056	0.056	0.057	0.057	0.059
92	0.048	0.048	0.049	0.049	0.051	0.051	0.052	0.052	0.053	0.053	0.053	0.053	0.054	0.053	0.055	0.055	0.055	0.055	0.056	0.056
93	0.044	0.046	0.045	0.049	0.048	0.051	0.050	0.052	0.051	0.059	0.068	0.067	0.057	0.055	0.054	0.054	0.054	0.055	0.055	0.056
94	0.044	0.042	0.046	0.044	0.048	0.048	0.048	0.048	0.056	0.102	0.163	0.151	0.096	0.065	0.056	0.053	0.054	0.054	0.055	0.055
95	0.043	0.044	0.044	0.046	0.045	0.048	0.046	0.048	0.049	0.062	0.094	0.100	0.072	0.057	0.053	0.053	0.052	0.054	0.053	0.054
96	0.042	0.041	0.044	0.044	0.046	0.046	0.047	0.046	0.048	0.048	0.050	0.050	0.053	0.052	0.052	0.052	0.053	0.052	0.053	0.054
97	0.039	0.039	0.041	0.041	0.044	0.044	0.045	0.046	0.047	0.046	0.049	0.048	0.050	0.050	0.051	0.050	0.052	0.051	0.051	0.052
98	0.041	0.039	0.041	0.039	0.043	0.043	0.044	0.044	0.046	0.046	0.048	0.049	0.049	0.048	0.049	0.048	0.051	0.051	0.052	0.052

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 7.40 SEC
GROUP 7 HREF = 0.398E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.044	0.044	0.041	0.041	0.039	0.039	0.036	0.036	0.035	0.035	0.034	0.034	0.032	0.034	0.032	0.032	0.031	0.031	0.029	0.030
65	0.049	0.046	0.044	0.043	0.041	0.041	0.039	0.039	0.036	0.036	0.035	0.036	0.035	0.034	0.032	0.034	0.032	0.034	0.031	0.032
66	0.059	0.052	0.047	0.045	0.043	0.043	0.041	0.041	0.039	0.039	0.036	0.036	0.035	0.036	0.034	0.035	0.034	0.033	0.032	0.031
67	0.075	0.062	0.051	0.048	0.041	0.042	0.037	0.040	0.036	0.039	0.035	0.036	0.032	0.034	0.031	0.034	0.031	0.032	0.030	0.031
68	0.113	0.081	0.063	0.052	0.047	0.043	0.042	0.041	0.039	0.038	0.036	0.034	0.034	0.032	0.033	0.031	0.032	0.031	0.031	0.029
69	0.244	0.126	0.087	0.066	0.054	0.046	0.042	0.041	0.038	0.038	0.036	0.036	0.034	0.034	0.032	0.031	0.030	0.030	0.029	0.029
70	0.458	0.280	0.139	0.092	0.068	0.055	0.047	0.041	0.041	0.039	0.037	0.035	0.034	0.034	0.033	0.032	0.032	0.029	0.029	0.027
71	0.488	0.477	0.341	0.178	0.103	0.075	0.057	0.049	0.041	0.041	0.038	0.038	0.035	0.035	0.034	0.034	0.031	0.031	0.029	0.029
72	0.494	0.484	0.469	0.352	0.186	0.106	0.077	0.061	0.051	0.043	0.041	0.039	0.039	0.036	0.035	0.034	0.034	0.031	0.031	0.030
73	0.532	0.529	0.505	0.475	0.393	0.236	0.123	0.085	0.065	0.054	0.044	0.042	0.039	0.038	0.035	0.035	0.034	0.034	0.031	0.031
74	0.487	0.498	0.506	0.510	0.492	0.431	0.279	0.143	0.089	0.068	0.053	0.046	0.039	0.039	0.034	0.035	0.032	0.034	0.033	0.031
75	0.450	0.441	0.444	0.459	0.477	0.484	0.447	0.305	0.156	0.095	0.070	0.056	0.045	0.041	0.039	0.036	0.034	0.034	0.034	0.032
76	0.462	0.455	0.449	0.441	0.432	0.429	0.433	0.418	0.310	0.171	0.102	0.074	0.058	0.046	0.041	0.038	0.036	0.034	0.033	0.031
77	0.453	0.458	0.458	0.453	0.441	0.426	0.413	0.401	0.381	0.294	0.163	0.094	0.071	0.059	0.048	0.041	0.038	0.036	0.034	0.033
78	0.428	0.435	0.442	0.447	0.449	0.447	0.440	0.424	0.400	0.369	0.288	0.168	0.095	0.070	0.059	0.049	0.042	0.037	0.034	0.032
79	0.417	0.410	0.409	0.411	0.419	0.425	0.428	0.434	0.433	0.416	0.383	0.311	0.192	0.104	0.072	0.060	0.053	0.045	0.039	0.035
80	0.411	0.411	0.410	0.408	0.403	0.402	0.401	0.402	0.405	0.412	0.408	0.388	0.327	0.214	0.116	0.077	0.060	0.054	0.048	0.044
81	0.412	0.405	0.400	0.401	0.401	0.399	0.394	0.392	0.389	0.385	0.382	0.381	0.375	0.345	0.255	0.147	0.088	0.065	0.054	0.051
82	0.411	0.408	0.400	0.397	0.399	0.400	0.397	0.389	0.381	0.380	0.378	0.372	0.363	0.354	0.348	0.304	0.190	0.100	0.067	0.056
83	0.404	0.405	0.402	0.396	0.393	0.396	0.400	0.406	0.402	0.393	0.383	0.375	0.366	0.357	0.345	0.327	0.270	0.170	0.095	0.067
84	0.404	0.403	0.402	0.399	0.396	0.394	0.395	0.396	0.400	0.401	0.396	0.393	0.388	0.376	0.362	0.346	0.328	0.283	0.192	0.107
85	0.410	0.405	0.404	0.405	0.406	0.404	0.403	0.404	0.405	0.403	0.401	0.403	0.403	0.398	0.393	0.383	0.361	0.336	0.298	0.215
86	0.419	0.415	0.414	0.417	0.420	0.420	0.420	0.419	0.418	0.418	0.419	0.419	0.416	0.412	0.409	0.405	0.395	0.378	0.356	0.325
87	0.425	0.428	0.430	0.429	0.427	0.425	0.425	0.426	0.426	0.427	0.428	0.427	0.424	0.420	0.417	0.412	0.405	0.396	0.388	0.385
88	0.305	0.326	0.350	0.377	0.405	0.438	0.468	0.492	0.497	0.496	0.495	0.493	0.488	0.481	0.473	0.470	0.468	0.468	0.469	0.479
89	0.074	0.077	0.078	0.082	0.084	0.088	0.092	0.097	0.100	0.103	0.105	0.108	0.112	0.115	0.114	0.114	0.111	0.110	0.110	0.114
90	0.063	0.065	0.064	0.065	0.066	0.067	0.067	0.069	0.068	0.069	0.071	0.075	0.077	0.080	0.079	0.078	0.074	0.072	0.070	0.069
91	0.059	0.060	0.060	0.061	0.060	0.061	0.060	0.061	0.061	0.063	0.064	0.067	0.070	0.073	0.073	0.072	0.068	0.066	0.063	0.064
92	0.057	0.056	0.057	0.056	0.058	0.057	0.059	0.058	0.059	0.060	0.066	0.071	0.071	0.072	0.076	0.082	0.079	0.068	0.065	0.063
93	0.055	0.057	0.056	0.057	0.057	0.064	0.081	0.083	0.069	0.063	0.064	0.067	0.068	0.071	0.072	0.074	0.072	0.069	0.066	0.066
94	0.056	0.056	0.057	0.056	0.061	0.093	0.155	0.162	0.112	0.076	0.067	0.068	0.071	0.073	0.075	0.075	0.074	0.071	0.069	0.068
95	0.054	0.056	0.053	0.056	0.056	0.062	0.077	0.086	0.072	0.065	0.064	0.069	0.072	0.076	0.078	0.079	0.077	0.074	0.072	0.073
96	0.056	0.056	0.057	0.057	0.058	0.059	0.059	0.059	0.060	0.062	0.067	0.070	0.075	0.077	0.080	0.080	0.081	0.077	0.078	0.077
97	0.054	0.054	0.056	0.057	0.059	0.060	0.061	0.061	0.061	0.062	0.066	0.071	0.076	0.079	0.083	0.084	0.083	0.079	0.078	0.077
98	0.055	0.055	0.056	0.057	0.060	0.061	0.063	0.062	0.063	0.064	0.066	0.073	0.078	0.081	0.085	0.085	0.084	0.079	0.075	0.074

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 7.40 SEC
HREF = 0.398E-01

GROUP 7

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.029	0.028	0.027	0.028	0.027	0.027	0.026	0.026	0.025	0.025	0.023	0.025	0.022	0.024	0.020	0.023	0.021	0.021	0.018	0.020
65	0.029	0.030	0.029	0.030	0.028	0.028	0.027	0.026	0.025	0.026	0.024	0.025	0.023	0.023	0.021	0.022	0.021	0.022	0.021	0.021
66	0.031	0.031	0.030	0.031	0.029	0.029	0.027	0.027	0.026	0.026	0.025	0.026	0.024	0.024	0.021	0.023	0.021	0.022	0.021	0.021
67	0.030	0.029	0.028	0.028	0.027	0.027	0.027	0.027	0.025	0.025	0.023	0.024	0.021	0.023	0.021	0.022	0.021	0.020	0.019	0.018
68	0.029	0.026	0.027	0.025	0.027	0.025	0.026	0.023	0.025	0.021	0.021	0.019	0.021	0.019	0.020	0.017	0.020	0.019	0.018	0.016
69	0.028	0.029	0.027	0.027	0.025	0.025	0.023	0.025	0.023	0.024	0.021	0.021	0.020	0.020	0.018	0.019	0.018	0.019	0.016	0.018
70	0.027	0.027	0.027	0.026	0.026	0.025	0.024	0.023	0.022	0.021	0.022	0.020	0.021	0.019	0.019	0.016	0.017	0.016	0.017	0.015
71	0.027	0.028	0.027	0.027	0.026	0.026	0.024	0.025	0.022	0.024	0.021	0.023	0.021	0.021	0.018	0.018	0.017	0.018	0.016	0.017
72	0.031	0.029	0.029	0.027	0.027	0.025	0.025	0.025	0.025	0.024	0.023	0.021	0.022	0.020	0.020	0.019	0.020	0.018	0.019	0.016
73	0.029	0.030	0.029	0.029	0.027	0.027	0.025	0.026	0.025	0.026	0.024	0.024	0.021	0.021	0.020	0.021	0.018	0.020	0.016	0.018
74	0.031	0.030	0.028	0.030	0.027	0.027	0.026	0.027	0.025	0.026	0.024	0.023	0.021	0.022	0.021	0.021	0.020	0.020	0.018	0.020
75	0.028	0.030	0.027	0.029	0.025	0.027	0.023	0.027	0.024	0.025	0.021	0.024	0.021	0.023	0.020	0.021	0.019	0.021	0.018	0.020
76	0.032	0.031	0.031	0.028	0.028	0.027	0.027	0.027	0.026	0.025	0.025	0.023	0.024	0.022	0.021	0.021	0.021	0.017	0.019	0.015
77	0.031	0.031	0.030	0.030	0.027	0.027	0.027	0.027	0.026	0.026	0.025	0.025	0.023	0.024	0.021	0.021	0.020	0.021	0.019	0.020
78	0.032	0.031	0.031	0.029	0.030	0.027	0.027	0.027	0.027	0.026	0.026	0.023	0.024	0.021	0.022	0.021	0.021	0.019	0.020	0.017
79	0.033	0.031	0.030	0.029	0.028	0.027	0.027	0.026	0.026	0.023	0.024	0.023	0.023	0.022	0.022	0.020	0.020	0.019	0.020	0.017
80	0.038	0.033	0.031	0.030	0.027	0.027	0.025	0.026	0.025	0.025	0.022	0.023	0.021	0.021	0.020	0.020	0.018	0.020	0.017	0.019
81	0.047	0.044	0.037	0.034	0.031	0.030	0.028	0.027	0.025	0.027	0.025	0.026	0.025	0.026	0.024	0.023	0.022	0.023	0.022	0.023
82	0.048	0.048	0.043	0.043	0.036	0.034	0.029	0.027	0.023	0.023	0.020	0.021	0.019	0.021	0.020	0.021	0.017	0.019	0.016	0.017
83	0.053	0.048	0.044	0.044	0.043	0.044	0.041	0.041	0.036	0.034	0.030	0.027	0.025	0.023	0.021	0.021	0.015	0.018	0.012	0.016
84	0.069	0.055	0.048	0.046	0.042	0.041	0.041	0.041	0.041	0.041	0.041	0.039	0.037	0.034	0.036	0.031	0.027	0.024	0.021	0.019
85	0.122	0.074	0.055	0.048	0.043	0.042	0.041	0.041	0.039	0.040	0.038	0.040	0.039	0.040	0.039	0.040	0.037	0.037	0.034	0.033
86	0.246	0.141	0.081	0.057	0.048	0.043	0.043	0.041	0.041	0.039	0.039	0.038	0.039	0.039	0.041	0.041	0.041	0.039	0.039	0.038
87	0.369	0.293	0.182	0.101	0.066	0.052	0.046	0.042	0.042	0.041	0.041	0.040	0.041	0.039	0.039	0.039	0.041	0.041	0.041	0.039
88	0.484	0.465	0.381	0.234	0.119	0.074	0.055	0.049	0.045	0.046	0.045	0.046	0.044	0.044	0.041	0.042	0.041	0.043	0.041	0.041
89	0.117	0.119	0.111	0.093	0.070	0.061	0.055	0.053	0.049	0.049	0.046	0.048	0.045	0.044	0.043	0.043	0.041	0.041	0.039	0.039
90	0.068	0.067	0.064	0.061	0.058	0.056	0.053	0.053	0.051	0.050	0.048	0.048	0.044	0.044	0.041	0.042	0.039	0.041	0.038	0.039
91	0.063	0.062	0.059	0.056	0.055	0.056	0.054	0.055	0.053	0.053	0.051	0.051	0.048	0.048	0.044	0.045	0.042	0.043	0.039	0.040
92	0.063	0.061	0.059	0.056	0.057	0.056	0.057	0.057	0.057	0.055	0.055	0.053	0.052	0.051	0.051	0.048	0.048	0.045	0.044	0.043
93	0.064	0.064	0.062	0.062	0.062	0.063	0.061	0.061	0.060	0.061	0.060	0.060	0.057	0.058	0.056	0.055	0.053	0.053	0.050	0.050
94	0.068	0.067	0.068	0.068	0.069	0.070	0.070	0.069	0.070	0.068	0.068	0.068	0.068	0.066	0.066	0.064	0.063	0.061	0.059	0.057
95	0.072	0.075	0.076	0.079	0.081	0.082	0.082	0.084	0.082	0.082	0.081	0.080	0.078	0.078	0.076	0.076	0.074	0.073	0.072	0.071
96	0.079	0.080	0.083	0.084	0.085	0.085	0.087	0.086	0.087	0.086	0.085	0.082	0.082	0.080	0.081	0.082	0.082	0.082	0.082	0.081
97	0.079	0.080	0.081	0.081	0.080	0.080	0.081	0.080	0.080	0.080	0.079	0.078	0.079	0.078	0.080	0.080	0.083	0.083	0.086	0.086
98	0.075	0.076	0.078	0.078	0.079	0.077	0.077	0.076	0.076	0.076	0.078	0.078	0.079	0.079	0.081	0.082	0.084	0.087	0.089	0.091

87

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 7.40 SEC
HREF = 0.398E-01

GROUP 7

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.017	0.020	0.017	0.020	0.015	0.017	0.015	0.017	0.015	0.015
65	0.017	0.019	0.017	0.019	0.017	0.018	0.016	0.016	0.015	0.015
66	0.019	0.020	0.017	0.019	0.016	0.018	0.018	0.016	0.015	0.014
67	0.017	0.018	0.017	0.017	0.013	0.016	0.013	0.013	0.012	0.013
68	0.017	0.014	0.016	0.015	0.016	0.013	0.013	0.012	0.011	0.010
69	0.011	0.015	0.010	0.014	0.008	0.012	0.009	0.011	0.008	0.010
70	0.016	0.013	0.014	0.012	0.011	0.010	0.010	0.010	0.010	0.010
71	0.015	0.015	0.013	0.013	0.011	0.012	0.010	0.011	0.009	0.011
72	0.016	0.014	0.015	0.013	0.014	0.012	0.012	0.010	0.010	0.010
73	0.015	0.017	0.015	0.015	0.013	0.013	0.011	0.011	0.010	0.011
74	0.017	0.018	0.015	0.015	0.012	0.014	0.012	0.012	0.009	0.010
75	0.016	0.017	0.015	0.016	0.013	0.013	0.011	0.011	0.010	0.012
76	0.017	0.014	0.017	0.013	0.014	0.011	0.012	0.010	0.011	0.008
77	0.017	0.016	0.015	0.016	0.015	0.014	0.011	0.012	0.010	0.011
78	0.019	0.017	0.017	0.015	0.014	0.013	0.013	0.012	0.011	0.010
79	0.018	0.016	0.017	0.015	0.015	0.013	0.014	0.012	0.012	0.010
80	0.016	0.017	0.014	0.016	0.013	0.014	0.012	0.012	0.010	0.011
81	0.022	0.023	0.021	0.021	0.020	0.021	0.019	0.020	0.018	0.019
82	0.015	0.016	0.015	0.015	0.013	0.013	0.010	0.011	0.010	0.010
83	0.012	0.015	0.011	0.014	0.010	0.012	0.006	0.011	0.005	0.010
84	0.018	0.016	0.014	0.014	0.012	0.010	0.010	0.009	0.008	0.010
85	0.031	0.029	0.026	0.025	0.021	0.018	0.014	0.014	0.011	0.012
86	0.039	0.036	0.035	0.032	0.031	0.028	0.027	0.025	0.025	0.020
87	0.038	0.036	0.039	0.039	0.037	0.034	0.032	0.031	0.030	0.028
88	0.038	0.037	0.038	0.039	0.035	0.034	0.033	0.031	0.029	0.029
89	0.034	0.034	0.032	0.033	0.032	0.031	0.030	0.028	0.026	0.027
90	0.034	0.036	0.032	0.035	0.032	0.034	0.030	0.030	0.026	0.027
91	0.038	0.039	0.038	0.039	0.038	0.039	0.035	0.035	0.031	0.032
92	0.042	0.041	0.041	0.040	0.042	0.041	0.041	0.039	0.040	0.037
93	0.048	0.048	0.046	0.048	0.046	0.048	0.048	0.049	0.048	0.048
94	0.057	0.056	0.057	0.057	0.058	0.057	0.060	0.059	0.058	0.056
95	0.070	0.071	0.071	0.072	0.072	0.074	0.074	0.075	0.073	0.072
96	0.082	0.082	0.084	0.085	0.087	0.090	0.092	0.094	0.095	0.094
97	0.090	0.090	0.094	0.099	0.112	0.132	0.157	0.168	0.174	0.179
98	0.095	0.099	0.104	0.118	0.148	0.189	0.230	0.247	0.251	0.243

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

GROUP 9

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
121 52	593.979	593.979	593.979	593.979	0.000	591.671
121 53	594.284	594.371	593.979	594.284	0.000	591.671
121 54	594.632	594.719	593.979	594.676	0.000	591.671
121 55	594.937	594.894	593.979	594.981	0.000	591.671
121 56	595.155	595.068	593.979	595.198	0.000	591.671
121 56	595.155	595.068	593.979	595.198	0.000	591.671
121 57	595.242	595.285	593.979	595.416	0.000	591.671
121 58	595.416	595.416	593.979	595.547	0.000	591.671
121 59	595.590	595.503	593.979	595.677	0.000	591.671
122 0	595.634	595.634	593.979	595.764	0.000	591.671
122 1	595.764	595.721	593.979	595.851	0.000	591.671
122 2	595.851	595.808	593.979	595.938	0.000	591.671
122 2	595.895	595.851	593.979	595.938	0.000	591.671
122 3	595.895	595.851	593.979	595.938	0.000	591.671
122 3	595.938	595.851	593.979	595.982	0.000	591.671
122 4	595.982	595.938	593.979	596.025	0.000	591.671
122 5	596.025	595.982	593.979	596.069	0.000	591.671
122 6	596.112	596.069	593.979	596.112	0.000	591.671
122 7	596.156	596.069	593.979	596.156	0.000	591.671

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

GROUP	* * * * TITLE TYPE	MODEL DESCRIPTION * * * * GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
9	PSI FORWARD	0.01	0.000	-0.02	30.02	0.053	1	21	26

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/F FT-1	HRFR BTU/FT2-SEC-R	INITIAL TEMP DEG R
8.00	797.99	1336.67	96.86	0.0817	3860.	0.708E-04	0.780E-07	0.350E+07	0.397E-01	538.7

IR CAMERA INFORMATION

MOUNTING LOCATION	260
F STOP	2.5
LENS-DEG	15
SENSITIVITY	1000.
BLACK LEVEL VOLTAGE	2.3751
LINE SCAN PHI	90
MODEL EMISSIVITY	0.96
REF EMISSIVITY	0.94
WINDOW FACTOR	0.840

TIME RECORDS

LIFT OFF	0.00
CENTER LINE	1.00
IR SCAN TIME	10.66
DELTA TIME,SEC	10.10
PHOTO 1 TIME	122
PHOTO 2 TIME	0
PHOTO 3 TIME	0
PHOTO 4 TIME	0

REFERENCE TARGET INFORMATION

TCR5	500.70
TCR6	-228.49

DIGITAL DATA AREA PRINTOUT LOCATION

LINE 29 THROUGH 98
POINT 1 THROUGH 110

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 10.10 SEC
GROUP 9 INITIAL TEMP 538.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	1.120	1.127	1.139	1.147	1.156	1.152	1.152	1.150	1.152	1.146	1.147	1.145	1.140	1.142	1.146	1.149	1.151	1.153	1.156	1.154
30	1.134	1.144	1.150	1.150	1.150	1.147	1.144	1.144	1.145	1.145	1.146	1.145	1.147	1.146	1.150	1.151	1.153	1.154	1.157	1.153
31	1.150	1.152	1.151	1.150	1.144	1.142	1.141	1.146	1.147	1.150	1.151	1.154	1.152	1.153	1.151	1.153	1.153	1.157	1.154	1.152
32	1.151	1.147	1.146	1.145	1.144	1.144	1.149	1.149	1.153	1.153	1.153	1.153	1.153	1.152	1.154	1.153	1.153	1.147	1.144	1.136
33	1.146	1.142	1.144	1.149	1.153	1.153	1.156	1.153	1.153	1.151	1.152	1.153	1.154	1.152	1.149	1.140	1.135	1.130	1.130	1.128
34	1.144	1.146	1.149	1.151	1.152	1.151	1.151	1.147	1.149	1.151	1.149	1.146	1.137	1.134	1.127	1.127	1.130	1.135	1.136	1.140
35	1.154	1.154	1.147	1.149	1.142	1.147	1.144	1.144	1.136	1.135	1.124	1.124	1.121	1.127	1.128	1.136	1.140	1.142	1.142	1.145
36	1.152	1.149	1.146	1.142	1.140	1.135	1.131	1.124	1.124	1.124	1.130	1.130	1.134	1.132	1.136	1.136	1.142	1.141	1.147	1.144
37	1.141	1.140	1.134	1.130	1.123	1.121	1.124	1.127	1.123	1.130	1.132	1.135	1.137	1.140	1.139	1.141	1.142	1.139	1.128	1.108
38	1.128	1.124	1.120	1.120	1.125	1.125	1.127	1.130	1.134	1.134	1.136	1.137	1.145	1.141	1.137	1.124	1.110	1.090	1.077	1.059
39	1.117	1.120	1.124	1.127	1.127	1.128	1.130	1.135	1.135	1.139	1.140	1.136	1.130	1.118	1.097	1.079	1.063	1.061	1.059	1.057
40	1.123	1.124	1.127	1.128	1.132	1.134	1.136	1.136	1.139	1.134	1.125	1.106	1.098	1.068	1.063	1.059	1.061	1.063	1.063	1.059
41	1.125	1.127	1.131	1.131	1.134	1.134	1.135	1.130	1.118	1.093	1.081	1.063	1.063	1.063	1.065	1.063	1.061	1.063	1.063	1.065
42	1.135	1.136	1.137	1.134	1.136	1.121	1.110	1.081	1.073	1.061	1.065	1.059	1.065	1.065	1.068	1.068	1.068	1.065	1.070	1.068
43	1.142	1.145	1.141	1.125	1.105	1.079	1.070	1.063	1.063	1.063	1.068	1.065	1.070	1.063	1.068	1.063	1.068	1.065	1.068	1.061
44	1.145	1.130	1.100	1.077	1.065	1.065	1.063	1.068	1.063	1.065	1.065	1.068	1.068	1.070	1.068	1.072	1.070	1.075	1.077	1.077
45	1.098	1.077	1.073	1.070	1.070	1.070	1.072	1.068	1.072	1.072	1.077	1.075	1.077	1.073	1.079	1.077	1.081	1.077	1.085	1.081
46	1.079	1.079	1.077	1.079	1.077	1.079	1.077	1.081	1.081	1.085	1.083	1.085	1.081	1.086	1.085	1.088	1.088	1.095	1.098	1.113
47	1.086	1.083	1.085	1.085	1.086	1.088	1.090	1.092	1.090	1.092	1.090	1.093	1.093	1.100	1.098	1.103	1.103	1.132	1.237	1.336
48	1.088	1.088	1.092	1.092	1.093	1.097	1.095	1.095	1.095	1.098	1.098	1.102	1.102	1.106	1.105	1.110	1.113	1.159	1.300	1.412
49	1.093	1.093	1.090	1.098	1.097	1.102	1.097	1.102	1.098	1.105	1.100	1.105	1.105	1.110	1.110	1.115	1.121	1.180	1.333	1.445
50	1.093	1.095	1.097	1.102	1.102	1.103	1.102	1.102	1.102	1.105	1.106	1.108	1.108	1.113	1.111	1.120	1.124	1.213	1.371	1.465
51	1.100	1.102	1.102	1.105	1.100	1.105	1.103	1.108	1.108	1.111	1.111	1.114	1.113	1.117	1.118	1.123	1.144	1.269	1.416	1.484
52	1.102	1.102	1.105	1.103	1.105	1.106	1.110	1.108	1.113	1.111	1.115	1.115	1.120	1.120	1.127	1.128	1.168	1.314	1.442	1.494
53	1.090	1.092	1.092	1.093	1.093	1.097	1.098	1.102	1.102	1.106	1.103	1.108	1.110	1.113	1.117	1.128	1.199	1.361	1.462	1.501
54	1.070	1.070	1.075	1.075	1.077	1.075	1.081	1.079	1.085	1.083	1.086	1.085	1.095	1.093	1.103	1.120	1.233	1.390	1.468	1.499
55	1.055	1.055	1.053	1.059	1.059	1.063	1.063	1.068	1.068	1.072	1.077	1.079	1.077	1.083	1.092	1.118	1.255	1.406	1.472	1.500
56	1.053	1.057	1.057	1.061	1.053	1.061	1.055	1.068	1.061	1.073	1.073	1.079	1.081	1.088	1.092	1.130	1.281	1.420	1.476	1.501
57	1.053	1.055	1.057	1.059	1.065	1.063	1.061	1.068	1.068	1.073	1.073	1.077	1.077	1.086	1.090	1.137	1.293	1.425	1.476	1.501
58	1.053	1.053	1.055	1.055	1.059	1.061	1.065	1.065	1.070	1.070	1.077	1.077	1.085	1.085	1.098	1.161	1.331	1.438	1.480	1.502
59	1.048	1.048	1.053	1.050	1.053	1.055	1.059	1.059	1.063	1.063	1.068	1.068	1.077	1.081	1.102	1.209	1.372	1.452	1.485	1.503
60	1.038	1.038	1.041	1.041	1.046	1.048	1.048	1.053	1.057	1.055	1.063	1.063	1.072	1.077	1.110	1.250	1.398	1.458	1.485	1.502
61	1.036	1.036	1.038	1.043	1.041	1.046	1.046	1.053	1.053	1.057	1.055	1.061	1.065	1.077	1.127	1.295	1.416	1.463	1.486	1.503
62	1.033	1.036	1.043	1.038	1.048	1.048	1.053	1.053	1.057	1.057	1.059	1.063	1.070	1.083	1.160	1.329	1.426	1.464	1.487	1.503
63	1.038	1.041	1.033	1.043	1.038	1.046	1.043	1.053	1.055	1.059	1.059	1.065	1.068	1.086	1.187	1.351	1.430	1.465	1.485	1.500

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 9

IR SCAN TIME 10.10 SEC
INITIAL TEMP 538.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	1.152	1.158	1.154	1.158	1.157	1.161	1.152	1.149	1.140	1.137	1.131	1.130	1.121	1.125	1.121	1.128	1.128	1.128	1.127	1.131
30	1.156	1.158	1.157	1.154	1.152	1.145	1.141	1.135	1.134	1.132	1.132	1.130	1.132	1.131	1.134	1.136	1.141	1.139	1.145	1.146
31	1.150	1.146	1.140	1.137	1.134	1.131	1.128	1.131	1.132	1.139	1.142	1.145	1.146	1.149	1.147	1.154	1.156	1.156	1.154	1.156
32	1.135	1.128	1.130	1.132	1.137	1.140	1.142	1.141	1.145	1.149	1.153	1.154	1.160	1.157	1.158	1.156	1.152	1.141	1.135	1.124
33	1.134	1.134	1.139	1.141	1.146	1.147	1.151	1.150	1.152	1.156	1.157	1.154	1.150	1.135	1.125	1.110	1.100	1.079	1.072	1.057
34	1.140	1.142	1.145	1.147	1.150	1.152	1.151	1.145	1.140	1.132	1.117	1.105	1.086	1.068	1.055	1.050	1.048	1.050	1.048	1.048
35	1.146	1.149	1.147	1.146	1.127	1.127	1.110	1.093	1.072	1.059	1.050	1.048	1.048	1.048	1.048	1.048	1.046	1.048	1.046	1.046
36	1.141	1.127	1.115	1.092	1.077	1.057	1.055	1.046	1.050	1.046	1.046	1.041	1.048	1.048	1.050	1.048	1.053	1.053	1.053	1.050
37	1.092	1.075	1.065	1.055	1.059	1.053	1.055	1.053	1.053	1.050	1.048	1.050	1.048	1.055	1.046	1.053	1.055	1.050	1.048	1.053
38	1.061	1.059	1.057	1.055	1.055	1.053	1.055	1.057	1.057	1.053	1.053	1.053	1.055	1.055	1.057	1.055	1.059	1.057	1.057	1.055
39	1.057	1.057	1.057	1.059	1.059	1.059	1.057	1.059	1.057	1.061	1.059	1.059	1.059	1.059	1.057	1.061	1.059	1.061	1.059	1.059
40	1.061	1.059	1.063	1.063	1.063	1.059	1.063	1.059	1.065	1.065	1.065	1.061	1.063	1.063	1.065	1.063	1.068	1.061	1.063	1.059
41	1.065	1.063	1.065	1.065	1.068	1.068	1.065	1.065	1.068	1.068	1.068	1.065	1.070	1.065	1.068	1.068	1.065	1.065	1.070	1.068
42	1.070	1.070	1.068	1.070	1.072	1.072	1.073	1.070	1.073	1.073	1.075	1.075	1.073	1.072	1.075	1.075	1.077	1.072	1.073	1.073
43	1.070	1.068	1.075	1.070	1.075	1.072	1.077	1.073	1.079	1.072	1.081	1.079	1.081	1.077	1.079	1.077	1.081	1.077	1.081	1.077
44	1.073	1.079	1.077	1.083	1.077	1.081	1.079	1.083	1.081	1.085	1.081	1.083	1.079	1.083	1.077	1.083	1.075	1.083	1.075	1.081
45	1.085	1.085	1.088	1.086	1.092	1.086	1.093	1.088	1.093	1.090	1.093	1.092	1.093	1.088	1.095	1.090	1.092	1.090	1.092	1.086
46	1.114	1.118	1.118	1.117	1.114	1.115	1.111	1.111	1.106	1.110	1.106	1.110	1.106	1.108	1.103	1.103	1.102	1.103	1.102	1.102
47	1.378	1.395	1.403	1.404	1.400	1.387	1.363	1.326	1.282	1.235	1.192	1.161	1.141	1.132	1.125	1.123	1.120	1.118	1.117	1.117
48	1.457	1.476	1.491	1.508	1.524	1.543	1.564	1.582	1.591	1.588	1.570	1.532	1.469	1.380	1.281	1.204	1.159	1.140	1.130	1.128
49	1.487	1.506	1.518	1.531	1.543	1.556	1.570	1.586	1.603	1.616	1.624	1.628	1.624	1.620	1.602	1.551	1.442	1.297	1.201	1.157
50	1.504	1.528	1.544	1.559	1.571	1.584	1.596	1.607	1.610	1.612	1.615	1.618	1.619	1.622	1.626	1.625	1.600	1.510	1.357	1.236
51	1.515	1.537	1.555	1.572	1.589	1.607	1.624	1.637	1.641	1.644	1.644	1.642	1.638	1.638	1.640	1.642	1.637	1.619	1.549	1.404
52	1.520	1.538	1.555	1.575	1.594	1.612	1.633	1.653	1.673	1.685	1.687	1.680	1.667	1.654	1.646	1.645	1.645	1.644	1.636	1.594
53	1.523	1.541	1.555	1.574	1.594	1.615	1.635	1.656	1.678	1.692	1.697	1.702	1.705	1.701	1.690	1.675	1.661	1.655	1.652	1.647
54	1.519	1.533	1.547	1.563	1.582	1.603	1.627	1.650	1.674	1.691	1.699	1.704	1.708	1.714	1.721	1.724	1.723	1.711	1.689	1.668
55	1.517	1.530	1.542	1.558	1.577	1.600	1.622	1.644	1.665	1.686	1.702	1.712	1.716	1.719	1.722	1.723	1.727	1.732	1.735	1.728
56	1.518	1.531	1.542	1.556	1.575	1.595	1.616	1.638	1.660	1.680	1.696	1.707	1.715	1.723	1.731	1.734	1.735	1.737	1.738	1.744
57	1.515	1.528	1.538	1.553	1.569	1.590	1.610	1.632	1.653	1.671	1.682	1.692	1.698	1.703	1.709	1.716	1.726	1.737	1.746	1.749
58	1.517	1.527	1.539	1.552	1.569	1.586	1.607	1.628	1.647	1.664	1.678	1.685	1.691	1.698	1.705	1.709	1.711	1.715	1.723	1.733
59	1.515	1.524	1.536	1.551	1.568	1.586	1.607	1.628	1.647	1.663	1.672	1.678	1.690	1.701	1.704	1.703	1.705	1.708	1.712	1.717
60	1.515	1.523	1.533	1.548	1.565	1.581	1.601	1.621	1.643	1.658	1.667	1.673	1.684	1.693	1.698	1.697	1.703	1.709	1.711	1.706
61	1.515	1.523	1.534	1.547	1.559	1.576	1.595	1.614	1.633	1.647	1.654	1.665	1.680	1.692	1.695	1.692	1.695	1.701	1.704	1.706
62	1.513	1.520	1.533	1.546	1.558	1.573	1.592	1.610	1.629	1.639	1.647	1.656	1.669	1.678	1.683	1.689	1.694	1.693	1.693	1.697
63	1.510	1.518	1.528	1.542	1.554	1.569	1.587	1.607	1.625	1.636	1.644	1.653	1.666	1.674	1.678	1.681	1.682	1.684	1.683	1.687

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 9

IR SCAN TIME 10.10 SEC
INITIAL TEMP 538.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	1.135	1.137	1.135	1.135	1.140	1.141	1.145	1.149	1.145	1.141	1.139	1.140	1.140	1.139	1.136	1.132	1.131	1.127	1.121	1.113
30	1.153	1.150	1.151	1.149	1.154	1.151	1.152	1.146	1.142	1.132	1.128	1.118	1.118	1.113	1.110	1.103	1.097	1.088	1.090	1.079
31	1.157	1.154	1.146	1.140	1.131	1.124	1.115	1.108	1.095	1.085	1.073	1.065	1.063	1.057	1.053	1.050	1.038	1.046	1.038	1.048
32	1.115	1.102	1.092	1.075	1.065	1.057	1.053	1.048	1.048	1.043	1.043	1.041	1.043	1.043	1.046	1.041	1.043	1.041	1.043	1.038
33	1.053	1.046	1.050	1.048	1.048	1.046	1.048	1.043	1.043	1.038	1.043	1.043	1.046	1.043	1.046	1.041	1.043	1.038	1.043	1.041
34	1.043	1.046	1.043	1.046	1.046	1.048	1.046	1.046	1.043	1.043	1.041	1.043	1.041	1.041	1.038	1.043	1.043	1.038	1.038	1.041
35	1.048	1.048	1.048	1.050	1.046	1.046	1.046	1.046	1.043	1.046	1.043	1.050	1.043	1.043	1.038	1.041	1.038	1.041	1.038	1.043
36	1.050	1.050	1.050	1.050	1.053	1.050	1.050	1.048	1.050	1.046	1.048	1.043	1.048	1.046	1.050	1.046	1.043	1.043	1.043	1.038
37	1.050	1.050	1.041	1.053	1.053	1.053	1.048	1.053	1.050	1.053	1.048	1.050	1.043	1.048	1.043	1.046	1.043	1.043	1.043	1.046
38	1.057	1.053	1.059	1.057	1.059	1.055	1.055	1.053	1.053	1.053	1.055	1.053	1.055	1.046	1.050	1.043	1.050	1.043	1.050	1.041
39	1.055	1.059	1.059	1.061	1.059	1.057	1.059	1.057	1.055	1.055	1.055	1.055	1.055	1.055	1.050	1.053	1.053	1.050	1.050	1.053
40	1.068	1.065	1.065	1.063	1.063	1.059	1.063	1.063	1.065	1.059	1.061	1.059	1.059	1.057	1.061	1.057	1.057	1.053	1.055	1.055
41	1.068	1.065	1.070	1.065	1.068	1.065	1.065	1.063	1.063	1.063	1.065	1.063	1.061	1.059	1.061	1.059	1.059	1.055	1.059	1.057
42	1.072	1.073	1.073	1.070	1.072	1.070	1.072	1.070	1.068	1.065	1.068	1.068	1.063	1.063	1.061	1.063	1.063	1.063	1.063	1.059
43	1.077	1.075	1.079	1.077	1.077	1.073	1.077	1.072	1.077	1.070	1.070	1.068	1.068	1.068	1.068	1.063	1.065	1.065	1.065	1.061
44	1.075	1.079	1.072	1.079	1.073	1.081	1.072	1.075	1.070	1.077	1.073	1.075	1.070	1.070	1.068	1.068	1.068	1.068	1.065	1.065
45	1.086	1.085	1.088	1.083	1.086	1.079	1.083	1.077	1.083	1.077	1.083	1.073	1.077	1.070	1.073	1.070	1.075	1.068	1.073	1.063
46	1.098	1.100	1.093	1.097	1.093	1.095	1.092	1.093	1.090	1.090	1.085	1.086	1.083	1.086	1.083	1.085	1.083	1.085	1.077	1.081
47	1.115	1.114	1.111	1.111	1.106	1.108	1.103	1.105	1.102	1.103	1.100	1.102	1.095	1.097	1.095	1.097	1.095	1.097	1.092	1.092
48	1.125	1.127	1.124	1.121	1.118	1.117	1.115	1.113	1.108	1.110	1.105	1.105	1.102	1.103	1.102	1.102	1.100	1.100	1.097	1.098
49	1.141	1.136	1.134	1.132	1.127	1.125	1.118	1.118	1.114	1.113	1.111	1.113	1.110	1.110	1.105	1.105	1.102	1.105	1.102	1.103
50	1.181	1.156	1.141	1.135	1.130	1.127	1.125	1.124	1.121	1.121	1.117	1.115	1.113	1.113	1.111	1.111	1.110	1.110	1.106	1.105
51	1.255	1.189	1.163	1.158	1.144	1.136	1.128	1.127	1.127	1.125	1.124	1.124	1.120	1.120	1.115	1.115	1.114	1.114	1.111	1.113
52	1.471	1.303	1.202	1.162	1.157	1.154	1.146	1.137	1.135	1.128	1.131	1.124	1.125	1.118	1.121	1.117	1.120	1.117	1.118	1.113
53	1.625	1.539	1.380	1.246	1.179	1.151	1.149	1.146	1.136	1.130	1.124	1.124	1.121	1.121	1.118	1.117	1.113	1.113	1.113	1.113
54	1.652	1.641	1.600	1.461	1.286	1.196	1.160	1.149	1.144	1.121	1.111	1.105	1.103	1.098	1.098	1.093	1.093	1.090	1.093	1.092
55	1.712	1.692	1.668	1.627	1.512	1.337	1.220	1.171	1.150	1.145	1.128	1.111	1.098	1.095	1.092	1.092	1.086	1.088	1.085	1.093
56	1.751	1.751	1.740	1.717	1.679	1.590	1.423	1.264	1.190	1.160	1.151	1.140	1.120	1.108	1.102	1.100	1.095	1.097	1.098	1.103
57	1.751	1.755	1.759	1.764	1.760	1.740	1.685	1.553	1.361	1.233	1.179	1.158	1.151	1.134	1.113	1.110	1.103	1.105	1.106	1.111
58	1.747	1.757	1.759	1.758	1.763	1.769	1.771	1.749	1.660	1.476	1.294	1.206	1.170	1.156	1.144	1.120	1.111	1.103	1.110	1.108
59	1.720	1.721	1.727	1.740	1.755	1.762	1.765	1.766	1.765	1.728	1.602	1.407	1.261	1.186	1.163	1.146	1.125	1.106	1.110	1.103
60	1.709	1.714	1.713	1.702	1.693	1.701	1.727	1.750	1.761	1.761	1.743	1.639	1.434	1.267	1.196	1.161	1.151	1.124	1.106	1.093
61	1.708	1.712	1.714	1.712	1.704	1.691	1.673	1.663	1.679	1.711	1.738	1.737	1.666	1.492	1.302	1.209	1.163	1.149	1.130	1.108
62	1.704	1.705	1.709	1.715	1.717	1.712	1.701	1.683	1.660	1.636	1.629	1.655	1.693	1.690	1.575	1.369	1.233	1.176	1.151	1.131
63	1.698	1.704	1.705	1.706	1.709	1.716	1.721	1.719	1.707	1.685	1.657	1.625	1.599	1.604	1.632	1.585	1.419	1.256	1.186	1.154

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 9

IR SCAN TIME 10.10 SEC
INITIAL TEMP 538.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	1.102	1.097	1.092	1.093	1.092	1.097	1.095	1.095	1.092	1.090	1.095	1.103	1.102	1.103	1.098	1.097	1.092	1.092	1.086	1.090
30	1.073	1.065	1.061	1.059	1.061	1.059	1.059	1.057	1.055	1.055	1.055	1.057	1.057	1.053	1.055	1.055	1.055	1.053	1.055	1.050
31	1.038	1.046	1.036	1.043	1.038	1.043	1.038	1.041	1.033	1.041	1.033	1.046	1.043	1.048	1.043	1.046	1.043	1.046	1.048	1.048
32	1.043	1.043	1.043	1.038	1.043	1.038	1.041	1.038	1.043	1.038	1.043	1.038	1.038	1.028	1.041	1.033	1.043	1.033	1.043	1.031
33	1.043	1.041	1.043	1.038	1.041	1.036	1.041	1.036	1.038	1.036	1.041	1.038	1.039	1.038	1.038	1.038	1.041	1.038	1.041	1.038
34	1.038	1.041	1.038	1.043	1.038	1.041	1.038	1.038	1.033	1.038	1.033	1.038	1.038	1.036	1.033	1.036	1.031	1.036	1.033	1.036
35	1.041	1.041	1.038	1.038	1.038	1.038	1.038	1.041	1.038	1.041	1.038	1.038	1.033	1.036	1.033	1.041	1.033	1.033	1.036	1.033
36	1.043	1.043	1.043	1.043	1.043	1.038	1.041	1.036	1.041	1.038	1.038	1.038	1.041	1.038	1.038	1.033	1.036	1.033	1.036	1.031
37	1.046	1.046	1.043	1.043	1.038	1.043	1.038	1.043	1.038	1.041	1.041	1.038	1.038	1.041	1.038	1.038	1.038	1.038	1.033	1.036
38	1.048	1.041	1.046	1.041	1.046	1.038	1.046	1.038	1.046	1.043	1.043	1.041	1.043	1.041	1.043	1.038	1.043	1.038	1.038	1.038
39	1.050	1.050	1.046	1.048	1.046	1.050	1.046	1.050	1.043	1.043	1.043	1.043	1.038	1.043	1.036	1.041	1.033	1.041	1.033	1.043
40	1.055	1.050	1.053	1.050	1.053	1.050	1.053	1.048	1.048	1.046	1.050	1.048	1.050	1.043	1.046	1.043	1.048	1.046	1.046	1.041
41	1.059	1.055	1.057	1.053	1.055	1.055	1.057	1.048	1.053	1.050	1.053	1.050	1.053	1.048	1.053	1.050	1.050	1.046	1.050	1.046
42	1.061	1.059	1.059	1.057	1.059	1.055	1.057	1.057	1.059	1.055	1.055	1.055	1.057	1.053	1.055	1.050	1.053	1.050	1.053	1.050
43	1.063	1.059	1.059	1.059	1.063	1.059	1.059	1.055	1.059	1.057	1.061	1.055	1.055	1.055	1.055	1.050	1.055	1.048	1.053	1.053
44	1.063	1.065	1.063	1.065	1.063	1.061	1.059	1.061	1.061	1.059	1.057	1.059	1.059	1.059	1.059	1.057	1.057	1.055	1.055	1.057
45	1.068	1.059	1.070	1.063	1.070	1.063	1.068	1.063	1.068	1.063	1.068	1.065	1.065	1.061	1.063	1.061	1.063	1.059	1.063	1.057
46	1.077	1.081	1.077	1.081	1.077	1.077	1.075	1.075	1.073	1.079	1.068	1.077	1.065	1.075	1.063	1.073	1.063	1.075	1.063	1.073
47	1.088	1.092	1.088	1.092	1.092	1.090	1.085	1.086	1.083	1.085	1.083	1.086	1.083	1.085	1.083	1.083	1.081	1.083	1.081	1.085
48	1.095	1.097	1.092	1.097	1.092	1.095	1.092	1.092	1.090	1.090	1.086	1.090	1.086	1.090	1.088	1.090	1.085	1.086	1.085	1.088
49	1.102	1.102	1.098	1.100	1.098	1.098	1.095	1.097	1.097	1.098	1.095	1.095	1.092	1.093	1.092	1.093	1.092	1.093	1.092	1.093
50	1.103	1.105	1.103	1.105	1.103	1.102	1.098	1.100	1.095	1.098	1.095	1.097	1.095	1.097	1.093	1.095	1.092	1.095	1.092	1.095
51	1.110	1.110	1.106	1.106	1.106	1.106	1.103	1.105	1.103	1.106	1.102	1.102	1.098	1.102	1.102	1.102	1.098	1.098	1.095	1.098
52	1.114	1.110	1.114	1.106	1.111	1.110	1.111	1.106	1.108	1.106	1.106	1.105	1.108	1.103	1.105	1.102	1.103	1.102	1.103	1.102
53	1.111	1.113	1.110	1.111	1.110	1.110	1.110	1.110	1.102	1.106	1.102	1.105	1.102	1.106	1.098	1.105	1.098	1.102	1.098	1.102
54	1.098	1.102	1.105	1.103	1.106	1.103	1.105	1.103	1.106	1.103	1.106	1.102	1.105	1.102	1.103	1.098	1.102	1.097	1.098	1.095
55	1.095	1.103	1.103	1.106	1.106	1.108	1.106	1.110	1.106	1.110	1.106	1.110	1.106	1.108	1.103	1.105	1.102	1.103	1.097	1.098
56	1.106	1.113	1.111	1.114	1.113	1.115	1.115	1.115	1.113	1.115	1.114	1.115	1.113	1.114	1.111	1.111	1.110	1.108	1.103	1.103
57	1.111	1.117	1.117	1.120	1.117	1.118	1.117	1.120	1.118	1.120	1.115	1.117	1.114	1.117	1.113	1.113	1.108	1.108	1.105	1.106
58	1.114	1.113	1.114	1.110	1.111	1.110	1.110	1.108	1.108	1.106	1.106	1.103	1.103	1.102	1.102	1.098	1.100	1.092	1.095	1.090
59	1.106	1.098	1.103	1.102	1.103	1.100	1.103	1.098	1.102	1.095	1.100	1.095	1.098	1.095	1.095	1.092	1.092	1.086	1.092	1.088
60	1.093	1.086	1.086	1.083	1.085	1.075	1.079	1.070	1.077	1.070	1.077	1.065	1.070	1.061	1.070	1.057	1.063	1.055	1.061	1.053
61	1.092	1.088	1.081	1.083	1.077	1.079	1.077	1.075	1.070	1.070	1.063	1.063	1.059	1.061	1.059	1.059	1.059	1.055	1.057	1.053
62	1.111	1.093	1.090	1.085	1.085	1.079	1.081	1.075	1.079	1.072	1.070	1.065	1.068	1.063	1.065	1.063	1.061	1.057	1.059	1.053
63	1.136	1.120	1.098	1.095	1.085	1.085	1.079	1.091	1.077	1.077	1.075	1.073	1.066	1.065	1.068	1.063	1.063	1.061	1.059	1.059

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 9

IR SCAN TIME 10.10 SEC
INITIAL TEMP 538.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	1.086	1.086	1.081	1.083	1.077	1.079	1.075	1.077	1.077	1.077	1.072	1.070	1.068	1.072	1.070	1.072	1.068	1.070	1.070	1.072
30	1.053	1.050	1.053	1.050	1.050	1.050	1.050	1.048	1.050	1.048	1.046	1.043	1.046	1.043	1.043	1.038	1.041	1.038	1.041	1.038
31	1.043	1.046	1.043	1.046	1.046	1.048	1.043	1.046	1.043	1.043	1.043	1.043	1.041	1.043	1.038	1.038	1.038	1.038	1.036	1.033
32	1.041	1.028	1.043	1.033	1.046	1.036	1.043	1.033	1.043	1.041	1.041	1.041	1.043	1.038	1.038	1.033	1.036	1.033	1.036	1.031
33	1.041	1.036	1.038	1.036	1.041	1.038	1.043	1.038	1.041	1.036	1.038	1.033	1.036	1.031	1.036	1.028	1.033	1.022	1.031	1.022
34	1.033	1.038	1.033	1.033	1.033	1.033	1.033	1.036	1.033	1.036	1.033	1.033	1.031	1.031	1.028	1.031	1.031	1.031	1.028	1.031
35	1.031	1.031	1.031	1.033	1.028	1.033	1.033	1.033	1.028	1.031	1.028	1.033	1.028	1.031	1.028	1.031	1.028	1.028	1.022	1.025
36	1.036	1.033	1.033	1.028	1.033	1.028	1.031	1.028	1.033	1.028	1.031	1.025	1.028	1.022	1.028	1.025	1.028	1.028	1.031	1.028
37	1.031	1.033	1.031	1.036	1.031	1.033	1.033	1.033	1.028	1.031	1.028	1.028	1.028	1.033	1.033	1.031	1.025	1.028	1.025	1.028
38	1.038	1.038	1.041	1.038	1.038	1.036	1.038	1.036	1.038	1.036	1.036	1.033	1.036	1.033	1.033	1.033	1.036	1.033	1.036	1.033
39	1.036	1.041	1.033	1.038	1.033	1.038	1.033	1.041	1.038	1.038	1.036	1.038	1.036	1.038	1.036	1.036	1.033	1.038	1.036	1.038
40	1.043	1.043	1.043	1.043	1.043	1.038	1.043	1.041	1.043	1.036	1.043	1.031	1.038	1.033	1.043	1.033	1.038	1.033	1.038	1.036
41	1.048	1.043	1.046	1.043	1.046	1.043	1.043	1.043	1.043	1.043	1.046	1.041	1.043	1.041	1.041	1.043	1.038	1.043	1.041	
42	1.048	1.050	1.050	1.046	1.048	1.043	1.046	1.043	1.048	1.046	1.046	1.043	1.046	1.043	1.046	1.041	1.043	1.041	1.043	1.041
43	1.055	1.053	1.053	1.046	1.050	1.048	1.053	1.048	1.048	1.046	1.048	1.046	1.048	1.043	1.046	1.043	1.048	1.043	1.048	1.041
44	1.055	1.055	1.050	1.053	1.053	1.055	1.053	1.053	1.048	1.053	1.048	1.050	1.048	1.050	1.046	1.048	1.046	1.048	1.048	1.048
45	1.061	1.059	1.059	1.059	1.061	1.059	1.059	1.057	1.059	1.057	1.059	1.055	1.059	1.057	1.057	1.053	1.057	1.055	1.057	1.055
46	1.063	1.072	1.063	1.072	1.063	1.073	1.070	1.070	1.068	1.070	1.065	1.070	1.065	1.070	1.068	1.070	1.065	1.065	1.063	1.065
47	1.083	1.086	1.085	1.085	1.083	1.083	1.077	1.081	1.077	1.081	1.077	1.079	1.073	1.079	1.072	1.081	1.075	1.081	1.075	1.079
48	1.086	1.093	1.092	1.097	1.089	1.088	1.095	1.086	1.083	1.086	1.085	1.086	1.083	1.085	1.081	1.083	1.083	1.085	1.083	1.085
49	1.092	1.097	1.093	1.100	1.093	1.095	1.092	1.092	1.088	1.089	1.085	1.088	1.086	1.090	1.086	1.090	1.086	1.088	1.085	1.085
50	1.095	1.098	1.097	1.097	1.093	1.095	1.092	1.092	1.092	1.092	1.090	1.092	1.086	1.090	1.086	1.086	1.086	1.092	1.086	1.088
51	1.095	1.098	1.098	1.098	1.095	1.097	1.093	1.095	1.093	1.095	1.092	1.095	1.093	1.093	1.092	1.093	1.092	1.093	1.093	1.092
52	1.105	1.100	1.102	1.100	1.100	1.100	1.102	1.098	1.100	1.098	1.097	1.095	1.097	1.093	1.098	1.093	1.095	1.092	1.095	1.092
53	1.095	1.098	1.092	1.097	1.093	1.093	1.092	1.092	1.088	1.088	1.085	1.090	1.083	1.086	1.081	1.085	1.081	1.083	1.081	1.081
54	1.097	1.092	1.092	1.085	1.086	1.075	1.077	1.068	1.070	1.063	1.070	1.061	1.065	1.061	1.065	1.059	1.063	1.059	1.061	1.055
55	1.092	1.093	1.090	1.088	1.079	1.077	1.068	1.065	1.063	1.061	1.057	1.059	1.055	1.059	1.055	1.053	1.050	1.050	1.048	1.053
56	1.100	1.102	1.095	1.093	1.088	1.085	1.075	1.072	1.063	1.063	1.061	1.063	1.061	1.059	1.055	1.057	1.053	1.055	1.053	1.048
57	1.102	1.100	1.093	1.093	1.090	1.086	1.077	1.072	1.065	1.063	1.063	1.061	1.057	1.059	1.055	1.057	1.053	1.053	1.043	1.048
58	1.092	1.085	1.086	1.079	1.083	1.075	1.075	1.065	1.068	1.059	1.061	1.057	1.059	1.055	1.057	1.050	1.053	1.048	1.050	1.046
59	1.090	1.085	1.085	1.083	1.085	1.077	1.083	1.077	1.079	1.077	1.077	1.072	1.068	1.065	1.070	1.068	1.070	1.068	1.070	1.065
60	1.059	1.055	1.055	1.048	1.053	1.046	1.050	1.046	1.048	1.041	1.043	1.038	1.043	1.038	1.043	1.038	1.043	1.038	1.038	1.036
61	1.050	1.053	1.046	1.050	1.043	1.043	1.038	1.043	1.033	1.041	1.033	1.041	1.033	1.038	1.031	1.033	1.028	1.033	1.025	1.033
62	1.053	1.050	1.053	1.050	1.053	1.048	1.050	1.043	1.046	1.041	1.043	1.038	1.043	1.038	1.043	1.033	1.036	1.033	1.038	1.028
63	1.055	1.055	1.053	1.053	1.050	1.053	1.048	1.053	1.048	1.048	1.041	1.043	1.038	1.043	1.038	1.041	1.038	1.038	1.033	1.033

NASA/RI OH90 TRANSITION TEST
V41R-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 9

IR SCAN TIME 10.10 SEC
INITIAL TEMP 538.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	1.068	1.068	1.065	1.070	1.068	1.068	1.068	1.068	1.068	1.068
30	1.036	1.033	1.036	1.031	1.038	1.033	1.033	1.028	1.033	1.031
31	1.031	1.033	1.031	1.033	1.031	1.033	1.025	1.031	1.028	1.031
32	1.036	1.028	1.031	1.025	1.031	1.028	1.028	1.025	1.028	1.025
33	1.025	1.022	1.031	1.022	1.031	1.019	1.025	1.025	1.028	1.022
34	1.022	1.022	1.019	1.022	1.022	1.025	1.022	1.025	1.022	1.022
35	1.022	1.025	1.019	1.025	1.022	1.025	1.019	1.022	1.019	1.022
36	1.031	1.022	1.025	1.022	1.028	1.022	1.028	1.022	1.025	1.022
37	1.028	1.028	1.028	1.028	1.028	1.025	1.022	1.025	1.025	1.028
38	1.033	1.028	1.033	1.031	1.036	1.031	1.033	1.028	1.031	1.028
39	1.038	1.036	1.033	1.036	1.033	1.036	1.033	1.036	1.033	1.033
40	1.041	1.033	1.041	1.033	1.041	1.041	1.041	1.038	1.041	1.038
41	1.043	1.038	1.041	1.038	1.041	1.038	1.043	1.031	1.041	1.031
42	1.046	1.038	1.048	1.041	1.046	1.043	1.043	1.041	1.043	1.043
43	1.046	1.041	1.046	1.043	1.043	1.041	1.046	1.043	1.048	1.043
44	1.043	1.048	1.046	1.048	1.048	1.046	1.046	1.046	1.043	1.050
45	1.055	1.053	1.055	1.053	1.055	1.053	1.057	1.055	1.055	1.050
46	1.063	1.065	1.068	1.068	1.065	1.068	1.063	1.065	1.065	1.065
47	1.073	1.077	1.072	1.079	1.077	1.079	1.079	1.081	1.075	1.075
48	1.083	1.083	1.077	1.081	1.077	1.081	1.075	1.083	1.075	1.081
49	1.083	1.086	1.085	1.086	1.083	1.086	1.081	1.083	1.081	1.085
50	1.083	1.088	1.085	1.088	1.085	1.086	1.083	1.085	1.083	1.085
51	1.092	1.092	1.086	1.090	1.088	1.092	1.090	1.092	1.086	1.086
52	1.095	1.092	1.095	1.088	1.092	1.086	1.090	1.086	1.090	1.086
53	1.077	1.081	1.079	1.081	1.079	1.079	1.077	1.077	1.075	1.077
54	1.063	1.059	1.059	1.055	1.059	1.057	1.059	1.055	1.057	1.053
55	1.046	1.043	1.043	1.046	1.036	1.043	1.028	1.043	1.031	1.041
56	1.048	1.046	1.043	1.046	1.041	1.041	1.038	1.041	1.038	1.038
57	1.043	1.046	1.043	1.041	1.038	1.038	1.038	1.038	1.033	1.033
58	1.048	1.043	1.043	1.038	1.041	1.038	1.043	1.038	1.038	1.033
59	1.063	1.063	1.065	1.063	1.063	1.059	1.063	1.055	1.057	1.053
60	1.033	1.028	1.036	1.033	1.036	1.028	1.031	1.025	1.028	1.022
61	1.028	1.033	1.028	1.028	1.019	1.019	1.016	1.025	1.019	1.028
62	1.036	1.025	1.031	1.019	1.028	1.013	1.022	1.016	1.022	1.016
63	1.031	1.028	1.028	1.028	1.031	1.031	1.033	1.028	1.031	1.016

NASA/RI OH90 TRANSITION TEST
V41R-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 9

IR SCAN TIME 10.10 SEC
INITIAL TEMP 538.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	1.041	1.041	1.043	1.050	1.048	1.050	1.048	1.053	1.055	1.059	1.063	1.068	1.077	1.093	1.218	1.366	1.432	1.463	1.481	1.495
65	1.041	1.041	1.043	1.041	1.043	1.046	1.050	1.053	1.057	1.061	1.063	1.065	1.072	1.100	1.238	1.374	1.428	1.456	1.475	1.490
66	1.038	1.036	1.041	1.038	1.046	1.046	1.053	1.048	1.055	1.057	1.063	1.065	1.077	1.120	1.277	1.387	1.430	1.456	1.474	1.485
67	1.036	1.036	1.036	1.038	1.041	1.043	1.048	1.046	1.050	1.050	1.059	1.065	1.079	1.158	1.317	1.397	1.431	1.454	1.471	1.483
68	1.028	1.028	1.033	1.033	1.036	1.038	1.038	1.043	1.043	1.048	1.053	1.059	1.079	1.199	1.341	1.402	1.432	1.452	1.464	1.477
69	1.022	1.025	1.028	1.031	1.033	1.033	1.038	1.038	1.043	1.046	1.050	1.057	1.100	1.246	1.362	1.405	1.431	1.449	1.460	1.470
70	1.022	1.028	1.022	1.028	1.022	1.036	1.038	1.043	1.043	1.046	1.053	1.068	1.135	1.289	1.372	1.405	1.428	1.443	1.454	1.466
71	1.022	1.025	1.033	1.033	1.038	1.033	1.038	1.033	1.043	1.041	1.055	1.063	1.167	1.309	1.376	1.404	1.424	1.437	1.450	1.459
72	1.025	1.028	1.028	1.033	1.033	1.038	1.038	1.041	1.043	1.048	1.053	1.075	1.198	1.329	1.381	1.408	1.426	1.440	1.452	1.462
73	1.031	1.031	1.028	1.033	1.036	1.041	1.043	1.048	1.043	1.048	1.053	1.085	1.216	1.337	1.383	1.408	1.425	1.438	1.449	1.459
74	1.031	1.029	1.028	1.028	1.036	1.038	1.046	1.046	1.048	1.053	1.057	1.103	1.247	1.345	1.384	1.405	1.421	1.433	1.443	1.453
75	1.031	1.031	1.033	1.031	1.038	1.038	1.046	1.043	1.048	1.048	1.061	1.140	1.282	1.356	1.387	1.404	1.418	1.428	1.439	1.449
76	1.028	1.028	1.028	1.031	1.031	1.036	1.038	1.048	1.046	1.050	1.065	1.171	1.305	1.361	1.387	1.403	1.416	1.425	1.435	1.444
77	1.031	1.031	1.025	1.033	1.031	1.036	1.038	1.041	1.038	1.050	1.077	1.212	1.324	1.367	1.389	1.403	1.414	1.424	1.432	1.441
78	1.028	1.028	1.033	1.031	1.036	1.025	1.038	1.028	1.041	1.041	1.103	1.248	1.339	1.370	1.390	1.402	1.413	1.421	1.429	1.437
79	1.028	1.046	1.059	1.063	1.055	1.061	1.063	1.061	1.050	1.050	1.123	1.271	1.345	1.374	1.391	1.403	1.411	1.419	1.427	1.436
80	1.048	1.075	1.090	1.073	1.085	1.079	1.061	1.053	1.063	1.073	1.149	1.285	1.348	1.373	1.391	1.402	1.410	1.417	1.425	1.433
81	1.070	1.097	1.108	1.085	1.085	1.090	1.088	1.075	1.063	1.070	1.166	1.293	1.348	1.371	1.386	1.395	1.404	1.410	1.418	1.425
82	1.108	1.147	1.158	1.135	1.110	1.095	1.103	1.106	1.103	1.102	1.208	1.317	1.358	1.376	1.387	1.394	1.400	1.406	1.413	1.418
83	1.205	1.243	1.222	1.227	1.197	1.130	1.092	1.086	1.103	1.136	1.251	1.335	1.366	1.383	1.392	1.398	1.403	1.406	1.409	1.415
84	1.225	1.257	1.234	1.275	1.265	1.163	1.100	1.059	1.072	1.152	1.282	1.343	1.366	1.378	1.388	1.394	1.400	1.403	1.406	1.409
85	1.169	1.166	1.168	1.214	1.202	1.132	1.085	1.065	1.081	1.207	1.334	1.382	1.398	1.405	1.407	1.408	1.408	1.409	1.407	1.409
86	1.149	1.140	1.132	1.132	1.134	1.120	1.111	1.105	1.118	1.127	1.156	1.184	1.213	1.241	1.276	1.307	1.340	1.364	1.385	1.412
87	1.123	1.114	1.113	1.121	1.115	1.115	1.111	1.106	1.108	1.111	1.108	1.113	1.114	1.117	1.117	1.118	1.118	1.124	1.125	1.131
88	1.077	1.070	1.072	1.079	1.085	1.077	1.083	1.086	1.110	1.108	1.106	1.102	1.105	1.103	1.108	1.103	1.108	1.106	1.111	1.113
89	1.043	1.038	1.036	1.038	1.043	1.046	1.059	1.073	1.098	1.098	1.100	1.098	1.100	1.097	1.102	1.097	1.098	1.093	1.098	1.100
90	1.028	1.022	1.028	1.025	1.036	1.036	1.046	1.059	1.088	1.098	1.100	1.097	1.098	1.093	1.093	1.088	1.092	1.086	1.092	1.090
91	1.016	1.007	1.019	1.016	1.022	1.028	1.036	1.053	1.083	1.102	1.100	1.102	1.093	1.093	1.092	1.093	1.092	1.092	1.090	1.090
92	1.007	1.010	1.001	1.016	1.007	1.019	1.016	1.043	1.073	1.093	1.092	1.097	1.092	1.093	1.086	1.090	1.083	1.092	1.085	1.088
93	1.007	1.007	1.007	1.007	1.016	1.019	1.028	1.043	1.083	1.092	1.093	1.093	1.097	1.092	1.095	1.090	1.092	1.085	1.086	1.075
94	1.016	1.013	1.010	1.013	1.016	1.022	1.028	1.048	1.085	1.095	1.093	1.098	1.093	1.097	1.093	1.095	1.090	1.088	1.083	1.083
95	1.057	1.055	1.053	1.046	1.048	1.043	1.050	1.053	1.085	1.092	1.097	1.098	1.106	1.103	1.103	1.100	1.100	1.092	1.088	1.077
96	1.085	1.083	1.077	1.079	1.075	1.072	1.065	1.070	1.088	1.103	1.098	1.103	1.106	1.111	1.111	1.113	1.106	1.103	1.090	1.083
97	1.108	1.108	1.108	1.108	1.103	1.095	1.077	1.077	1.095	1.113	1.106	1.111	1.113	1.118	1.118	1.120	1.115	1.111	1.095	1.086
98	1.113	1.113	1.110	1.111	1.106	1.102	1.083	1.079	1.093	1.106	1.102	1.111	1.118	1.127	1.124	1.125	1.123	1.114	1.098	1.092

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 10.10 SEC
GROUP 9 INITIAL TEMP 538.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	1.506	1.515	1.527	1.539	1.552	1.564	1.583	1.605	1.625	1.638	1.647	1.659	1.674	1.682	1.683	1.682	1.678	1.678	1.678	1.672
65	1.499	1.509	1.521	1.532	1.544	1.562	1.579	1.598	1.616	1.632	1.641	1.654	1.670	1.682	1.685	1.690	1.688	1.687	1.684	1.678
66	1.494	1.503	1.517	1.527	1.541	1.556	1.574	1.590	1.611	1.629	1.639	1.651	1.669	1.679	1.682	1.688	1.693	1.697	1.698	1.696
67	1.491	1.500	1.514	1.525	1.539	1.554	1.570	1.586	1.603	1.625	1.641	1.648	1.658	1.669	1.676	1.683	1.691	1.697	1.696	1.699
68	1.487	1.496	1.508	1.521	1.534	1.549	1.564	1.581	1.599	1.617	1.634	1.646	1.651	1.657	1.667	1.676	1.681	1.684	1.686	1.692
69	1.481	1.489	1.502	1.513	1.525	1.538	1.552	1.568	1.585	1.601	1.618	1.632	1.639	1.643	1.649	1.659	1.667	1.671	1.678	1.683
70	1.473	1.483	1.494	1.505	1.520	1.533	1.544	1.559	1.576	1.594	1.612	1.628	1.637	1.644	1.649	1.652	1.655	1.661	1.668	1.673
71	1.470	1.480	1.493	1.505	1.520	1.536	1.548	1.559	1.574	1.592	1.610	1.625	1.635	1.641	1.647	1.651	1.655	1.660	1.665	1.668
72	1.471	1.481	1.493	1.505	1.514	1.530	1.544	1.557	1.569	1.586	1.602	1.615	1.625	1.632	1.635	1.640	1.647	1.653	1.657	1.661
73	1.468	1.477	1.487	1.498	1.508	1.521	1.536	1.549	1.562	1.579	1.593	1.606	1.616	1.622	1.625	1.628	1.633	1.640	1.645	1.648
74	1.462	1.471	1.482	1.492	1.507	1.520	1.534	1.549	1.562	1.573	1.587	1.598	1.609	1.618	1.622	1.622	1.623	1.626	1.632	1.637
75	1.459	1.468	1.477	1.487	1.500	1.515	1.528	1.541	1.555	1.567	1.579	1.590	1.602	1.612	1.613	1.612	1.613	1.615	1.621	1.629
76	1.451	1.460	1.472	1.482	1.493	1.505	1.519	1.532	1.545	1.557	1.568	1.577	1.583	1.591	1.596	1.599	1.603	1.604	1.604	1.606
77	1.449	1.458	1.468	1.479	1.490	1.504	1.516	1.528	1.538	1.551	1.563	1.573	1.580	1.585	1.590	1.593	1.595	1.599	1.600	1.602
78	1.447	1.456	1.465	1.475	1.486	1.499	1.512	1.524	1.537	1.546	1.557	1.568	1.578	1.583	1.588	1.593	1.599	1.601	1.605	1.607
79	1.443	1.453	1.461	1.472	1.482	1.496	1.509	1.524	1.534	1.545	1.553	1.562	1.568	1.574	1.580	1.587	1.592	1.597	1.600	1.603
80	1.443	1.452	1.461	1.471	1.482	1.494	1.507	1.519	1.531	1.543	1.554	1.560	1.568	1.574	1.580	1.583	1.588	1.592	1.595	1.598
81	1.435	1.444	1.454	1.464	1.475	1.485	1.499	1.512	1.527	1.540	1.552	1.563	1.572	1.577	1.580	1.584	1.585	1.587	1.591	1.594
82	1.426	1.433	1.443	1.453	1.464	1.477	1.490	1.502	1.516	1.530	1.544	1.556	1.565	1.573	1.578	1.581	1.585	1.588	1.591	1.594
83	1.421	1.428	1.438	1.449	1.460	1.471	1.483	1.495	1.508	1.520	1.532	1.541	1.550	1.558	1.564	1.569	1.575	1.581	1.585	1.589
84	1.414	1.420	1.428	1.439	1.451	1.464	1.478	1.490	1.502	1.514	1.526	1.535	1.542	1.549	1.556	1.559	1.563	1.567	1.572	1.576
85	1.411	1.415	1.420	1.429	1.438	1.450	1.463	1.477	1.489	1.500	1.510	1.519	1.525	1.533	1.538	1.542	1.546	1.550	1.554	1.556
86	1.423	1.424	1.433	1.445	1.455	1.458	1.455	1.455	1.464	1.477	1.495	1.510	1.520	1.524	1.528	1.530	1.534	1.537	1.540	1.543
87	1.136	1.146	1.159	1.182	1.197	1.205	1.199	1.189	1.184	1.192	1.210	1.235	1.251	1.265	1.276	1.286	1.298	1.311	1.323	1.338
88	1.115	1.117	1.118	1.117	1.123	1.121	1.124	1.123	1.124	1.123	1.124	1.124	1.130	1.130	1.134	1.134	1.136	1.135	1.137	1.137
89	1.103	1.103	1.108	1.106	1.110	1.110	1.113	1.111	1.113	1.110	1.113	1.111	1.114	1.113	1.115	1.113	1.118	1.117	1.121	1.120
90	1.095	1.092	1.097	1.093	1.100	1.098	1.103	1.102	1.106	1.103	1.103	1.103	1.106	1.103	1.106	1.106	1.110	1.106	1.110	1.108
91	1.093	1.092	1.092	1.097	1.098	1.097	1.098	1.097	1.097	1.100	1.102	1.103	1.106	1.105	1.102	1.103	1.102	1.105	1.103	1.106
92	1.083	1.086	1.085	1.092	1.092	1.095	1.093	1.098	1.095	1.102	1.114	1.203	1.271	1.235	1.150	1.114	1.102	1.100	1.100	1.103
93	1.085	1.075	1.085	1.077	1.088	1.077	1.092	1.085	1.093	1.088	1.124	1.236	1.315	1.269	1.172	1.118	1.103	1.093	1.097	1.095
94	1.079	1.081	1.079	1.081	1.081	1.086	1.086	1.092	1.092	1.093	1.092	1.100	1.111	1.106	1.093	1.092	1.090	1.092	1.086	1.095
95	1.079	1.077	1.085	1.085	1.088	1.088	1.093	1.093	1.098	1.097	1.100	1.093	1.093	1.088	1.092	1.085	1.092	1.086	1.092	1.086
96	1.077	1.081	1.083	1.086	1.086	1.092	1.098	1.100	1.098	1.102	1.102	1.102	1.095	1.093	1.086	1.090	1.086	1.092	1.086	1.088
97	1.075	1.079	1.081	1.090	1.090	1.095	1.093	1.102	1.102	1.106	1.103	1.103	1.102	1.098	1.090	1.086	1.083	1.086	1.083	1.088
98	1.083	1.086	1.088	1.095	1.093	1.100	1.098	1.102	1.102	1.108	1.103	1.106	1.102	1.102	1.093	1.092	1.093	1.086	1.083	1.085

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 9

IR SCAN TIME 10.10 SEC
INITIAL TEMP 538.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	1.674	1.679	1.690	1.699	1.705	1.710	1.713	1.718	1.721	1.721	1.712	1.683	1.649	1.617	1.592	1.598	1.604	1.506	1.322	1.213
65	1.672	1.663	1.652	1.649	1.651	1.662	1.676	1.692	1.706	1.712	1.716	1.715	1.708	1.680	1.633	1.597	1.588	1.599	1.554	1.399
66	1.694	1.687	1.677	1.660	1.639	1.619	1.603	1.594	1.602	1.619	1.644	1.668	1.685	1.696	1.698	1.673	1.619	1.576	1.579	1.570
67	1.704	1.706	1.705	1.697	1.683	1.662	1.639	1.610	1.577	1.546	1.524	1.519	1.532	1.560	1.599	1.638	1.662	1.655	1.613	1.573
68	1.697	1.701	1.702	1.701	1.701	1.700	1.691	1.676	1.656	1.629	1.594	1.554	1.517	1.494	1.480	1.483	1.507	1.547	1.593	1.618
69	1.688	1.693	1.697	1.697	1.697	1.704	1.710	1.705	1.702	1.693	1.672	1.645	1.612	1.572	1.538	1.513	1.496	1.486	1.487	1.501
70	1.677	1.684	1.692	1.699	1.699	1.701	1.707	1.712	1.712	1.708	1.703	1.697	1.680	1.650	1.611	1.571	1.538	1.520	1.505	1.494
71	1.671	1.674	1.679	1.681	1.685	1.692	1.698	1.703	1.707	1.706	1.703	1.699	1.700	1.700	1.691	1.674	1.644	1.598	1.552	1.523
72	1.665	1.670	1.675	1.680	1.679	1.677	1.678	1.683	1.683	1.686	1.687	1.690	1.693	1.697	1.695	1.690	1.689	1.686	1.677	1.656
73	1.652	1.656	1.661	1.665	1.664	1.662	1.662	1.667	1.670	1.671	1.668	1.666	1.663	1.662	1.664	1.668	1.677	1.686	1.697	1.705
74	1.643	1.647	1.645	1.641	1.641	1.644	1.649	1.656	1.665	1.670	1.670	1.667	1.663	1.657	1.652	1.651	1.644	1.639	1.640	1.644
75	1.637	1.643	1.643	1.641	1.639	1.642	1.652	1.658	1.661	1.665	1.660	1.654	1.650	1.642	1.634	1.631	1.625	1.624	1.628	1.627
76	1.608	1.613	1.622	1.627	1.626	1.626	1.633	1.640	1.644	1.643	1.642	1.639	1.636	1.632	1.625	1.617	1.605	1.589	1.569	1.546
77	1.601	1.603	1.605	1.605	1.605	1.605	1.603	1.599	1.595	1.592	1.588	1.586	1.583	1.580	1.575	1.573	1.571	1.569	1.562	1.553
78	1.611	1.613	1.616	1.616	1.615	1.611	1.607	1.600	1.590	1.579	1.569	1.557	1.549	1.539	1.531	1.523	1.519	1.514	1.510	1.506
79	1.607	1.609	1.612	1.614	1.615	1.615	1.615	1.615	1.612	1.607	1.600	1.590	1.578	1.564	1.550	1.535	1.521	1.510	1.498	1.489
80	1.601	1.603	1.605	1.608	1.610	1.610	1.611	1.610	1.610	1.608	1.608	1.607	1.606	1.601	1.593	1.582	1.571	1.557	1.543	1.528
81	1.597	1.600	1.604	1.605	1.605	1.605	1.606	1.606	1.608	1.608	1.608	1.608	1.610	1.609	1.606	1.604	1.601	1.598	1.593	1.585
82	1.596	1.600	1.604	1.605	1.608	1.608	1.609	1.609	1.609	1.608	1.610	1.610	1.610	1.611	1.612	1.611	1.610	1.609	1.608	1.605
83	1.594	1.597	1.600	1.603	1.607	1.609	1.611	1.614	1.616	1.616	1.617	1.618	1.619	1.619	1.618	1.617	1.619	1.616	1.616	1.616
84	1.591	1.596	1.599	1.599	1.603	1.608	1.612	1.615	1.617	1.619	1.621	1.621	1.622	1.622	1.623	1.623	1.625	1.627	1.628	1.629
85	1.562	1.567	1.572	1.577	1.582	1.586	1.591	1.596	1.600	1.604	1.609	1.613	1.617	1.620	1.622	1.624	1.624	1.625	1.627	1.630
86	1.547	1.550	1.554	1.558	1.561	1.563	1.565	1.567	1.568	1.570	1.572	1.574	1.577	1.581	1.586	1.591	1.598	1.604	1.609	1.613
87	1.352	1.370	1.386	1.402	1.413	1.424	1.432	1.438	1.439	1.442	1.442	1.443	1.443	1.445	1.446	1.449	1.452	1.458	1.465	1.474
88	1.141	1.141	1.145	1.146	1.147	1.147	1.150	1.146	1.149	1.146	1.147	1.146	1.147	1.144	1.144	1.142	1.142	1.137	1.142	1.139
89	1.123	1.123	1.123	1.124	1.125	1.125	1.128	1.127	1.130	1.125	1.127	1.125	1.124	1.124	1.124	1.121	1.124	1.120	1.123	1.118
90	1.111	1.110	1.114	1.111	1.115	1.113	1.117	1.113	1.113	1.111	1.113	1.110	1.113	1.110	1.111	1.108	1.110	1.105	1.106	1.106
91	1.106	1.110	1.106	1.110	1.108	1.110	1.108	1.111	1.110	1.111	1.110	1.110	1.108	1.108	1.105	1.103	1.102	1.105	1.102	1.102
92	1.102	1.105	1.102	1.105	1.103	1.106	1.103	1.106	1.105	1.110	1.120	1.172	1.193	1.156	1.117	1.106	1.097	1.102	1.098	1.097
93	1.100	1.098	1.102	1.098	1.102	1.102	1.105	1.102	1.105	1.106	1.174	1.308	1.347	1.266	1.163	1.120	1.103	1.095	1.095	1.092
94	1.092	1.095	1.090	1.098	1.095	1.102	1.095	1.098	1.093	1.098	1.102	1.145	1.168	1.139	1.106	1.100	1.095	1.095	1.092	1.092
95	1.092	1.090	1.095	1.093	1.102	1.098	1.102	1.098	1.098	1.093	1.095	1.092	1.097	1.092	1.095	1.086	1.088	1.083	1.092	1.085
96	1.085	1.090	1.090	1.093	1.092	1.095	1.095	1.100	1.095	1.095	1.092	1.092	1.092	1.090	1.088	1.088	1.085	1.086	1.085	1.088
97	1.086	1.086	1.083	1.088	1.086	1.093	1.092	1.095	1.092	1.093	1.090	1.092	1.085	1.088	1.083	1.088	1.083	1.085	1.079	1.083
98	1.083	1.086	1.081	1.085	1.083	1.092	1.092	1.095	1.092	1.093	1.092	1.092	1.086	1.088	1.083	1.086	1.081	1.083	1.081	1.083

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVEPDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 9

IR SCAN TIME 10.10 SEC
INITIAL TEMP 538.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	1.166	1.142	1.124	1.106	1.093	1.092	1.081	1.083	1.077	1.079	1.075	1.075	1.070	1.072	1.065	1.068	1.063	1.065	1.063	1.063
65	1.243	1.179	1.149	1.132	1.113	1.098	1.092	1.086	1.081	1.081	1.079	1.081	1.077	1.075	1.068	1.070	1.065	1.070	1.063	1.065
66	1.457	1.280	1.193	1.154	1.136	1.117	1.102	1.092	1.088	1.085	1.083	1.077	1.079	1.077	1.077	1.073	1.072	1.068	1.065	1.068
67	1.556	1.466	1.301	1.195	1.157	1.136	1.124	1.098	1.090	1.079	1.083	1.075	1.079	1.072	1.073	1.065	1.070	1.063	1.068	1.065
68	1.614	1.597	1.538	1.384	1.233	1.173	1.144	1.125	1.102	1.086	1.081	1.079	1.075	1.072	1.070	1.070	1.063	1.063	1.059	1.059
69	1.529	1.564	1.594	1.582	1.449	1.268	1.187	1.147	1.128	1.105	1.086	1.077	1.077	1.068	1.068	1.063	1.063	1.063	1.059	1.055
70	1.487	1.489	1.506	1.546	1.562	1.468	1.299	1.198	1.151	1.131	1.108	1.088	1.075	1.072	1.068	1.065	1.063	1.063	1.057	1.057
71	1.510	1.506	1.507	1.509	1.522	1.545	1.493	1.331	1.205	1.156	1.134	1.115	1.095	1.077	1.072	1.068	1.065	1.063	1.063	1.057
72	1.622	1.580	1.546	1.531	1.530	1.530	1.534	1.501	1.377	1.232	1.166	1.139	1.121	1.100	1.079	1.075	1.063	1.068	1.063	1.063
73	1.703	1.698	1.685	1.651	1.600	1.552	1.526	1.521	1.516	1.446	1.296	1.190	1.145	1.128	1.110	1.090	1.077	1.073	1.065	1.063
74	1.652	1.661	1.672	1.676	1.677	1.665	1.640	1.601	1.563	1.534	1.483	1.354	1.221	1.159	1.134	1.110	1.095	1.077	1.072	1.063
75	1.627	1.627	1.628	1.622	1.611	1.600	1.592	1.590	1.593	1.589	1.573	1.536	1.425	1.269	1.183	1.140	1.121	1.102	1.081	1.063
76	1.528	1.516	1.515	1.520	1.534	1.551	1.566	1.574	1.570	1.553	1.532	1.509	1.490	1.424	1.294	1.184	1.141	1.118	1.108	1.085
77	1.543	1.526	1.506	1.486	1.469	1.456	1.449	1.445	1.444	1.450	1.463	1.478	1.479	1.466	1.417	1.307	1.192	1.140	1.118	1.108
78	1.502	1.497	1.490	1.479	1.469	1.458	1.449	1.440	1.433	1.424	1.419	1.419	1.421	1.421	1.421	1.404	1.326	1.208	1.144	1.115
79	1.480	1.475	1.470	1.468	1.466	1.464	1.460	1.455	1.449	1.446	1.441	1.434	1.427	1.424	1.419	1.415	1.404	1.352	1.244	1.159
80	1.516	1.503	1.491	1.480	1.468	1.457	1.454	1.450	1.447	1.442	1.439	1.439	1.440	1.440	1.443	1.446	1.449	1.449	1.421	1.330
81	1.576	1.561	1.544	1.528	1.510	1.488	1.473	1.463	1.458	1.452	1.446	1.436	1.429	1.425	1.425	1.423	1.422	1.425	1.435	1.445
82	1.603	1.597	1.588	1.582	1.575	1.562	1.543	1.520	1.500	1.483	1.471	1.462	1.453	1.441	1.433	1.427	1.423	1.415	1.410	1.407
83	1.612	1.607	1.601	1.595	1.592	1.590	1.588	1.582	1.575	1.564	1.551	1.533	1.513	1.492	1.468	1.450	1.441	1.429	1.418	1.408
84	1.625	1.620	1.617	1.612	1.605	1.601	1.600	1.600	1.599	1.596	1.595	1.594	1.591	1.582	1.569	1.551	1.530	1.500	1.470	1.446
85	1.632	1.633	1.633	1.632	1.629	1.627	1.628	1.628	1.627	1.625	1.623	1.619	1.616	1.613	1.611	1.609	1.605	1.597	1.584	1.566
86	1.616	1.617	1.619	1.621	1.621	1.621	1.622	1.620	1.621	1.621	1.625	1.629	1.632	1.633	1.635	1.633	1.632	1.628	1.624	1.619
87	1.483	1.491	1.505	1.519	1.537	1.562	1.587	1.615	1.640	1.663	1.682	1.693	1.696	1.694	1.692	1.691	1.687	1.683	1.678	1.676
88	1.144	1.141	1.146	1.146	1.152	1.151	1.160	1.164	1.179	1.187	1.204	1.216	1.232	1.243	1.258	1.271	1.285	1.295	1.305	1.310
89	1.120	1.117	1.123	1.121	1.124	1.124	1.127	1.124	1.125	1.124	1.125	1.125	1.128	1.129	1.134	1.135	1.140	1.139	1.141	1.136
90	1.106	1.105	1.110	1.108	1.111	1.106	1.108	1.105	1.108	1.105	1.106	1.106	1.105	1.105	1.111	1.113	1.118	1.120	1.124	1.118
91	1.098	1.102	1.102	1.103	1.102	1.105	1.102	1.105	1.098	1.100	1.095	1.098	1.095	1.098	1.103	1.124	1.121	1.117	1.113	1.117
92	1.093	1.098	1.095	1.098	1.098	1.100	1.098	1.100	1.098	1.114	1.140	1.134	1.106	1.098	1.098	1.113	1.110	1.110	1.108	1.111
93	1.095	1.093	1.098	1.095	1.095	1.093	1.098	1.095	1.123	1.238	1.330	1.296	1.190	1.117	1.102	1.095	1.102	1.098	1.105	1.102
94	1.090	1.093	1.090	1.095	1.090	1.092	1.092	1.093	1.095	1.136	1.191	1.181	1.123	1.098	1.088	1.092	1.093	1.102	1.102	1.102
95	1.090	1.085	1.092	1.086	1.090	1.083	1.088	1.085	1.090	1.083	1.090	1.086	1.086	1.083	1.085	1.088	1.098	1.102	1.105	1.102
96	1.083	1.086	1.081	1.085	1.083	1.085	1.083	1.085	1.081	1.083	1.079	1.081	1.077	1.081	1.077	1.090	1.092	1.103	1.102	1.106
97	1.081	1.083	1.081	1.085	1.081	1.085	1.083	1.085	1.079	1.079	1.077	1.081	1.077	1.079	1.077	1.093	1.102	1.113	1.114	1.115
98	1.077	1.083	1.079	1.085	1.081	1.085	1.079	1.081	1.077	1.083	1.077	1.079	1.075	1.079	1.079	1.102	1.113	1.124	1.127	1.131

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 9

IR SCAN TIME 10.10 SEC
INITIAL TEMP 538.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	1.059	1.059	1.050	1.055	1.053	1.055	1.053	1.053	1.050	1.048	1.043	1.046	1.043	1.043	1.041	1.041	1.038	1.038	1.038	1.038
65	1.063	1.061	1.059	1.057	1.059	1.057	1.055	1.055	1.050	1.048	1.046	1.046	1.046	1.046	1.043	1.043	1.041	1.038	1.036	1.038
66	1.065	1.065	1.065	1.059	1.059	1.055	1.057	1.055	1.055	1.050	1.050	1.043	1.048	1.046	1.043	1.041	1.041	1.038	1.038	1.033
67	1.063	1.061	1.063	1.059	1.057	1.053	1.055	1.053	1.053	1.050	1.048	1.043	1.046	1.041	1.046	1.041	1.038	1.036	1.036	1.033
68	1.059	1.059	1.048	1.053	1.046	1.053	1.043	1.046	1.036	1.046	1.038	1.043	1.033	1.036	1.028	1.033	1.028	1.033	1.025	1.028
69	1.057	1.053	1.055	1.050	1.048	1.046	1.046	1.043	1.043	1.038	1.038	1.033	1.038	1.033	1.036	1.025	1.031	1.022	1.028	1.010
70	1.053	1.055	1.050	1.053	1.046	1.043	1.043	1.043	1.043	1.041	1.033	1.036	1.033	1.033	1.028	1.028	1.022	1.025	1.022	1.022
71	1.057	1.050	1.053	1.050	1.050	1.046	1.046	1.043	1.046	1.041	1.043	1.038	1.038	1.033	1.036	1.031	1.033	1.025	1.028	1.022
72	1.057	1.057	1.053	1.053	1.050	1.050	1.046	1.046	1.041	1.043	1.038	1.041	1.038	1.038	1.033	1.031	1.031	1.028	1.028	1.025
73	1.059	1.059	1.059	1.057	1.053	1.053	1.048	1.050	1.043	1.043	1.043	1.043	1.041	1.041	1.033	1.038	1.028	1.033	1.028	1.031
74	1.068	1.063	1.061	1.057	1.059	1.053	1.053	1.048	1.050	1.046	1.048	1.041	1.043	1.041	1.038	1.033	1.038	1.033	1.033	1.033
75	1.063	1.057	1.059	1.053	1.057	1.050	1.053	1.043	1.048	1.041	1.046	1.036	1.043	1.038	1.041	1.033	1.038	1.031	1.031	1.028
76	1.072	1.061	1.061	1.057	1.057	1.055	1.055	1.048	1.050	1.043	1.046	1.038	1.043	1.038	1.041	1.038	1.038	1.025	1.036	1.022
77	1.090	1.073	1.063	1.059	1.055	1.055	1.050	1.050	1.043	1.043	1.038	1.043	1.041	1.043	1.038	1.036	1.033	1.031	1.028	1.028
78	1.106	1.098	1.093	1.070	1.065	1.053	1.053	1.046	1.048	1.043	1.046	1.043	1.043	1.038	1.038	1.033	1.033	1.031	1.036	1.031
79	1.123	1.106	1.100	1.100	1.085	1.073	1.055	1.053	1.046	1.046	1.041	1.041	1.041	1.041	1.036	1.036	1.028	1.031	1.028	1.028
80	1.209	1.144	1.118	1.103	1.102	1.095	1.092	1.077	1.063	1.050	1.048	1.041	1.041	1.033	1.036	1.033	1.033	1.031	1.031	1.022
81	1.412	1.300	1.181	1.130	1.113	1.098	1.098	1.092	1.093	1.086	1.081	1.068	1.057	1.050	1.048	1.043	1.043	1.038	1.043	1.038
82	1.403	1.370	1.280	1.172	1.124	1.102	1.097	1.086	1.090	1.079	1.085	1.077	1.081	1.077	1.072	1.063	1.057	1.046	1.043	1.033
83	1.400	1.392	1.373	1.304	1.201	1.130	1.103	1.090	1.090	1.085	1.086	1.077	1.079	1.075	1.081	1.068	1.079	1.063	1.077	1.063
84	1.426	1.409	1.394	1.376	1.324	1.226	1.142	1.103	1.092	1.085	1.086	1.081	1.083	1.077	1.079	1.075	1.077	1.075	1.077	1.072
85	1.539	1.504	1.464	1.429	1.399	1.352	1.262	1.163	1.110	1.090	1.079	1.079	1.077	1.077	1.073	1.075	1.068	1.070	1.068	1.072
86	1.613	1.603	1.587	1.563	1.533	1.492	1.430	1.331	1.214	1.134	1.098	1.077	1.073	1.070	1.072	1.072	1.073	1.068	1.070	1.065
87	1.677	1.681	1.684	1.685	1.685	1.682	1.665	1.623	1.535	1.383	1.216	1.127	1.085	1.073	1.068	1.072	1.069	1.070	1.065	1.065
88	1.320	1.332	1.346	1.358	1.373	1.390	1.406	1.407	1.382	1.304	1.187	1.113	1.085	1.068	1.065	1.063	1.063	1.061	1.059	1.055
89	1.135	1.121	1.120	1.113	1.114	1.106	1.108	1.100	1.098	1.085	1.081	1.072	1.068	1.055	1.057	1.050	1.053	1.046	1.053	1.048
90	1.115	1.105	1.097	1.085	1.083	1.079	1.085	1.077	1.079	1.075	1.065	1.059	1.057	1.046	1.050	1.043	1.048	1.046	1.050	1.043
91	1.123	1.123	1.093	1.081	1.075	1.072	1.068	1.065	1.063	1.061	1.059	1.055	1.050	1.050	1.046	1.048	1.043	1.041	1.041	1.043
92	1.117	1.114	1.085	1.075	1.069	1.055	1.065	1.059	1.055	1.055	1.050	1.050	1.048	1.048	1.046	1.046	1.043	1.041	1.038	1.038
93	1.102	1.088	1.091	1.070	1.063	1.059	1.061	1.057	1.057	1.050	1.053	1.048	1.046	1.043	1.046	1.041	1.043	1.038	1.041	1.038
94	1.098	1.092	1.075	1.065	1.063	1.063	1.055	1.055	1.050	1.050	1.048	1.046	1.043	1.043	1.038	1.041	1.038	1.038	1.033	1.036
95	1.102	1.092	1.083	1.065	1.063	1.055	1.059	1.055	1.055	1.050	1.050	1.048	1.050	1.043	1.043	1.041	1.043	1.041	1.041	1.038
96	1.102	1.098	1.077	1.065	1.059	1.061	1.050	1.053	1.048	1.053	1.050	1.048	1.043	1.043	1.041	1.043	1.038	1.041	1.036	1.038
97	1.111	1.108	1.090	1.075	1.069	1.057	1.053	1.053	1.048	1.050	1.043	1.041	1.038	1.043	1.033	1.041	1.028	1.036	1.028	1.038
98	1.127	1.121	1.102	1.077	1.059	1.059	1.055	1.057	1.053	1.050	1.043	1.046	1.043	1.043	1.043	1.041	1.033	1.038	1.033	1.036

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 9

IR SCAN TIME 10.10 SEC
INITIAL TEMP 538.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	1.028	1.033	1.031	1.033	1.026	1.031	1.022	1.025	1.019	1.022
65	1.036	1.033	1.033	1.033	1.028	1.028	1.025	1.028	1.025	1.025
66	1.036	1.033	1.036	1.028	1.031	1.025	1.025	1.025	1.025	1.019
67	1.036	1.031	1.028	1.025	1.025	1.022	1.025	1.016	1.019	1.013
68	1.028	1.025	1.022	1.019	1.016	1.019	1.016	1.016	1.007	1.013
69	1.022	1.004	1.019	1.007	1.016	1.001	1.010	0.997	1.007	0.997
70	1.016	1.016	1.013	1.019	1.010	1.013	1.007	1.007	1.001	1.007
71	1.022	1.016	1.025	1.013	1.013	1.007	1.013	1.007	1.010	1.001
72	1.022	1.022	1.013	1.019	1.013	1.016	1.010	1.013	1.007	1.007
73	1.025	1.025	1.019	1.019	1.013	1.016	1.010	1.016	1.010	1.013
74	1.031	1.028	1.028	1.022	1.022	1.016	1.022	1.016	1.019	1.010
75	1.031	1.025	1.028	1.022	1.022	1.013	1.019	1.010	1.013	1.010
76	1.028	1.019	1.025	1.013	1.022	1.010	1.013	1.004	1.013	1.001
77	1.025	1.025	1.022	1.022	1.013	1.016	1.010	1.010	1.007	1.010
78	1.033	1.022	1.022	1.013	1.022	1.013	1.016	1.010	1.013	1.004
79	1.025	1.025	1.016	1.019	1.013	1.019	1.019	1.013	1.010	1.010
80	1.028	1.022	1.025	1.019	1.022	1.010	1.016	1.013	1.016	1.010
81	1.041	1.036	1.041	1.033	1.038	1.033	1.036	1.028	1.028	1.025
82	1.033	1.025	1.028	1.016	1.019	1.010	1.016	1.007	1.010	1.007
83	1.068	1.048	1.050	1.028	1.038	1.013	1.028	1.004	1.016	0.997
84	1.073	1.072	1.073	1.068	1.065	1.061	1.057	1.050	1.046	1.038
85	1.068	1.070	1.068	1.063	1.065	1.065	1.063	1.063	1.059	1.059
86	1.068	1.063	1.063	1.063	1.065	1.061	1.061	1.057	1.061	1.057
87	1.065	1.063	1.059	1.063	1.059	1.059	1.055	1.055	1.057	1.055
88	1.057	1.053	1.055	1.053	1.053	1.048	1.050	1.046	1.048	1.046
89	1.053	1.046	1.048	1.043	1.043	1.041	1.043	1.043	1.046	1.041
90	1.043	1.043	1.041	1.028	1.046	1.038	1.046	1.043	1.041	1.038
91	1.041	1.041	1.038	1.038	1.038	1.038	1.038	1.041	1.033	1.036
92	1.038	1.041	1.031	1.038	1.033	1.033	1.033	1.033	1.031	1.036
93	1.038	1.036	1.038	1.031	1.033	1.028	1.036	1.028	1.036	1.028
94	1.033	1.038	1.033	1.033	1.028	1.031	1.028	1.031	1.031	1.028
95	1.038	1.036	1.036	1.033	1.036	1.025	1.033	1.028	1.033	1.028
96	1.036	1.038	1.031	1.033	1.028	1.033	1.031	1.033	1.031	1.031
97	1.028	1.028	1.028	1.031	1.025	1.033	1.022	1.033	1.028	1.033
98	1.033	1.033	1.025	1.031	1.028	1.036	1.033	1.033	1.028	1.033

102

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 10.10 SEC
GROUP 9 HRFR = 0.397E-01

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	0.039	0.042	0.046	0.049	0.052	0.051	0.051	0.050	0.051	0.049	0.049	0.048	0.047	0.047	0.049	0.050	0.051	0.052	0.052	0.052
30	0.044	0.048	0.050	0.050	0.050	0.049	0.048	0.048	0.048	0.048	0.049	0.048	0.049	0.049	0.050	0.051	0.052	0.052	0.053	0.052
31	0.050	0.051	0.051	0.050	0.048	0.047	0.047	0.049	0.049	0.050	0.051	0.052	0.051	0.052	0.051	0.052	0.052	0.053	0.052	0.051
32	0.051	0.049	0.049	0.048	0.048	0.048	0.050	0.050	0.052	0.052	0.052	0.052	0.052	0.051	0.052	0.052	0.052	0.049	0.048	0.045
33	0.049	0.047	0.048	0.050	0.052	0.052	0.052	0.052	0.052	0.051	0.051	0.052	0.052	0.051	0.050	0.047	0.045	0.043	0.043	0.042
34	0.048	0.049	0.050	0.051	0.051	0.051	0.051	0.049	0.050	0.051	0.050	0.049	0.046	0.044	0.042	0.042	0.043	0.045	0.045	0.047
35	0.052	0.052	0.049	0.050	0.047	0.049	0.048	0.048	0.045	0.045	0.041	0.041	0.040	0.042	0.042	0.045	0.047	0.047	0.047	0.048
36	0.051	0.050	0.049	0.047	0.047	0.045	0.043	0.041	0.041	0.041	0.043	0.043	0.044	0.044	0.045	0.045	0.047	0.047	0.049	0.048
37	0.047	0.047	0.044	0.043	0.040	0.040	0.041	0.042	0.040	0.043	0.044	0.045	0.046	0.047	0.046	0.047	0.047	0.046	0.042	0.035
38	0.042	0.041	0.039	0.039	0.041	0.041	0.042	0.043	0.044	0.044	0.045	0.046	0.048	0.047	0.046	0.041	0.036	0.029	0.025	0.019
39	0.038	0.039	0.041	0.042	0.042	0.042	0.043	0.045	0.045	0.046	0.047	0.045	0.043	0.039	0.031	0.025	0.020	0.019	0.019	0.018
40	0.040	0.041	0.042	0.042	0.044	0.044	0.045	0.045	0.046	0.044	0.041	0.035	0.028	0.021	0.020	0.019	0.019	0.020	0.020	0.019
41	0.041	0.042	0.043	0.043	0.044	0.044	0.045	0.043	0.039	0.030	0.026	0.020	0.020	0.020	0.021	0.020	0.019	0.020	0.020	0.021
42	0.045	0.045	0.046	0.044	0.045	0.040	0.036	0.026	0.023	0.019	0.021	0.019	0.021	0.021	0.021	0.021	0.021	0.021	0.022	0.021
43	0.047	0.048	0.047	0.041	0.034	0.025	0.022	0.020	0.020	0.020	0.021	0.021	0.022	0.020	0.021	0.020	0.021	0.021	0.021	0.019
44	0.048	0.043	0.032	0.025	0.021	0.021	0.020	0.021	0.070	0.021	0.021	0.021	0.021	0.022	0.021	0.023	0.022	0.024	0.025	0.025
45	0.032	0.025	0.023	0.022	0.022	0.022	0.023	0.021	0.023	0.023	0.025	0.024	0.025	0.023	0.025	0.025	0.026	0.025	0.027	0.026
46	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.026	0.026	0.027	0.027	0.027	0.026	0.028	0.027	0.028	0.028	0.031	0.032	0.037
47	0.028	0.027	0.027	0.027	0.028	0.028	0.029	0.030	0.029	0.030	0.029	0.030	0.030	0.032	0.032	0.034	0.034	0.044	0.085	0.131
48	0.028	0.028	0.030	0.030	0.030	0.031	0.031	0.031	0.031	0.032	0.032	0.033	0.033	0.035	0.034	0.036	0.037	0.054	0.113	0.172
49	0.030	0.030	0.029	0.032	0.031	0.033	0.031	0.033	0.032	0.034	0.032	0.034	0.034	0.036	0.036	0.038	0.040	0.062	0.129	0.192
50	0.030	0.031	0.031	0.033	0.033	0.034	0.033	0.033	0.033	0.034	0.035	0.035	0.035	0.037	0.036	0.039	0.041	0.075	0.149	0.205
51	0.032	0.033	0.033	0.034	0.032	0.034	0.034	0.035	0.035	0.036	0.036	0.037	0.037	0.038	0.039	0.040	0.048	0.099	0.174	0.218
52	0.033	0.033	0.034	0.034	0.034	0.035	0.036	0.035	0.037	0.036	0.038	0.038	0.039	0.039	0.042	0.042	0.057	0.120	0.190	0.225
53	0.029	0.030	0.030	0.030	0.030	0.031	0.032	0.033	0.033	0.035	0.034	0.035	0.036	0.037	0.038	0.042	0.069	0.144	0.203	0.229
54	0.022	0.022	0.024	0.024	0.025	0.024	0.026	0.025	0.027	0.027	0.028	0.027	0.031	0.030	0.034	0.039	0.083	0.160	0.207	0.228
55	0.017	0.017	0.016	0.019	0.019	0.020	0.020	0.021	0.021	0.023	0.025	0.025	0.025	0.027	0.030	0.039	0.092	0.169	0.209	0.228
56	0.016	0.018	0.018	0.019	0.016	0.019	0.017	0.021	0.019	0.023	0.023	0.025	0.026	0.028	0.030	0.043	0.104	0.177	0.212	0.229
57	0.016	0.017	0.018	0.019	0.021	0.020	0.019	0.021	0.021	0.023	0.023	0.025	0.025	0.028	0.029	0.046	0.110	0.180	0.212	0.229
58	0.016	0.016	0.017	0.017	0.019	0.019	0.021	0.021	0.022	0.022	0.025	0.025	0.027	0.027	0.032	0.055	0.128	0.188	0.215	0.230
59	0.015	0.015	0.016	0.016	0.016	0.017	0.019	0.019	0.020	0.020	0.021	0.021	0.025	0.026	0.033	0.073	0.150	0.197	0.218	0.231
60	0.012	0.012	0.013	0.013	0.014	0.015	0.015	0.016	0.018	0.017	0.020	0.020	0.023	0.025	0.036	0.091	0.164	0.200	0.218	0.230
61	0.011	0.011	0.012	0.013	0.013	0.014	0.014	0.016	0.016	0.018	0.017	0.019	0.021	0.025	0.042	0.111	0.174	0.203	0.219	0.230
62	0.010	0.011	0.013	0.012	0.015	0.015	0.016	0.016	0.018	0.018	0.019	0.020	0.022	0.027	0.054	0.127	0.180	0.204	0.220	0.231
63	0.012	0.013	0.010	0.013	0.012	0.014	0.013	0.016	0.017	0.019	0.019	0.021	0.021	0.028	0.064	0.138	0.183	0.205	0.218	0.229

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 10.10 SEC
GROUP 9 HREF = 0.397E-01

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	0.051	0.053	0.052	0.053	0.053	0.055	0.051	0.050	0.047	0.046	0.043	0.043	0.040	0.041	0.040	0.042	0.042	0.042	0.042	0.043
30	0.052	0.053	0.053	0.052	0.051	0.048	0.047	0.045	0.044	0.044	0.044	0.043	0.044	0.043	0.044	0.045	0.047	0.046	0.048	0.049
31	0.050	0.049	0.047	0.046	0.044	0.043	0.042	0.043	0.044	0.046	0.047	0.048	0.049	0.050	0.049	0.052	0.052	0.052	0.052	0.052
32	0.045	0.042	0.043	0.044	0.046	0.047	0.047	0.047	0.048	0.050	0.052	0.052	0.054	0.053	0.053	0.052	0.051	0.047	0.045	0.041
33	0.044	0.044	0.046	0.047	0.049	0.049	0.051	0.050	0.051	0.052	0.053	0.052	0.050	0.045	0.041	0.036	0.032	0.025	0.023	0.018
34	0.047	0.047	0.048	0.049	0.050	0.051	0.051	0.048	0.047	0.044	0.038	0.034	0.028	0.021	0.017	0.016	0.015	0.016	0.015	0.015
35	0.049	0.050	0.049	0.049	0.046	0.042	0.036	0.030	0.023	0.019	0.016	0.015	0.015	0.015	0.015	0.015	0.014	0.015	0.014	0.014
36	0.047	0.042	0.038	0.030	0.025	0.018	0.017	0.014	0.016	0.014	0.014	0.013	0.015	0.015	0.016	0.015	0.016	0.016	0.016	0.016
37	0.030	0.024	0.021	0.017	0.016	0.016	0.017	0.016	0.016	0.016	0.015	0.016	0.015	0.017	0.014	0.016	0.017	0.016	0.015	0.016
38	0.019	0.019	0.018	0.017	0.017	0.016	0.017	0.018	0.018	0.016	0.016	0.016	0.017	0.017	0.018	0.017	0.019	0.018	0.018	0.017
39	0.018	0.018	0.018	0.019	0.019	0.019	0.018	0.019	0.018	0.019	0.019	0.019	0.019	0.019	0.018	0.019	0.019	0.019	0.019	0.019
40	0.019	0.019	0.020	0.020	0.020	0.019	0.020	0.019	0.021	0.021	0.021	0.019	0.020	0.020	0.021	0.020	0.021	0.019	0.020	0.019
41	0.021	0.020	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.022	0.021	0.021	0.021	0.021	0.021	0.022	0.021
42	0.022	0.022	0.021	0.022	0.023	0.023	0.023	0.022	0.023	0.023	0.024	0.024	0.023	0.023	0.024	0.024	0.025	0.023	0.023	0.023
43	0.022	0.021	0.024	0.022	0.024	0.023	0.025	0.023	0.025	0.023	0.026	0.025	0.026	0.025	0.025	0.025	0.026	0.025	0.026	0.025
44	0.023	0.025	0.025	0.027	0.025	0.026	0.025	0.027	0.026	0.027	0.026	0.027	0.025	0.027	0.025	0.027	0.024	0.027	0.024	0.026
45	0.027	0.027	0.028	0.028	0.030	0.028	0.030	0.028	0.030	0.029	0.030	0.030	0.030	0.028	0.031	0.029	0.030	0.029	0.030	0.028
46	0.037	0.039	0.039	0.038	0.037	0.038	0.036	0.036	0.035	0.036	0.035	0.036	0.035	0.035	0.034	0.034	0.033	0.034	0.033	0.033
47	0.153	0.163	0.167	0.167	0.165	0.158	0.145	0.126	0.105	0.084	0.066	0.055	0.047	0.044	0.041	0.040	0.039	0.039	0.038	0.038
48	0.199	0.212	0.222	0.234	0.246	0.261	0.278	0.292	0.300	0.298	0.282	0.252	0.207	0.154	0.104	0.071	0.054	0.047	0.043	0.042
49	0.219	0.233	0.241	0.251	0.261	0.271	0.282	0.297	0.312	0.323	0.332	0.335	0.332	0.327	0.311	0.267	0.190	0.112	0.070	0.053
50	0.231	0.249	0.261	0.274	0.283	0.295	0.305	0.315	0.318	0.319	0.322	0.325	0.326	0.329	0.333	0.332	0.309	0.236	0.142	0.085
51	0.239	0.256	0.270	0.284	0.298	0.315	0.331	0.344	0.346	0.351	0.351	0.349	0.345	0.345	0.347	0.350	0.344	0.326	0.265	0.167
52	0.243	0.257	0.270	0.286	0.303	0.320	0.340	0.361	0.383	0.397	0.399	0.390	0.377	0.362	0.354	0.352	0.352	0.351	0.343	0.303
53	0.245	0.259	0.270	0.286	0.303	0.323	0.342	0.364	0.389	0.405	0.411	0.418	0.421	0.416	0.403	0.385	0.370	0.363	0.359	0.354
54	0.242	0.253	0.264	0.277	0.293	0.311	0.334	0.357	0.384	0.404	0.414	0.419	0.425	0.433	0.442	0.445	0.444	0.428	0.402	0.378
55	0.241	0.251	0.260	0.272	0.288	0.308	0.329	0.351	0.374	0.398	0.417	0.430	0.435	0.438	0.442	0.444	0.449	0.456	0.459	0.451
56	0.242	0.251	0.260	0.271	0.286	0.304	0.324	0.345	0.368	0.392	0.410	0.424	0.434	0.444	0.455	0.459	0.460	0.463	0.464	0.473
57	0.239	0.249	0.257	0.268	0.282	0.299	0.318	0.339	0.361	0.381	0.394	0.405	0.413	0.418	0.425	0.434	0.447	0.463	0.475	0.480
58	0.241	0.248	0.257	0.267	0.281	0.297	0.316	0.335	0.354	0.373	0.389	0.397	0.404	0.412	0.421	0.425	0.428	0.433	0.443	0.457
59	0.240	0.246	0.255	0.267	0.281	0.297	0.315	0.335	0.354	0.372	0.382	0.389	0.403	0.416	0.420	0.418	0.421	0.425	0.430	0.435
60	0.239	0.245	0.253	0.265	0.278	0.292	0.310	0.328	0.350	0.367	0.377	0.383	0.395	0.406	0.412	0.411	0.418	0.426	0.429	0.423
61	0.239	0.245	0.254	0.264	0.273	0.288	0.304	0.321	0.340	0.354	0.362	0.374	0.391	0.405	0.409	0.405	0.408	0.416	0.419	0.422
62	0.238	0.243	0.253	0.263	0.272	0.285	0.301	0.318	0.336	0.346	0.354	0.364	0.379	0.389	0.394	0.402	0.407	0.406	0.406	0.411
63	0.236	0.241	0.249	0.260	0.269	0.282	0.297	0.315	0.332	0.343	0.351	0.361	0.375	0.384	0.388	0.392	0.393	0.396	0.395	0.399

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 10.10 SEC
GROUP 9 HRFR = 0.397E-01

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	0.045	0.046	0.045	0.045	0.047	0.047	0.048	0.050	0.048	0.047	0.046	0.047	0.047	0.046	0.045	0.044	0.043	0.042	0.040	0.037
30	0.052	0.050	0.051	0.050	0.052	0.051	0.051	0.049	0.047	0.044	0.042	0.039	0.039	0.037	0.036	0.034	0.031	0.028	0.029	0.025
31	0.053	0.052	0.049	0.047	0.043	0.041	0.038	0.035	0.031	0.027	0.023	0.021	0.020	0.018	0.016	0.016	0.012	0.014	0.012	0.015
32	0.038	0.033	0.030	0.024	0.021	0.018	0.016	0.015	0.015	0.013	0.013	0.013	0.013	0.013	0.014	0.013	0.013	0.013	0.013	0.012
33	0.016	0.014	0.016	0.015	0.015	0.014	0.015	0.013	0.013	0.012	0.013	0.013	0.014	0.013	0.014	0.013	0.013	0.012	0.013	0.013
34	0.013	0.014	0.013	0.014	0.014	0.015	0.014	0.014	0.013	0.013	0.013	0.013	0.013	0.013	0.012	0.013	0.013	0.012	0.012	0.013
35	0.015	0.015	0.015	0.016	0.014	0.014	0.014	0.014	0.013	0.014	0.013	0.016	0.013	0.013	0.012	0.013	0.012	0.013	0.012	0.013
36	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.015	0.016	0.014	0.015	0.013	0.015	0.014	0.016	0.014	0.013	0.013	0.013	0.012
37	0.016	0.016	0.013	0.016	0.016	0.016	0.015	0.016	0.016	0.016	0.015	0.016	0.013	0.015	0.013	0.014	0.013	0.013	0.013	0.014
38	0.018	0.016	0.019	0.018	0.019	0.017	0.017	0.016	0.016	0.016	0.017	0.016	0.017	0.014	0.016	0.013	0.016	0.013	0.016	0.013
39	0.017	0.019	0.019	0.019	0.019	0.018	0.019	0.018	0.017	0.017	0.017	0.017	0.017	0.017	0.016	0.016	0.016	0.016	0.016	0.016
40	0.021	0.021	0.021	0.020	0.020	0.019	0.020	0.020	0.021	0.019	0.019	0.019	0.019	0.018	0.019	0.018	0.018	0.016	0.017	0.017
41	0.021	0.021	0.022	0.021	0.021	0.021	0.021	0.020	0.020	0.020	0.021	0.020	0.019	0.019	0.019	0.019	0.019	0.017	0.019	0.018
42	0.023	0.023	0.023	0.022	0.023	0.022	0.023	0.022	0.021	0.021	0.021	0.021	0.021	0.020	0.020	0.019	0.020	0.020	0.020	0.019
43	0.025	0.024	0.025	0.025	0.025	0.023	0.025	0.023	0.025	0.022	0.022	0.021	0.021	0.021	0.021	0.020	0.021	0.021	0.021	0.019
44	0.024	0.025	0.023	0.025	0.023	0.026	0.023	0.024	0.022	0.025	0.023	0.024	0.022	0.022	0.021	0.021	0.021	0.021	0.021	0.021
45	0.028	0.027	0.028	0.027	0.028	0.025	0.027	0.025	0.027	0.025	0.027	0.023	0.025	0.022	0.023	0.022	0.024	0.021	0.023	0.020
46	0.032	0.032	0.030	0.031	0.030	0.031	0.030	0.030	0.029	0.029	0.027	0.028	0.027	0.028	0.027	0.027	0.027	0.027	0.025	0.026
47	0.038	0.037	0.036	0.036	0.035	0.035	0.034	0.034	0.033	0.034	0.032	0.033	0.031	0.031	0.031	0.031	0.031	0.031	0.030	0.030
48	0.041	0.042	0.041	0.040	0.039	0.038	0.038	0.037	0.035	0.036	0.034	0.034	0.033	0.034	0.033	0.033	0.032	0.032	0.031	0.032
49	0.047	0.045	0.044	0.044	0.042	0.041	0.039	0.039	0.037	0.037	0.036	0.037	0.036	0.036	0.034	0.034	0.033	0.034	0.033	0.034
50	0.062	0.052	0.047	0.045	0.043	0.042	0.041	0.041	0.040	0.040	0.038	0.038	0.037	0.037	0.036	0.036	0.036	0.036	0.035	0.034
51	0.092	0.065	0.055	0.053	0.048	0.045	0.042	0.042	0.042	0.041	0.041	0.041	0.039	0.039	0.038	0.038	0.037	0.037	0.036	0.037
52	0.209	0.115	0.070	0.055	0.053	0.052	0.049	0.046	0.045	0.042	0.043	0.041	0.041	0.039	0.040	0.038	0.039	0.038	0.039	0.037
53	0.332	0.257	0.154	0.089	0.061	0.051	0.050	0.049	0.045	0.043	0.041	0.041	0.040	0.040	0.039	0.038	0.037	0.037	0.037	0.037
54	0.360	0.349	0.309	0.202	0.107	0.068	0.054	0.050	0.048	0.040	0.036	0.034	0.034	0.032	0.032	0.030	0.030	0.029	0.030	0.030
55	0.430	0.405	0.378	0.334	0.237	0.131	0.078	0.058	0.050	0.048	0.042	0.036	0.032	0.031	0.030	0.030	0.028	0.028	0.027	0.030
56	0.482	0.483	0.467	0.436	0.390	0.300	0.179	0.097	0.066	0.054	0.051	0.047	0.039	0.035	0.033	0.032	0.031	0.031	0.032	0.034
57	0.483	0.488	0.495	0.502	0.497	0.467	0.396	0.269	0.144	0.083	0.061	0.053	0.051	0.044	0.037	0.036	0.034	0.034	0.035	0.036
58	0.477	0.492	0.495	0.493	0.500	0.510	0.513	0.480	0.368	0.212	0.110	0.072	0.058	0.052	0.048	0.039	0.036	0.034	0.036	0.035
59	0.440	0.441	0.449	0.467	0.489	0.500	0.504	0.506	0.504	0.450	0.311	0.169	0.095	0.064	0.055	0.049	0.041	0.035	0.036	0.034
60	0.426	0.433	0.430	0.418	0.407	0.416	0.449	0.482	0.498	0.498	0.472	0.347	0.185	0.098	0.068	0.055	0.051	0.041	0.035	0.030
61	0.425	0.429	0.432	0.430	0.420	0.403	0.383	0.372	0.390	0.429	0.464	0.464	0.375	0.223	0.114	0.073	0.055	0.050	0.043	0.035
62	0.419	0.421	0.426	0.434	0.436	0.430	0.416	0.394	0.369	0.343	0.336	0.363	0.406	0.403	0.287	0.148	0.083	0.060	0.051	0.043
63	0.413	0.419	0.420	0.422	0.425	0.435	0.442	0.439	0.423	0.397	0.366	0.332	0.307	0.313	0.339	0.295	0.176	0.093	0.064	0.052

NASA/RI OH90 TRANSITION TEST
V41B-P4A
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50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 10.10 SEC
GROUP 9 HRFR = 0.397E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.033	0.031	0.030	0.030	0.030	0.031	0.031	0.031	0.030	0.029	0.031	0.034	0.033	0.034	0.032	0.031	0.030	0.030	0.028	0.029
30	0.023	0.021	0.019	0.019	0.019	0.019	0.019	0.018	0.017	0.017	0.017	0.018	0.018	0.016	0.017	0.017	0.017	0.016	0.017	0.016
31	0.012	0.014	0.011	0.013	0.012	0.013	0.012	0.013	0.010	0.013	0.010	0.014	0.013	0.015	0.013	0.014	0.013	0.014	0.015	0.015
32	0.013	0.013	0.013	0.012	0.013	0.012	0.013	0.012	0.013	0.012	0.013	0.012	0.012	0.009	0.013	0.010	0.013	0.010	0.013	0.009
33	0.013	0.013	0.013	0.012	0.013	0.011	0.013	0.011	0.012	0.011	0.013	0.012	0.012	0.012	0.012	0.012	0.013	0.012	0.013	0.012
34	0.012	0.013	0.012	0.013	0.012	0.013	0.012	0.012	0.010	0.012	0.010	0.012	0.012	0.011	0.010	0.011	0.009	0.011	0.010	0.011
35	0.013	0.013	0.012	0.012	0.012	0.012	0.012	0.013	0.012	0.013	0.012	0.012	0.010	0.011	0.010	0.013	0.010	0.010	0.011	0.010
36	0.013	0.013	0.013	0.013	0.013	0.012	0.013	0.011	0.013	0.012	0.012	0.012	0.013	0.012	0.012	0.010	0.011	0.010	0.011	0.009
37	0.014	0.014	0.013	0.013	0.012	0.013	0.012	0.013	0.012	0.013	0.013	0.012	0.012	0.013	0.012	0.012	0.012	0.012	0.010	0.011
38	0.015	0.013	0.014	0.013	0.014	0.012	0.014	0.012	0.014	0.013	0.013	0.013	0.013	0.013	0.013	0.012	0.013	0.012	0.012	0.012
39	0.016	0.016	0.014	0.015	0.014	0.016	0.014	0.016	0.013	0.013	0.013	0.013	0.012	0.013	0.011	0.013	0.010	0.013	0.010	0.013
40	0.017	0.016	0.016	0.016	0.016	0.016	0.016	0.015	0.015	0.014	0.016	0.015	0.016	0.013	0.014	0.013	0.015	0.014	0.014	0.013
41	0.019	0.017	0.018	0.016	0.017	0.017	0.018	0.015	0.016	0.016	0.016	0.016	0.016	0.015	0.016	0.016	0.016	0.014	0.016	0.014
42	0.019	0.019	0.019	0.018	0.019	0.017	0.018	0.018	0.019	0.017	0.017	0.017	0.018	0.016	0.017	0.016	0.016	0.016	0.016	0.016
43	0.020	0.019	0.019	0.019	0.020	0.019	0.019	0.017	0.019	0.018	0.019	0.017	0.017	0.017	0.017	0.016	0.017	0.015	0.016	0.016
44	0.020	0.021	0.020	0.021	0.020	0.019	0.019	0.019	0.019	0.019	0.018	0.019	0.019	0.019	0.019	0.018	0.018	0.017	0.017	0.018
45	0.021	0.019	0.022	0.020	0.022	0.020	0.021	0.020	0.021	0.020	0.021	0.021	0.021	0.019	0.020	0.019	0.020	0.019	0.020	0.018
46	0.025	0.026	0.025	0.026	0.025	0.025	0.024	0.024	0.023	0.025	0.021	0.025	0.021	0.024	0.020	0.023	0.020	0.024	0.020	0.023
47	0.028	0.030	0.028	0.030	0.030	0.029	0.027	0.028	0.027	0.027	0.027	0.028	0.027	0.027	0.027	0.027	0.026	0.027	0.026	0.027
48	0.031	0.031	0.030	0.031	0.030	0.031	0.030	0.030	0.029	0.029	0.028	0.029	0.028	0.029	0.028	0.029	0.027	0.028	0.027	0.028
49	0.033	0.033	0.032	0.032	0.032	0.032	0.031	0.031	0.031	0.032	0.031	0.031	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030
50	0.034	0.034	0.034	0.034	0.034	0.033	0.032	0.032	0.031	0.032	0.031	0.031	0.031	0.031	0.030	0.031	0.030	0.031	0.030	0.031
51	0.036	0.036	0.035	0.035	0.035	0.035	0.034	0.034	0.034	0.035	0.033	0.033	0.032	0.033	0.033	0.033	0.032	0.032	0.031	0.032
52	0.037	0.036	0.037	0.035	0.036	0.036	0.036	0.035	0.035	0.035	0.035	0.034	0.035	0.034	0.034	0.033	0.034	0.033	0.034	0.033
53	0.036	0.037	0.036	0.036	0.036	0.036	0.036	0.036	0.033	0.035	0.033	0.034	0.033	0.035	0.032	0.034	0.032	0.033	0.032	0.033
54	0.032	0.033	0.034	0.034	0.035	0.034	0.034	0.034	0.035	0.034	0.035	0.033	0.034	0.033	0.034	0.032	0.033	0.031	0.032	0.031
55	0.031	0.034	0.034	0.035	0.035	0.035	0.035	0.036	0.035	0.036	0.035	0.036	0.035	0.035	0.034	0.034	0.033	0.034	0.031	0.032
56	0.035	0.037	0.036	0.037	0.037	0.038	0.038	0.038	0.037	0.038	0.037	0.038	0.037	0.037	0.036	0.036	0.036	0.035	0.034	0.034
57	0.036	0.038	0.038	0.039	0.038	0.039	0.038	0.039	0.039	0.039	0.038	0.038	0.037	0.038	0.037	0.037	0.035	0.035	0.034	0.035
58	0.037	0.037	0.037	0.036	0.036	0.036	0.036	0.035	0.035	0.035	0.035	0.034	0.034	0.033	0.033	0.032	0.032	0.030	0.031	0.029
59	0.035	0.032	0.034	0.033	0.034	0.032	0.034	0.032	0.033	0.031	0.032	0.031	0.032	0.031	0.031	0.030	0.030	0.028	0.030	0.028
60	0.030	0.028	0.028	0.027	0.027	0.024	0.025	0.022	0.025	0.022	0.025	0.021	0.022	0.019	0.022	0.018	0.020	0.017	0.019	0.016
61	0.030	0.028	0.026	0.027	0.025	0.025	0.025	0.024	0.022	0.022	0.020	0.020	0.019	0.019	0.019	0.019	0.019	0.017	0.018	0.016
62	0.036	0.030	0.029	0.027	0.027	0.025	0.026	0.024	0.025	0.023	0.022	0.021	0.021	0.020	0.021	0.020	0.019	0.018	0.019	0.016
63	0.045	0.039	0.032	0.031	0.027	0.027	0.025	0.026	0.025	0.025	0.024	0.023	0.021	0.021	0.021	0.020	0.020	0.019	0.019	0.019

106

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 10.10 SEC
HRFR = 0.3975-01

GROUP 9

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.028	0.028	0.026	0.027	0.025	0.025	0.024	0.025	0.025	0.025	0.023	0.022	0.021	0.023	0.022	0.023	0.021	0.022	0.022	0.023
30	0.016	0.016	0.016	0.016	0.015	0.016	0.016	0.015	0.016	0.015	0.014	0.013	0.014	0.013	0.013	0.012	0.013	0.012	0.013	0.012
31	0.013	0.014	0.013	0.014	0.014	0.015	0.013	0.014	0.013	0.013	0.013	0.013	0.013	0.013	0.012	0.012	0.012	0.012	0.011	0.010
32	0.013	0.009	0.013	0.010	0.014	0.011	0.013	0.010	0.013	0.013	0.013	0.013	0.013	0.012	0.012	0.010	0.011	0.010	0.011	0.009
33	0.013	0.011	0.012	0.011	0.013	0.012	0.013	0.012	0.013	0.011	0.012	0.010	0.011	0.009	0.011	0.009	0.010	0.007	0.009	0.007
34	0.010	0.012	0.010	0.010	0.010	0.010	0.010	0.011	0.010	0.011	0.010	0.010	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
35	0.009	0.009	0.009	0.010	0.009	0.010	0.010	0.010	0.009	0.009	0.009	0.010	0.009	0.009	0.009	0.009	0.009	0.009	0.007	0.008
36	0.011	0.010	0.010	0.009	0.010	0.009	0.009	0.009	0.010	0.009	0.009	0.008	0.009	0.007	0.009	0.008	0.009	0.009	0.009	0.009
37	0.009	0.010	0.009	0.011	0.009	0.010	0.010	0.010	0.009	0.009	0.009	0.009	0.009	0.010	0.010	0.009	0.008	0.009	0.008	0.009
38	0.012	0.012	0.013	0.012	0.012	0.011	0.012	0.011	0.012	0.011	0.011	0.010	0.011	0.010	0.010	0.010	0.011	0.010	0.011	0.010
39	0.011	0.013	0.010	0.012	0.010	0.012	0.010	0.013	0.012	0.012	0.011	0.012	0.011	0.012	0.011	0.011	0.010	0.012	0.011	0.012
40	0.013	0.013	0.013	0.013	0.013	0.012	0.013	0.013	0.013	0.011	0.013	0.009	0.012	0.010	0.013	0.010	0.012	0.010	0.012	0.011
41	0.015	0.013	0.014	0.013	0.014	0.013	0.013	0.013	0.013	0.013	0.014	0.013	0.013	0.013	0.013	0.013	0.013	0.012	0.013	0.013
42	0.015	0.016	0.016	0.014	0.015	0.013	0.014	0.013	0.015	0.014	0.014	0.013	0.014	0.013	0.014	0.013	0.013	0.013	0.013	0.013
43	0.017	0.016	0.016	0.014	0.016	0.015	0.016	0.015	0.015	0.014	0.015	0.014	0.015	0.013	0.014	0.013	0.015	0.013	0.015	0.013
44	0.017	0.017	0.016	0.016	0.016	0.017	0.016	0.016	0.015	0.016	0.015	0.016	0.015	0.016	0.014	0.015	0.014	0.015	0.015	0.015
45	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.018	0.019	0.018	0.019	0.017	0.019	0.018	0.018	0.016	0.018	0.017	0.018	0.017
46	0.020	0.023	0.020	0.023	0.020	0.023	0.022	0.022	0.021	0.022	0.021	0.022	0.021	0.022	0.021	0.022	0.021	0.021	0.020	0.021
47	0.027	0.028	0.027	0.027	0.027	0.027	0.025	0.026	0.025	0.026	0.025	0.025	0.023	0.025	0.023	0.026	0.024	0.026	0.024	0.025
48	0.028	0.030	0.030	0.031	0.028	0.028	0.027	0.028	0.027	0.028	0.027	0.028	0.027	0.027	0.026	0.027	0.027	0.027	0.027	0.027
49	0.030	0.031	0.030	0.032	0.030	0.031	0.030	0.030	0.028	0.028	0.027	0.028	0.028	0.029	0.028	0.029	0.028	0.028	0.027	0.027
50	0.031	0.032	0.031	0.031	0.030	0.031	0.030	0.030	0.030	0.030	0.029	0.030	0.028	0.029	0.028	0.028	0.028	0.030	0.028	0.028
51	0.031	0.032	0.032	0.032	0.031	0.031	0.030	0.031	0.030	0.031	0.030	0.031	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030
52	0.034	0.032	0.033	0.032	0.032	0.032	0.033	0.032	0.032	0.032	0.031	0.031	0.031	0.030	0.032	0.030	0.031	0.030	0.031	0.030
53	0.031	0.032	0.030	0.031	0.030	0.030	0.030	0.030	0.028	0.028	0.027	0.029	0.027	0.028	0.026	0.027	0.026	0.027	0.026	0.026
54	0.031	0.030	0.030	0.027	0.028	0.024	0.025	0.021	0.022	0.020	0.022	0.019	0.021	0.019	0.021	0.019	0.020	0.019	0.019	0.017
55	0.030	0.030	0.029	0.028	0.025	0.025	0.021	0.021	0.020	0.019	0.018	0.019	0.017	0.019	0.017	0.016	0.016	0.016	0.015	0.016
56	0.032	0.033	0.031	0.030	0.028	0.027	0.024	0.023	0.020	0.020	0.019	0.020	0.019	0.019	0.017	0.018	0.016	0.017	0.016	0.015
57	0.033	0.032	0.030	0.030	0.029	0.028	0.025	0.023	0.021	0.020	0.020	0.019	0.018	0.019	0.017	0.018	0.016	0.016	0.013	0.015
58	0.030	0.027	0.028	0.025	0.027	0.024	0.024	0.021	0.021	0.019	0.019	0.018	0.019	0.017	0.018	0.016	0.016	0.015	0.016	0.014
59	0.029	0.027	0.027	0.027	0.027	0.025	0.027	0.025	0.025	0.025	0.025	0.023	0.021	0.021	0.022	0.021	0.022	0.021	0.022	0.021
60	0.019	0.017	0.017	0.015	0.016	0.014	0.016	0.014	0.015	0.013	0.013	0.012	0.013	0.012	0.013	0.012	0.013	0.012	0.012	0.011
61	0.016	0.016	0.014	0.016	0.013	0.013	0.012	0.013	0.010	0.013	0.010	0.013	0.010	0.012	0.009	0.010	0.009	0.010	0.008	0.010
62	0.016	0.016	0.016	0.016	0.016	0.015	0.016	0.013	0.014	0.013	0.013	0.012	0.013	0.012	0.013	0.010	0.011	0.010	0.012	0.009
63	0.017	0.017	0.016	0.016	0.016	0.016	0.015	0.016	0.015	0.015	0.013	0.013	0.012	0.013	0.012	0.013	0.012	0.012	0.010	0.010

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 10.10 SEC
HREF = 0.397E-01

GROUP 9

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.021	0.021	0.021	0.022	0.021	0.021	0.021	0.021	0.021	0.021
30	0.011	0.010	0.011	0.009	0.012	0.010	0.010	0.009	0.010	0.009
31	0.009	0.010	0.009	0.010	0.009	0.010	0.008	0.009	0.009	0.009
32	0.011	0.009	0.009	0.008	0.009	0.009	0.009	0.008	0.009	0.008
33	0.008	0.007	0.009	0.007	0.009	0.006	0.008	0.008	0.009	0.007
34	0.007	0.007	0.006	0.007	0.007	0.008	0.007	0.008	0.007	0.007
35	0.007	0.008	0.006	0.008	0.007	0.008	0.006	0.007	0.006	0.007
36	0.009	0.007	0.008	0.007	0.009	0.007	0.009	0.007	0.008	0.007
37	0.009	0.009	0.009	0.009	0.009	0.008	0.007	0.008	0.008	0.009
38	0.010	0.009	0.010	0.009	0.011	0.009	0.010	0.009	0.009	0.009
39	0.012	0.011	0.010	0.011	0.010	0.011	0.010	0.011	0.010	0.010
40	0.013	0.010	0.013	0.010	0.013	0.013	0.013	0.012	0.013	0.012
41	0.013	0.012	0.013	0.012	0.013	0.012	0.013	0.009	0.013	0.009
42	0.014	0.012	0.015	0.013	0.014	0.013	0.013	0.013	0.013	0.013
43	0.014	0.013	0.014	0.013	0.013	0.013	0.014	0.013	0.015	0.013
44	0.013	0.015	0.014	0.015	0.015	0.014	0.014	0.014	0.013	0.016
45	0.017	0.016	0.017	0.016	0.017	0.015	0.018	0.017	0.017	0.016
46	0.020	0.021	0.021	0.021	0.021	0.021	0.020	0.021	0.021	0.021
47	0.023	0.025	0.023	0.025	0.025	0.025	0.025	0.026	0.024	0.024
48	0.027	0.027	0.025	0.026	0.025	0.026	0.024	0.027	0.024	0.026
49	0.027	0.028	0.027	0.028	0.027	0.028	0.026	0.027	0.026	0.027
50	0.027	0.028	0.027	0.028	0.027	0.028	0.027	0.027	0.027	0.027
51	0.030	0.030	0.028	0.029	0.028	0.030	0.029	0.030	0.028	0.028
52	0.031	0.030	0.031	0.028	0.030	0.028	0.029	0.028	0.029	0.028
53	0.025	0.026	0.025	0.026	0.025	0.025	0.025	0.025	0.024	0.025
54	0.020	0.019	0.019	0.017	0.019	0.018	0.019	0.017	0.018	0.016
55	0.014	0.013	0.013	0.014	0.011	0.013	0.009	0.013	0.009	0.013
56	0.015	0.014	0.013	0.014	0.013	0.013	0.012	0.013	0.012	0.012
57	0.013	0.014	0.013	0.013	0.012	0.012	0.012	0.012	0.010	0.010
58	0.015	0.013	0.013	0.012	0.013	0.012	0.013	0.012	0.012	0.010
59	0.020	0.020	0.021	0.020	0.020	0.019	0.020	0.017	0.018	0.016
60	0.010	0.009	0.011	0.010	0.011	0.009	0.009	0.008	0.009	0.007
61	0.009	0.010	0.009	0.009	0.006	0.006	0.005	0.008	0.006	0.009
62	0.011	0.008	0.009	0.006	0.009	0.004	0.007	0.005	0.007	0.005
63	0.009	0.009	0.009	0.009	0.009	0.009	0.010	0.009	0.009	0.005

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 10.10 SEC
HRFR = 0.397E-01

GROUP 9

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.013	0.013	0.013	0.016	0.015	0.016	0.015	0.016	0.017	0.019	0.020	0.021	0.025	0.030	0.077	0.147	0.184	0.204	0.215	0.225
65	0.013	0.013	0.013	0.013	0.013	0.014	0.016	0.016	0.018	0.019	0.020	0.021	0.023	0.032	0.085	0.151	0.182	0.199	0.212	0.221
66	0.012	0.011	0.013	0.012	0.014	0.014	0.016	0.015	0.017	0.018	0.020	0.021	0.025	0.039	0.103	0.158	0.183	0.199	0.211	0.218
67	0.011	0.011	0.011	0.012	0.013	0.013	0.015	0.014	0.016	0.016	0.019	0.021	0.025	0.053	0.121	0.163	0.184	0.198	0.209	0.217
68	0.009	0.009	0.010	0.010	0.011	0.012	0.012	0.013	0.013	0.015	0.016	0.019	0.025	0.069	0.133	0.166	0.184	0.196	0.204	0.213
69	0.007	0.008	0.009	0.009	0.010	0.010	0.012	0.012	0.013	0.014	0.016	0.018	0.032	0.089	0.144	0.168	0.183	0.194	0.201	0.208
70	0.007	0.009	0.007	0.009	0.009	0.011	0.012	0.013	0.013	0.014	0.016	0.021	0.045	0.108	0.149	0.168	0.181	0.191	0.198	0.205
71	0.007	0.008	0.010	0.010	0.012	0.010	0.012	0.010	0.013	0.013	0.017	0.020	0.057	0.118	0.152	0.167	0.179	0.187	0.195	0.201
72	0.008	0.009	0.009	0.010	0.010	0.012	0.012	0.013	0.013	0.015	0.016	0.024	0.069	0.127	0.155	0.170	0.181	0.189	0.196	0.203
73	0.009	0.009	0.009	0.010	0.011	0.013	0.013	0.015	0.013	0.015	0.016	0.027	0.076	0.131	0.156	0.169	0.180	0.188	0.194	0.201
74	0.009	0.009	0.009	0.009	0.011	0.012	0.014	0.014	0.015	0.016	0.018	0.034	0.089	0.135	0.156	0.168	0.178	0.184	0.191	0.197
75	0.009	0.009	0.010	0.009	0.012	0.012	0.014	0.013	0.015	0.015	0.019	0.047	0.105	0.141	0.158	0.168	0.176	0.182	0.188	0.194
76	0.009	0.009	0.009	0.009	0.009	0.011	0.012	0.015	0.014	0.016	0.021	0.058	0.115	0.144	0.158	0.167	0.175	0.180	0.186	0.191
77	0.009	0.009	0.008	0.010	0.009	0.011	0.012	0.013	0.012	0.016	0.025	0.074	0.125	0.147	0.159	0.167	0.173	0.179	0.184	0.190
78	0.009	0.009	0.010	0.009	0.011	0.008	0.012	0.009	0.013	0.013	0.034	0.089	0.132	0.149	0.160	0.166	0.172	0.177	0.182	0.187
79	0.009	0.014	0.019	0.020	0.017	0.019	0.020	0.019	0.016	0.016	0.040	0.100	0.135	0.150	0.160	0.167	0.172	0.176	0.181	0.186
80	0.015	0.024	0.029	0.023	0.027	0.025	0.019	0.016	0.020	0.023	0.050	0.106	0.137	0.150	0.160	0.166	0.171	0.175	0.180	0.185
81	0.022	0.031	0.035	0.027	0.027	0.029	0.028	0.024	0.020	0.022	0.056	0.110	0.137	0.149	0.157	0.163	0.167	0.171	0.176	0.180
82	0.035	0.049	0.053	0.045	0.036	0.031	0.034	0.035	0.034	0.033	0.073	0.121	0.142	0.152	0.158	0.162	0.165	0.168	0.172	0.176
83	0.072	0.087	0.078	0.081	0.068	0.043	0.030	0.028	0.034	0.045	0.091	0.130	0.147	0.155	0.161	0.164	0.167	0.168	0.170	0.174
84	0.080	0.094	0.084	0.102	0.097	0.055	0.032	0.019	0.023	0.051	0.105	0.134	0.147	0.153	0.158	0.162	0.165	0.167	0.168	0.170
85	0.057	0.056	0.057	0.075	0.070	0.044	0.027	0.021	0.026	0.072	0.130	0.155	0.164	0.168	0.169	0.170	0.170	0.170	0.169	0.170
86	0.050	0.047	0.044	0.044	0.044	0.039	0.036	0.034	0.039	0.042	0.052	0.063	0.075	0.087	0.102	0.117	0.133	0.145	0.157	0.172
87	0.040	0.037	0.037	0.040	0.038	0.038	0.036	0.035	0.035	0.036	0.035	0.037	0.037	0.038	0.038	0.039	0.039	0.041	0.041	0.043
88	0.025	0.022	0.023	0.025	0.027	0.025	0.027	0.028	0.036	0.035	0.035	0.033	0.034	0.034	0.035	0.034	0.035	0.035	0.036	0.037
89	0.013	0.012	0.011	0.012	0.013	0.014	0.019	0.023	0.032	0.032	0.032	0.032	0.032	0.031	0.033	0.031	0.032	0.030	0.032	0.032
90	0.009	0.007	0.009	0.008	0.011	0.011	0.014	0.019	0.028	0.032	0.032	0.031	0.032	0.030	0.030	0.028	0.030	0.028	0.030	0.029
91	0.005	0.002	0.006	0.005	0.007	0.009	0.011	0.016	0.027	0.033	0.032	0.033	0.030	0.030	0.030	0.030	0.030	0.030	0.029	0.029
92	0.002	0.003	0.000	0.005	0.002	0.006	0.005	0.013	0.023	0.030	0.030	0.031	0.030	0.030	0.028	0.029	0.027	0.030	0.027	0.028
93	0.002	0.002	0.002	0.002	0.005	0.006	0.009	0.013	0.027	0.030	0.030	0.030	0.031	0.030	0.031	0.029	0.030	0.027	0.028	0.024
94	0.005	0.004	0.003	0.004	0.005	0.007	0.009	0.015	0.027	0.031	0.030	0.032	0.030	0.031	0.030	0.031	0.029	0.028	0.027	0.027
95	0.018	0.017	0.016	0.014	0.015	0.013	0.016	0.016	0.027	0.030	0.031	0.032	0.035	0.034	0.034	0.032	0.032	0.030	0.028	0.025
96	0.027	0.027	0.025	0.025	0.024	0.023	0.021	0.022	0.028	0.034	0.032	0.034	0.035	0.036	0.036	0.037	0.035	0.034	0.029	0.027
97	0.035	0.035	0.035	0.035	0.034	0.031	0.025	0.025	0.031	0.037	0.035	0.036	0.037	0.039	0.039	0.039	0.038	0.036	0.031	0.028
98	0.037	0.037	0.036	0.036	0.035	0.033	0.027	0.025	0.030	0.035	0.033	0.036	0.039	0.042	0.041	0.041	0.040	0.037	0.032	0.030

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 10.10 SEC
HREF = 0.397E-01

GROUP 9

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	0.233	0.239	0.249	0.257	0.267	0.278	0.293	0.313	0.332	0.345	0.354	0.367	0.384	0.393	0.395	0.393	0.389	0.389	0.389	0.382
65	0.228	0.235	0.244	0.252	0.262	0.276	0.290	0.306	0.323	0.339	0.349	0.362	0.379	0.393	0.397	0.402	0.401	0.400	0.396	0.389
66	0.224	0.231	0.241	0.248	0.259	0.271	0.286	0.299	0.319	0.336	0.347	0.359	0.379	0.390	0.393	0.400	0.406	0.411	0.412	0.410
67	0.222	0.229	0.238	0.247	0.258	0.270	0.282	0.296	0.312	0.332	0.349	0.355	0.366	0.379	0.386	0.394	0.404	0.411	0.410	0.413
68	0.220	0.226	0.235	0.244	0.254	0.265	0.277	0.292	0.308	0.324	0.341	0.353	0.359	0.365	0.376	0.386	0.392	0.396	0.398	0.405
69	0.215	0.221	0.230	0.238	0.247	0.257	0.268	0.280	0.295	0.310	0.326	0.339	0.346	0.350	0.356	0.368	0.377	0.380	0.388	0.395
70	0.210	0.217	0.225	0.232	0.243	0.253	0.261	0.273	0.287	0.303	0.319	0.335	0.344	0.351	0.357	0.360	0.364	0.370	0.378	0.383
71	0.208	0.215	0.224	0.232	0.243	0.255	0.265	0.274	0.286	0.302	0.318	0.332	0.342	0.349	0.354	0.358	0.363	0.369	0.375	0.378
72	0.209	0.215	0.224	0.232	0.239	0.250	0.261	0.272	0.281	0.297	0.311	0.322	0.333	0.339	0.342	0.347	0.354	0.361	0.366	0.370
73	0.207	0.213	0.219	0.227	0.235	0.244	0.256	0.265	0.276	0.290	0.303	0.314	0.323	0.329	0.332	0.335	0.340	0.347	0.352	0.356
74	0.203	0.209	0.216	0.223	0.234	0.243	0.253	0.265	0.276	0.285	0.297	0.307	0.317	0.325	0.329	0.329	0.331	0.333	0.339	0.344
75	0.201	0.206	0.213	0.220	0.229	0.239	0.249	0.259	0.270	0.280	0.290	0.299	0.310	0.320	0.321	0.320	0.321	0.323	0.328	0.336
76	0.196	0.201	0.209	0.216	0.224	0.232	0.242	0.252	0.262	0.271	0.281	0.288	0.294	0.300	0.305	0.307	0.311	0.312	0.312	0.314
77	0.195	0.200	0.206	0.214	0.222	0.231	0.240	0.249	0.257	0.267	0.276	0.285	0.291	0.296	0.299	0.302	0.304	0.307	0.309	0.311
78	0.194	0.199	0.205	0.211	0.219	0.228	0.237	0.246	0.256	0.263	0.271	0.281	0.289	0.294	0.298	0.303	0.307	0.310	0.313	0.315
79	0.191	0.197	0.202	0.210	0.216	0.225	0.235	0.246	0.254	0.262	0.269	0.276	0.281	0.286	0.291	0.297	0.301	0.306	0.309	0.312
80	0.191	0.196	0.202	0.209	0.216	0.224	0.234	0.242	0.251	0.261	0.269	0.275	0.281	0.286	0.291	0.294	0.298	0.301	0.304	0.306
81	0.186	0.191	0.198	0.204	0.211	0.218	0.228	0.237	0.248	0.258	0.268	0.277	0.284	0.288	0.291	0.294	0.296	0.297	0.300	0.303
82	0.180	0.185	0.191	0.197	0.204	0.213	0.221	0.230	0.240	0.251	0.262	0.271	0.279	0.285	0.290	0.292	0.296	0.298	0.301	0.303
83	0.177	0.181	0.188	0.194	0.202	0.209	0.217	0.225	0.234	0.243	0.252	0.259	0.266	0.272	0.277	0.281	0.286	0.291	0.296	0.298
84	0.173	0.177	0.182	0.188	0.196	0.204	0.213	0.222	0.230	0.239	0.247	0.254	0.260	0.266	0.271	0.273	0.277	0.280	0.284	0.287
85	0.171	0.174	0.177	0.182	0.188	0.195	0.204	0.213	0.221	0.228	0.236	0.243	0.247	0.253	0.256	0.260	0.263	0.266	0.269	0.272
86	0.179	0.179	0.185	0.192	0.198	0.200	0.199	0.198	0.204	0.213	0.225	0.236	0.243	0.246	0.249	0.251	0.254	0.256	0.258	0.260
87	0.045	0.049	0.054	0.063	0.068	0.072	0.069	0.065	0.063	0.066	0.074	0.084	0.091	0.097	0.102	0.107	0.112	0.118	0.124	0.132
88	0.038	0.038	0.039	0.038	0.040	0.040	0.041	0.040	0.041	0.040	0.041	0.041	0.043	0.043	0.044	0.044	0.045	0.045	0.046	0.046
89	0.034	0.034	0.035	0.035	0.036	0.036	0.037	0.036	0.037	0.036	0.037	0.036	0.037	0.037	0.038	0.037	0.039	0.038	0.040	0.039
90	0.031	0.030	0.031	0.030	0.032	0.032	0.034	0.033	0.035	0.034	0.034	0.034	0.035	0.034	0.035	0.035	0.036	0.035	0.036	0.035
91	0.030	0.030	0.030	0.031	0.032	0.031	0.032	0.031	0.031	0.032	0.033	0.034	0.035	0.034	0.033	0.034	0.033	0.034	0.034	0.035
92	0.027	0.028	0.027	0.030	0.030	0.031	0.030	0.032	0.031	0.033	0.037	0.071	0.100	0.084	0.050	0.037	0.033	0.032	0.032	0.034
93	0.027	0.024	0.027	0.025	0.028	0.025	0.030	0.027	0.030	0.028	0.041	0.085	0.120	0.099	0.059	0.039	0.034	0.030	0.031	0.031
94	0.025	0.026	0.025	0.026	0.026	0.028	0.028	0.030	0.030	0.030	0.030	0.032	0.036	0.035	0.030	0.030	0.029	0.030	0.028	0.031
95	0.025	0.025	0.027	0.027	0.028	0.028	0.030	0.030	0.032	0.031	0.032	0.030	0.030	0.028	0.030	0.027	0.030	0.028	0.030	0.028
96	0.025	0.026	0.027	0.028	0.028	0.030	0.032	0.032	0.032	0.033	0.033	0.033	0.031	0.030	0.028	0.029	0.028	0.030	0.028	0.028
97	0.024	0.025	0.026	0.029	0.029	0.031	0.030	0.033	0.033	0.035	0.034	0.034	0.033	0.032	0.029	0.028	0.027	0.028	0.027	0.028
98	0.027	0.028	0.028	0.031	0.030	0.032	0.032	0.033	0.033	0.035	0.034	0.035	0.033	0.033	0.030	0.030	0.027	0.028	0.027	0.027

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREFR
IR SCAN TIME 10.10 SEC
HREFR = 0.397E-01

GROUP 9

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	0.384	0.390	0.402	0.413	0.421	0.427	0.431	0.437	0.441	0.441	0.430	0.394	0.356	0.324	0.301	0.306	0.312	0.233	0.124	0.075
65	0.382	0.371	0.360	0.356	0.359	0.371	0.387	0.406	0.422	0.430	0.434	0.434	0.425	0.392	0.340	0.306	0.298	0.308	0.269	0.165
66	0.407	0.399	0.387	0.368	0.347	0.327	0.311	0.303	0.310	0.326	0.351	0.377	0.397	0.410	0.413	0.383	0.326	0.287	0.290	0.283
67	0.420	0.422	0.421	0.411	0.395	0.371	0.346	0.317	0.288	0.263	0.246	0.242	0.252	0.274	0.308	0.345	0.371	0.363	0.321	0.285
68	0.411	0.415	0.417	0.416	0.416	0.415	0.403	0.386	0.364	0.336	0.303	0.269	0.241	0.224	0.215	0.217	0.234	0.264	0.302	0.325
69	0.400	0.406	0.412	0.411	0.411	0.420	0.427	0.421	0.417	0.406	0.382	0.352	0.320	0.284	0.257	0.238	0.226	0.219	0.220	0.229
70	0.388	0.395	0.406	0.414	0.413	0.416	0.423	0.430	0.430	0.424	0.418	0.411	0.391	0.357	0.318	0.283	0.257	0.243	0.232	0.224
71	0.381	0.385	0.390	0.392	0.397	0.405	0.412	0.418	0.423	0.423	0.418	0.414	0.415	0.414	0.404	0.384	0.351	0.307	0.268	0.246
72	0.374	0.379	0.385	0.390	0.390	0.388	0.389	0.395	0.394	0.398	0.399	0.403	0.406	0.411	0.408	0.403	0.401	0.398	0.387	0.364
73	0.360	0.364	0.370	0.375	0.373	0.371	0.371	0.377	0.380	0.380	0.378	0.376	0.372	0.371	0.373	0.378	0.387	0.398	0.412	0.421
74	0.350	0.354	0.352	0.348	0.348	0.351	0.356	0.364	0.374	0.380	0.379	0.376	0.372	0.365	0.360	0.359	0.351	0.346	0.348	0.351
75	0.344	0.350	0.350	0.348	0.346	0.349	0.360	0.366	0.370	0.374	0.368	0.362	0.358	0.349	0.341	0.338	0.333	0.331	0.335	0.334
76	0.316	0.321	0.329	0.334	0.333	0.333	0.340	0.347	0.352	0.350	0.349	0.347	0.343	0.339	0.332	0.325	0.313	0.298	0.281	0.263
77	0.310	0.311	0.313	0.313	0.313	0.313	0.312	0.307	0.304	0.301	0.298	0.296	0.294	0.291	0.287	0.285	0.283	0.281	0.276	0.269
78	0.318	0.321	0.324	0.324	0.322	0.319	0.315	0.309	0.299	0.290	0.281	0.272	0.265	0.258	0.251	0.245	0.242	0.239	0.236	0.233
79	0.315	0.317	0.320	0.322	0.323	0.323	0.323	0.322	0.320	0.315	0.308	0.300	0.289	0.278	0.266	0.255	0.244	0.235	0.227	0.221
80	0.309	0.311	0.314	0.316	0.318	0.318	0.319	0.318	0.318	0.316	0.316	0.315	0.314	0.309	0.302	0.293	0.283	0.272	0.260	0.249
81	0.306	0.309	0.312	0.313	0.313	0.313	0.314	0.315	0.316	0.316	0.316	0.316	0.318	0.317	0.315	0.312	0.310	0.307	0.302	0.295
82	0.305	0.309	0.312	0.313	0.316	0.316	0.317	0.317	0.317	0.316	0.318	0.317	0.318	0.319	0.320	0.319	0.318	0.317	0.316	0.314
83	0.303	0.306	0.309	0.311	0.315	0.317	0.319	0.321	0.323	0.324	0.325	0.326	0.326	0.326	0.326	0.325	0.326	0.324	0.323	0.323
84	0.292	0.296	0.302	0.307	0.312	0.316	0.320	0.323	0.324	0.327	0.328	0.328	0.329	0.330	0.330	0.330	0.332	0.334	0.335	0.336
85	0.276	0.280	0.284	0.288	0.292	0.297	0.301	0.305	0.309	0.312	0.317	0.321	0.324	0.327	0.330	0.331	0.332	0.332	0.334	0.337
86	0.264	0.266	0.269	0.272	0.275	0.277	0.279	0.280	0.281	0.282	0.284	0.286	0.288	0.292	0.296	0.301	0.307	0.312	0.317	0.320
87	0.139	0.149	0.157	0.166	0.173	0.179	0.184	0.188	0.189	0.190	0.190	0.191	0.191	0.192	0.192	0.195	0.196	0.200	0.205	0.211
88	0.047	0.047	0.048	0.049	0.049	0.049	0.050	0.049	0.050	0.049	0.049	0.049	0.049	0.048	0.048	0.047	0.047	0.046	0.047	0.046
89	0.040	0.040	0.040	0.041	0.041	0.041	0.042	0.042	0.043	0.041	0.042	0.041	0.041	0.041	0.041	0.040	0.041	0.039	0.040	0.039
90	0.036	0.036	0.037	0.036	0.038	0.037	0.038	0.037	0.037	0.036	0.037	0.036	0.037	0.036	0.036	0.035	0.036	0.034	0.035	0.035
91	0.035	0.036	0.035	0.036	0.035	0.036	0.035	0.036	0.036	0.036	0.036	0.036	0.035	0.035	0.034	0.034	0.033	0.034	0.033	0.033
92	0.033	0.034	0.033	0.034	0.034	0.035	0.034	0.035	0.034	0.036	0.039	0.059	0.067	0.052	0.038	0.035	0.031	0.033	0.032	0.031
93	0.032	0.032	0.033	0.032	0.033	0.033	0.034	0.033	0.034	0.035	0.059	0.117	0.136	0.098	0.055	0.039	0.034	0.031	0.031	0.030
94	0.030	0.031	0.029	0.032	0.031	0.033	0.031	0.032	0.030	0.032	0.033	0.048	0.057	0.046	0.035	0.032	0.031	0.031	0.030	0.030
95	0.030	0.029	0.031	0.030	0.033	0.032	0.033	0.032	0.032	0.030	0.031	0.030	0.031	0.030	0.031	0.028	0.028	0.027	0.030	0.027
96	0.027	0.029	0.029	0.030	0.030	0.031	0.031	0.032	0.031	0.031	0.030	0.030	0.030	0.029	0.028	0.028	0.027	0.028	0.027	0.028
97	0.028	0.028	0.027	0.028	0.028	0.030	0.030	0.031	0.030	0.030	0.029	0.030	0.027	0.028	0.027	0.028	0.027	0.027	0.025	0.027
98	0.027	0.028	0.026	0.027	0.027	0.030	0.030	0.031	0.030	0.030	0.030	0.030	0.028	0.028	0.027	0.028	0.026	0.027	0.026	0.027

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREFR
IR SCAN TIME 10.10 SEC
GROUP 9 HREFR = 0.397E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.056	0.047	0.041	0.035	0.030	0.030	0.026	0.027	0.025	0.025	0.024	0.024	0.022	0.023	0.021	0.021	0.020	0.021	0.020	0.020
65	0.087	0.061	0.050	0.044	0.037	0.032	0.030	0.028	0.026	0.026	0.025	0.026	0.025	0.024	0.021	0.022	0.021	0.022	0.020	0.021
66	0.199	0.104	0.067	0.052	0.045	0.038	0.033	0.030	0.028	0.027	0.027	0.025	0.025	0.025	0.025	0.023	0.023	0.021	0.021	0.021
67	0.271	0.206	0.114	0.068	0.053	0.045	0.041	0.032	0.029	0.025	0.027	0.024	0.025	0.023	0.023	0.021	0.022	0.020	0.021	0.021
68	0.322	0.306	0.257	0.156	0.083	0.059	0.048	0.041	0.033	0.028	0.026	0.025	0.024	0.023	0.022	0.022	0.020	0.020	0.019	0.019
69	0.250	0.277	0.304	0.292	0.194	0.098	0.064	0.049	0.042	0.034	0.028	0.025	0.025	0.021	0.021	0.020	0.020	0.020	0.019	0.017
70	0.219	0.221	0.233	0.263	0.276	0.206	0.113	0.069	0.051	0.043	0.035	0.028	0.024	0.023	0.021	0.021	0.020	0.020	0.018	0.018
71	0.236	0.233	0.234	0.235	0.245	0.262	0.224	0.128	0.072	0.052	0.044	0.038	0.031	0.025	0.023	0.021	0.021	0.020	0.020	0.019
72	0.329	0.291	0.263	0.251	0.250	0.251	0.254	0.230	0.152	0.083	0.056	0.046	0.040	0.032	0.025	0.024	0.020	0.021	0.020	0.020
73	0.418	0.413	0.397	0.359	0.309	0.268	0.247	0.244	0.240	0.193	0.112	0.066	0.048	0.042	0.036	0.029	0.025	0.023	0.021	0.020
74	0.360	0.370	0.382	0.387	0.388	0.374	0.347	0.310	0.276	0.253	0.217	0.140	0.078	0.054	0.044	0.036	0.031	0.025	0.023	0.020
75	0.335	0.334	0.335	0.330	0.319	0.309	0.302	0.300	0.302	0.299	0.285	0.255	0.180	0.099	0.063	0.047	0.040	0.033	0.026	0.020
76	0.249	0.240	0.239	0.243	0.253	0.267	0.279	0.286	0.282	0.269	0.252	0.235	0.221	0.179	0.110	0.063	0.047	0.039	0.035	0.027
77	0.260	0.248	0.233	0.219	0.207	0.199	0.194	0.192	0.192	0.195	0.203	0.213	0.214	0.206	0.175	0.116	0.066	0.047	0.039	0.035
78	0.230	0.227	0.222	0.214	0.207	0.200	0.194	0.189	0.185	0.179	0.176	0.176	0.177	0.178	0.178	0.167	0.126	0.073	0.048	0.038
79	0.215	0.211	0.208	0.206	0.205	0.204	0.201	0.198	0.194	0.193	0.189	0.185	0.181	0.179	0.176	0.174	0.168	0.139	0.088	0.054
80	0.240	0.231	0.222	0.215	0.209	0.200	0.198	0.195	0.194	0.190	0.188	0.188	0.189	0.189	0.190	0.192	0.194	0.194	0.178	0.128
81	0.287	0.275	0.262	0.249	0.235	0.220	0.210	0.204	0.200	0.196	0.193	0.186	0.182	0.180	0.180	0.179	0.178	0.180	0.186	0.192
82	0.311	0.306	0.298	0.293	0.287	0.276	0.261	0.243	0.229	0.217	0.209	0.203	0.197	0.190	0.185	0.181	0.178	0.174	0.171	0.169
83	0.320	0.315	0.310	0.305	0.302	0.300	0.298	0.293	0.286	0.277	0.267	0.253	0.238	0.223	0.207	0.195	0.190	0.182	0.176	0.170
84	0.332	0.328	0.325	0.319	0.313	0.309	0.309	0.308	0.308	0.305	0.304	0.303	0.301	0.293	0.282	0.267	0.250	0.229	0.208	0.192
85	0.339	0.340	0.340	0.339	0.336	0.334	0.335	0.335	0.334	0.332	0.330	0.327	0.323	0.320	0.319	0.317	0.313	0.306	0.295	0.279
86	0.323	0.325	0.327	0.328	0.328	0.329	0.329	0.328	0.328	0.329	0.332	0.336	0.339	0.340	0.342	0.340	0.339	0.335	0.331	0.327
87	0.217	0.224	0.232	0.242	0.256	0.275	0.297	0.322	0.347	0.372	0.393	0.407	0.409	0.408	0.406	0.403	0.399	0.394	0.389	0.386
88	0.048	0.047	0.049	0.049	0.051	0.051	0.054	0.056	0.061	0.064	0.071	0.076	0.083	0.087	0.094	0.100	0.106	0.111	0.116	0.118
89	0.039	0.038	0.040	0.040	0.041	0.041	0.042	0.041	0.041	0.041	0.041	0.041	0.042	0.042	0.044	0.045	0.047	0.046	0.047	0.045
90	0.035	0.034	0.036	0.035	0.036	0.035	0.035	0.034	0.035	0.034	0.035	0.035	0.034	0.034	0.036	0.037	0.039	0.039	0.041	0.039
91	0.032	0.033	0.033	0.034	0.033	0.034	0.033	0.034	0.032	0.032	0.031	0.032	0.031	0.032	0.034	0.041	0.040	0.038	0.037	0.038
92	0.030	0.032	0.031	0.032	0.032	0.032	0.032	0.032	0.032	0.037	0.047	0.044	0.035	0.032	0.032	0.037	0.036	0.036	0.035	0.036
93	0.031	0.030	0.032	0.031	0.031	0.030	0.032	0.031	0.040	0.086	0.128	0.111	0.066	0.038	0.033	0.031	0.033	0.032	0.034	0.033
94	0.029	0.030	0.029	0.031	0.029	0.030	0.030	0.030	0.031	0.045	0.066	0.062	0.040	0.032	0.028	0.030	0.030	0.033	0.033	0.033
95	0.029	0.027	0.030	0.028	0.029	0.027	0.028	0.027	0.029	0.027	0.029	0.028	0.028	0.027	0.027	0.028	0.032	0.033	0.034	0.033
96	0.027	0.028	0.026	0.027	0.027	0.027	0.027	0.027	0.026	0.027	0.025	0.026	0.025	0.026	0.025	0.029	0.030	0.034	0.033	0.035
97	0.026	0.027	0.026	0.027	0.026	0.027	0.027	0.027	0.025	0.025	0.025	0.026	0.025	0.025	0.025	0.030	0.033	0.037	0.037	0.038
98	0.025	0.027	0.025	0.027	0.026	0.027	0.025	0.025	0.025	0.027	0.025	0.025	0.024	0.025	0.025	0.033	0.037	0.041	0.042	0.043

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 10.10 SEC
HRFR = 0.397E-01

GROUP 9

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.019	0.019	0.016	0.017	0.016	0.017	0.016	0.016	0.016	0.015	0.013	0.014	0.013	0.013	0.013	0.013	0.012	0.012	0.012	0.012
65	0.020	0.019	0.019	0.018	0.019	0.018	0.017	0.017	0.016	0.015	0.014	0.014	0.014	0.014	0.013	0.013	0.013	0.012	0.011	0.012
66	0.021	0.021	0.021	0.019	0.019	0.017	0.018	0.017	0.017	0.016	0.016	0.013	0.015	0.014	0.013	0.013	0.013	0.012	0.012	0.010
67	0.020	0.019	0.020	0.019	0.018	0.016	0.017	0.016	0.016	0.016	0.015	0.013	0.014	0.013	0.014	0.013	0.012	0.011	0.011	0.010
68	0.019	0.019	0.015	0.016	0.014	0.016	0.013	0.014	0.011	0.014	0.012	0.013	0.010	0.011	0.009	0.010	0.009	0.010	0.008	0.009
69	0.018	0.016	0.017	0.016	0.015	0.014	0.014	0.013	0.013	0.012	0.012	0.010	0.012	0.010	0.011	0.008	0.009	0.007	0.009	0.003
70	0.016	0.017	0.016	0.016	0.014	0.013	0.013	0.013	0.013	0.013	0.010	0.011	0.010	0.010	0.009	0.009	0.007	0.008	0.007	0.007
71	0.018	0.016	0.016	0.016	0.016	0.014	0.014	0.013	0.014	0.013	0.013	0.012	0.012	0.010	0.011	0.009	0.010	0.008	0.009	0.007
72	0.018	0.018	0.016	0.016	0.016	0.016	0.014	0.014	0.013	0.013	0.012	0.013	0.012	0.012	0.010	0.009	0.009	0.009	0.009	0.008
73	0.019	0.019	0.019	0.018	0.016	0.016	0.015	0.016	0.013	0.013	0.013	0.013	0.013	0.013	0.010	0.012	0.009	0.010	0.009	0.009
74	0.021	0.020	0.019	0.018	0.019	0.016	0.016	0.015	0.016	0.014	0.015	0.013	0.013	0.013	0.012	0.010	0.012	0.010	0.010	0.010
75	0.020	0.018	0.019	0.016	0.018	0.016	0.016	0.013	0.015	0.013	0.014	0.011	0.013	0.012	0.013	0.010	0.012	0.009	0.009	0.009
76	0.023	0.019	0.019	0.018	0.018	0.017	0.017	0.015	0.016	0.013	0.014	0.012	0.013	0.012	0.013	0.012	0.012	0.008	0.011	0.007
77	0.029	0.023	0.020	0.019	0.017	0.017	0.016	0.016	0.013	0.013	0.012	0.013	0.013	0.013	0.012	0.011	0.010	0.009	0.009	0.009
78	0.035	0.032	0.030	0.022	0.021	0.016	0.016	0.014	0.015	0.013	0.014	0.013	0.013	0.012	0.012	0.010	0.010	0.009	0.011	0.009
79	0.040	0.035	0.032	0.032	0.027	0.023	0.017	0.016	0.014	0.014	0.013	0.013	0.013	0.013	0.011	0.011	0.009	0.009	0.009	0.009
80	0.073	0.048	0.039	0.034	0.033	0.031	0.030	0.025	0.020	0.016	0.015	0.013	0.013	0.010	0.011	0.010	0.010	0.009	0.009	0.007
81	0.172	0.113	0.062	0.043	0.037	0.032	0.032	0.030	0.030	0.028	0.026	0.021	0.018	0.016	0.015	0.013	0.013	0.012	0.013	0.012
82	0.167	0.148	0.104	0.059	0.041	0.033	0.031	0.028	0.029	0.025	0.027	0.025	0.026	0.025	0.023	0.020	0.018	0.014	0.013	0.010
83	0.165	0.161	0.150	0.115	0.070	0.043	0.034	0.029	0.029	0.027	0.028	0.025	0.025	0.024	0.026	0.021	0.025	0.020	0.025	0.020
84	0.181	0.170	0.162	0.152	0.125	0.080	0.047	0.034	0.030	0.027	0.028	0.026	0.027	0.025	0.025	0.024	0.025	0.024	0.025	0.023
85	0.258	0.232	0.204	0.182	0.165	0.139	0.096	0.055	0.036	0.029	0.025	0.025	0.025	0.023	0.024	0.021	0.022	0.021	0.023	
86	0.321	0.311	0.297	0.277	0.253	0.223	0.183	0.128	0.075	0.044	0.032	0.025	0.023	0.022	0.023	0.023	0.023	0.021	0.022	0.021
87	0.388	0.392	0.395	0.397	0.397	0.394	0.374	0.330	0.254	0.156	0.076	0.042	0.027	0.023	0.021	0.023	0.021	0.022	0.021	0.021
88	0.123	0.129	0.136	0.142	0.150	0.159	0.169	0.169	0.155	0.115	0.064	0.037	0.027	0.021	0.021	0.020	0.020	0.019	0.019	0.017
89	0.045	0.040	0.039	0.037	0.037	0.035	0.035	0.032	0.032	0.027	0.026	0.023	0.021	0.017	0.018	0.016	0.016	0.014	0.016	0.015
90	0.038	0.034	0.031	0.027	0.027	0.025	0.027	0.025	0.025	0.024	0.021	0.019	0.018	0.014	0.016	0.013	0.015	0.014	0.016	0.013
91	0.040	0.040	0.030	0.026	0.024	0.023	0.021	0.021	0.020	0.019	0.019	0.017	0.016	0.016	0.014	0.015	0.013	0.013	0.013	0.013
92	0.038	0.037	0.027	0.024	0.021	0.021	0.021	0.019	0.017	0.017	0.016	0.016	0.015	0.015	0.014	0.014	0.013	0.013	0.012	0.012
93	0.033	0.028	0.026	0.022	0.020	0.019	0.019	0.018	0.018	0.016	0.016	0.015	0.014	0.013	0.014	0.013	0.013	0.012	0.013	0.012
94	0.032	0.030	0.024	0.021	0.020	0.020	0.017	0.017	0.016	0.016	0.015	0.014	0.013	0.013	0.012	0.013	0.012	0.012	0.010	0.011
95	0.033	0.030	0.027	0.021	0.020	0.017	0.019	0.017	0.017	0.016	0.016	0.015	0.016	0.013	0.013	0.013	0.013	0.013	0.013	0.012
96	0.033	0.032	0.025	0.021	0.019	0.019	0.016	0.016	0.015	0.016	0.016	0.015	0.013	0.013	0.013	0.013	0.012	0.013	0.011	0.012
97	0.036	0.035	0.029	0.024	0.019	0.018	0.016	0.016	0.015	0.016	0.013	0.013	0.012	0.013	0.010	0.013	0.009	0.011	0.009	0.012
98	0.042	0.040	0.033	0.025	0.019	0.019	0.017	0.018	0.016	0.016	0.013	0.014	0.013	0.013	0.013	0.013	0.010	0.012	0.010	0.011

IR HEAT TRANSFER COEFFICIENT - H(,9TO)/HRFR
IR SCAN TIME 10.10 SEC
HRFR = 0.397E-01

GROUP 9

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.009	0.010	0.009	0.010	0.009	0.009	0.007	0.008	0.006	0.007
65	0.011	0.010	0.010	0.010	0.009	0.009	0.008	0.009	0.008	0.008
66	0.011	0.010	0.011	0.009	0.009	0.008	0.008	0.006	0.008	0.006
67	0.011	0.009	0.009	0.008	0.008	0.007	0.009	0.005	0.006	0.004
68	0.009	0.008	0.007	0.006	0.005	0.006	0.005	0.005	0.002	0.004
69	0.007	0.001	0.006	0.002	0.005	0.000	0.003	0.003	0.002	0.002
70	0.005	0.005	0.004	0.006	0.003	0.004	0.002	0.002	0.000	0.002
71	0.007	0.005	0.008	0.004	0.004	0.002	0.004	0.002	0.003	0.000
72	0.007	0.007	0.004	0.006	0.004	0.005	0.003	0.004	0.002	0.002
73	0.008	0.008	0.006	0.006	0.004	0.005	0.003	0.005	0.003	0.004
74	0.009	0.009	0.009	0.007	0.007	0.005	0.007	0.005	0.006	0.003
75	0.009	0.008	0.009	0.007	0.007	0.004	0.006	0.003	0.004	0.003
76	0.009	0.006	0.008	0.004	0.007	0.003	0.004	0.001	0.004	0.000
77	0.008	0.008	0.007	0.007	0.004	0.005	0.003	0.003	0.002	0.003
78	0.010	0.007	0.007	0.004	0.007	0.004	0.005	0.003	0.004	0.001
79	0.008	0.008	0.005	0.006	0.004	0.006	0.003	0.004	0.003	0.003
80	0.009	0.007	0.008	0.006	0.007	0.003	0.005	0.004	0.005	0.003
81	0.013	0.011	0.013	0.010	0.012	0.010	0.011	0.009	0.009	0.008
82	0.010	0.008	0.009	0.005	0.006	0.003	0.005	0.002	0.003	0.002
83	0.021	0.015	0.016	0.009	0.012	0.004	0.009	0.001	0.005	0.005
84	0.023	0.023	0.023	0.021	0.021	0.019	0.018	0.016	0.014	0.012
85	0.021	0.022	0.021	0.020	0.021	0.021	0.020	0.020	0.019	0.019
86	0.021	0.020	0.020	0.020	0.021	0.019	0.019	0.018	0.019	0.018
87	0.021	0.020	0.019	0.020	0.019	0.019	0.017	0.017	0.018	0.017
88	0.018	0.016	0.017	0.016	0.016	0.015	0.016	0.014	0.015	0.014
89	0.016	0.014	0.015	0.013	0.013	0.013	0.013	0.013	0.014	0.013
90	0.013	0.013	0.013	0.009	0.014	0.012	0.014	0.013	0.013	0.012
91	0.013	0.013	0.012	0.012	0.012	0.012	0.012	0.013	0.010	0.011
92	0.012	0.013	0.009	0.012	0.010	0.010	0.010	0.010	0.009	0.011
93	0.012	0.011	0.012	0.009	0.010	0.009	0.011	0.009	0.011	0.009
94	0.010	0.012	0.010	0.010	0.009	0.009	0.009	0.009	0.009	0.009
95	0.012	0.011	0.011	0.010	0.011	0.008	0.010	0.009	0.010	0.009
96	0.011	0.012	0.009	0.010	0.009	0.010	0.009	0.010	0.009	0.009
97	0.009	0.009	0.009	0.009	0.008	0.010	0.007	0.010	0.009	0.010
98	0.010	0.010	0.008	0.009	0.009	0.011	0.010	0.010	0.009	0.010

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

GROUP 10

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
140 24	593.936	593.979	593.979	593.979	0.000	591.671
140 25	594.241	594.458	593.979	594.458	0.000	591.671
140 26	594.763	594.850	593.979	594.894	0.000	591.671
140 28	595.155	595.329	593.979	595.242	0.000	591.671
140 29	595.459	595.590	593.979	595.459	0.000	591.671
140 29	595.459	595.677	593.979	595.459	0.000	591.671
140 30	595.590	595.764	593.979	595.677	0.000	591.671
140 31	595.808	596.025	593.979	595.808	0.000	591.671
140 32	595.982	596.156	593.979	595.895	0.000	591.671
140 33	596.156	596.286	593.979	595.982	0.000	591.671
140 33	596.156	596.286	593.979	596.069	0.000	591.671
140 34	596.243	596.417	593.979	596.112	0.000	591.671
140 35	596.373	596.504	593.979	596.199	0.000	591.671
140 36	596.460	596.635	593.979	596.243	0.000	591.671
140 37	596.504	596.678	593.979	596.330	0.000	591.671

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

GROUP	* * * * MODEL DESCRIPTION * * * *		ALPHA-SECTOR	ALPHA-MODEL	PCK1/2	HR	MIN	SEC
	TITLE TYPE	GAP HEIGHT	DEG	DEG				
10	RSI FORWARD	0.01 0.000	-10.11	40.11	0.053	1	39	41

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/F FT-1	HRFR BTU/FT2-SEC-R	INITIAL TEMP DEG R
8.00	798.99	1334.67.	96.72	0.0818	3857.	0.710E-04	0.779E-07	0.352E+07	0.397E-01	534.7

IR CAMERA INFORMATION

MOUNTING LOCATION	260
F STOP	2.5
LENS-DEG	15
SENSITIVITY	1000.
BLACK LEVEL VOLTAGE	2.3752
LINE SCAN PHI	90
MODEL EMISSIVITY	0.96
REF EMISSIVITY	0.94
WINDOW FACTOR	0.840

TIME RECORDS

LIFT OFF	0.00
CENTER LINE	1.00
IR SCAN TIME	8.24
DELTA TIME,SEC	7.68
PHOTO 1 TIME	140
PHOTO 2 TIME	0
PHOTO 3 TIME	0
PHOTO 4 TIME	0

REFERENCE TARGET INFORMATION

TCR5	500.70
TCR6	-228.49

DIGITAL DATA AREA PRINTOUT LOCATION

LINE 29 THROUGH 99
POINT 1 THROUGH 110

113

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 10

IR SCAN TIME 7.68 SEC
INITIAL TEMP 534.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	1.131	1.139	1.152	1.161	1.170	1.173	1.169	1.170	1.165	1.164	1.164	1.158	1.162	1.164	1.162	1.162	1.168	1.172	1.176	1.172
30	1.146	1.160	1.168	1.170	1.170	1.168	1.162	1.163	1.163	1.164	1.162	1.161	1.161	1.164	1.166	1.171	1.170	1.174	1.174	1.175
31	1.163	1.169	1.170	1.168	1.162	1.156	1.156	1.161	1.164	1.168	1.166	1.168	1.169	1.170	1.169	1.172	1.172	1.175	1.174	1.174
32	1.169	1.166	1.161	1.161	1.157	1.155	1.161	1.166	1.169	1.170	1.170	1.172	1.169	1.170	1.170	1.173	1.172	1.170	1.164	1.160
33	1.165	1.158	1.157	1.161	1.166	1.170	1.170	1.171	1.170	1.169	1.168	1.169	1.170	1.172	1.169	1.163	1.155	1.150	1.142	1.141
34	1.161	1.161	1.163	1.166	1.169	1.170	1.168	1.168	1.166	1.169	1.168	1.165	1.158	1.151	1.145	1.143	1.145	1.147	1.148	1.151
35	1.169	1.172	1.166	1.166	1.158	1.164	1.161	1.161	1.153	1.153	1.143	1.141	1.134	1.139	1.145	1.148	1.153	1.156	1.156	1.158
36	1.169	1.165	1.163	1.161	1.162	1.153	1.146	1.141	1.139	1.139	1.141	1.143	1.145	1.148	1.148	1.153	1.156	1.161	1.158	1.163
37	1.157	1.155	1.152	1.145	1.138	1.135	1.135	1.139	1.142	1.143	1.146	1.148	1.152	1.153	1.156	1.156	1.157	1.152	1.142	1.124
38	1.145	1.135	1.132	1.134	1.135	1.142	1.142	1.145	1.147	1.150	1.150	1.155	1.156	1.157	1.148	1.138	1.119	1.102	1.083	1.076
39	1.132	1.135	1.137	1.139	1.143	1.143	1.146	1.148	1.151	1.152	1.155	1.151	1.141	1.122	1.105	1.085	1.078	1.073	1.073	1.071
40	1.135	1.139	1.141	1.145	1.145	1.147	1.148	1.152	1.152	1.145	1.130	1.112	1.089	1.083	1.076	1.076	1.073	1.078	1.078	1.078
41	1.141	1.143	1.143	1.146	1.146	1.148	1.146	1.135	1.119	1.100	1.083	1.078	1.078	1.078	1.078	1.078	1.076	1.078	1.078	1.080
42	1.148	1.150	1.148	1.153	1.141	1.131	1.107	1.091	1.076	1.080	1.071	1.078	1.073	1.082	1.080	1.082	1.078	1.082	1.083	1.085
43	1.161	1.162	1.151	1.131	1.105	1.091	1.082	1.082	1.078	1.078	1.078	1.083	1.083	1.085	1.080	1.083	1.078	1.087	1.080	1.087
44	1.155	1.132	1.103	1.089	1.083	1.085	1.082	1.082	1.080	1.083	1.082	1.087	1.085	1.091	1.085	1.087	1.085	1.091	1.089	1.095
45	1.107	1.089	1.087	1.085	1.085	1.085	1.087	1.085	1.087	1.083	1.087	1.087	1.095	1.091	1.095	1.091	1.093	1.095	1.100	1.100
46	1.095	1.091	1.091	1.093	1.091	1.096	1.093	1.098	1.095	1.098	1.095	1.102	1.100	1.103	1.103	1.108	1.107	1.115	1.142	1.188
47	1.100	1.096	1.100	1.098	1.102	1.102	1.103	1.103	1.105	1.103	1.107	1.105	1.110	1.110	1.115	1.118	1.122	1.142	1.271	1.428
48	1.102	1.105	1.103	1.108	1.107	1.110	1.107	1.110	1.108	1.113	1.112	1.116	1.116	1.119	1.119	1.122	1.128	1.156	1.302	1.464
49	1.107	1.103	1.102	1.110	1.107	1.115	1.110	1.115	1.110	1.116	1.112	1.119	1.121	1.124	1.124	1.131	1.135	1.164	1.312	1.473
50	1.110	1.112	1.110	1.116	1.115	1.118	1.115	1.118	1.118	1.118	1.121	1.124	1.121	1.128	1.125	1.134	1.137	1.181	1.344	1.490
51	1.112	1.113	1.112	1.116	1.115	1.121	1.119	1.122	1.121	1.122	1.122	1.127	1.128	1.132	1.134	1.137	1.145	1.214	1.393	1.514
52	1.112	1.113	1.116	1.115	1.115	1.116	1.119	1.119	1.124	1.124	1.125	1.127	1.131	1.132	1.137	1.139	1.152	1.252	1.432	1.530
53	1.103	1.103	1.102	1.108	1.107	1.112	1.110	1.113	1.113	1.119	1.118	1.121	1.121	1.127	1.130	1.138	1.158	1.303	1.468	1.541
54	1.083	1.085	1.087	1.087	1.089	1.087	1.095	1.093	1.096	1.095	1.102	1.102	1.108	1.110	1.115	1.121	1.172	1.350	1.492	1.545
55	1.069	1.071	1.071	1.073	1.071	1.078	1.076	1.083	1.083	1.087	1.087	1.095	1.095	1.100	1.102	1.116	1.191	1.383	1.506	1.549
56	1.067	1.069	1.069	1.060	1.073	1.067	1.078	1.067	1.085	1.085	1.091	1.091	1.096	1.096	1.107	1.119	1.217	1.407	1.515	1.553
57	1.067	1.069	1.069	1.071	1.076	1.078	1.080	1.082	1.085	1.085	1.093	1.091	1.096	1.096	1.108	1.121	1.231	1.420	1.519	1.555
58	1.067	1.069	1.069	1.071	1.073	1.076	1.080	1.083	1.085	1.085	1.089	1.089	1.096	1.098	1.110	1.131	1.272	1.448	1.526	1.556
59	1.060	1.065	1.065	1.067	1.071	1.071	1.073	1.076	1.080	1.082	1.087	1.085	1.095	1.095	1.108	1.152	1.332	1.482	1.538	1.563
60	1.058	1.058	1.060	1.067	1.065	1.069	1.069	1.073	1.076	1.082	1.082	1.087	1.085	1.095	1.103	1.174	1.369	1.494	1.539	1.560
61	1.053	1.053	1.058	1.060	1.063	1.065	1.069	1.071	1.073	1.073	1.078	1.080	1.087	1.091	1.110	1.213	1.405	1.504	1.540	1.559
62	1.051	1.056	1.059	1.060	1.056	1.065	1.071	1.065	1.076	1.076	1.083	1.069	1.089	1.098	1.118	1.252	1.429	1.506	1.538	1.558
63	1.049	1.049	1.043	1.053	1.049	1.060	1.058	1.067	1.071	1.073	1.076	1.080	1.085	1.098	1.124	1.276	1.440	1.507	1.536	1.555

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 10

IR SCAN TIME 7.68 SEC
INITIAL TEMP 534.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	1.173	1.175	1.179	1.176	1.183	1.181	1.180	1.169	1.164	1.156	1.153	1.142	1.141	1.138	1.142	1.143	1.143	1.141	1.142	1.145
30	1.175	1.190	1.180	1.179	1.174	1.169	1.162	1.158	1.152	1.151	1.148	1.145	1.143	1.145	1.146	1.151	1.152	1.156	1.152	1.161
31	1.171	1.170	1.163	1.160	1.153	1.148	1.142	1.142	1.143	1.151	1.153	1.157	1.160	1.160	1.160	1.165	1.168	1.170	1.170	1.172
32	1.153	1.145	1.141	1.145	1.146	1.150	1.151	1.155	1.156	1.163	1.164	1.168	1.169	1.171	1.172	1.174	1.170	1.164	1.153	1.146
33	1.141	1.145	1.150	1.155	1.160	1.162	1.162	1.163	1.163	1.168	1.170	1.172	1.168	1.160	1.148	1.137	1.121	1.108	1.089	1.080
34	1.152	1.156	1.157	1.163	1.165	1.169	1.165	1.163	1.158	1.155	1.139	1.131	1.115	1.095	1.076	1.067	1.060	1.060	1.058	1.060
35	1.161	1.168	1.162	1.161	1.155	1.146	1.135	1.116	1.098	1.080	1.073	1.060	1.056	1.058	1.058	1.058	1.063	1.063	1.065	1.060
36	1.153	1.146	1.127	1.113	1.089	1.078	1.063	1.063	1.051	1.058	1.051	1.058	1.053	1.063	1.063	1.063	1.060	1.063	1.058	1.063
37	1.107	1.085	1.071	1.067	1.063	1.063	1.065	1.063	1.065	1.063	1.060	1.058	1.060	1.060	1.065	1.053	1.067	1.053	1.065	1.051
38	1.073	1.071	1.067	1.071	1.069	1.071	1.071	1.069	1.067	1.067	1.065	1.069	1.067	1.069	1.067	1.067	1.067	1.071	1.071	1.071
39	1.073	1.073	1.076	1.073	1.073	1.071	1.073	1.076	1.073	1.071	1.071	1.071	1.076	1.073	1.076	1.071	1.076	1.076	1.078	1.076
40	1.076	1.078	1.076	1.078	1.080	1.076	1.076	1.078	1.078	1.078	1.076	1.078	1.078	1.082	1.080	1.082	1.078	1.080	1.078	1.080
41	1.078	1.080	1.078	1.083	1.082	1.085	1.080	1.083	1.082	1.087	1.085	1.085	1.083	1.085	1.083	1.087	1.082	1.083	1.082	1.083
42	1.083	1.083	1.085	1.089	1.085	1.089	1.087	1.089	1.085	1.091	1.087	1.089	1.085	1.089	1.087	1.091	1.087	1.087	1.085	1.089
43	1.082	1.089	1.082	1.091	1.087	1.095	1.089	1.093	1.085	1.095	1.087	1.096	1.093	1.095	1.093	1.095	1.091	1.095	1.091	1.095
44	1.093	1.096	1.095	1.098	1.095	1.100	1.098	1.102	1.100	1.103	1.096	1.098	1.096	1.100	1.093	1.102	1.091	1.096	1.089	1.096
45	1.105	1.105	1.107	1.107	1.108	1.107	1.110	1.110	1.110	1.110	1.110	1.107	1.107	1.107	1.110	1.105	1.105	1.103	1.103	1.100
46	1.202	1.197	1.184	1.170	1.153	1.145	1.135	1.132	1.130	1.130	1.124	1.127	1.121	1.125	1.118	1.121	1.116	1.119	1.115	1.118
47	1.503	1.526	1.532	1.526	1.510	1.480	1.433	1.369	1.299	1.234	1.189	1.162	1.148	1.142	1.138	1.134	1.134	1.130	1.131	1.127
48	1.539	1.571	1.590	1.609	1.625	1.642	1.657	1.665	1.657	1.628	1.570	1.481	1.364	1.261	1.194	1.164	1.150	1.143	1.138	1.138
49	1.545	1.576	1.594	1.611	1.630	1.648	1.666	1.685	1.700	1.708	1.708	1.698	1.676	1.629	1.539	1.400	1.263	1.192	1.162	1.151
50	1.550	1.579	1.599	1.617	1.631	1.649	1.668	1.688	1.700	1.708	1.712	1.712	1.708	1.706	1.697	1.646	1.512	1.345	1.241	1.187
51	1.559	1.585	1.603	1.619	1.635	1.652	1.671	1.687	1.701	1.717	1.729	1.736	1.736	1.735	1.731	1.721	1.680	1.556	1.375	1.261
52	1.565	1.584	1.598	1.616	1.634	1.652	1.671	1.690	1.710	1.723	1.731	1.735	1.737	1.740	1.744	1.742	1.735	1.708	1.603	1.417
53	1.569	1.588	1.601	1.615	1.632	1.650	1.668	1.689	1.710	1.723	1.728	1.734	1.737	1.740	1.742	1.745	1.748	1.746	1.726	1.640
54	1.569	1.584	1.595	1.608	1.624	1.642	1.663	1.684	1.705	1.720	1.728	1.735	1.740	1.746	1.752	1.761	1.765	1.763	1.757	1.742
55	1.571	1.585	1.594	1.606	1.622	1.641	1.661	1.680	1.700	1.718	1.730	1.737	1.741	1.747	1.750	1.752	1.754	1.757	1.759	1.762
56	1.573	1.586	1.595	1.606	1.621	1.639	1.657	1.676	1.695	1.713	1.726	1.735	1.741	1.748	1.752	1.756	1.761	1.763	1.765	1.766
57	1.573	1.585	1.594	1.604	1.618	1.633	1.651	1.671	1.690	1.705	1.714	1.721	1.725	1.729	1.736	1.744	1.754	1.761	1.766	1.771
58	1.573	1.584	1.593	1.604	1.618	1.633	1.651	1.668	1.684	1.699	1.710	1.716	1.722	1.728	1.731	1.733	1.739	1.746	1.757	1.768
59	1.576	1.584	1.591	1.602	1.616	1.631	1.648	1.667	1.685	1.699	1.706	1.713	1.725	1.731	1.732	1.733	1.735	1.739	1.744	1.749
60	1.573	1.582	1.589	1.601	1.615	1.628	1.644	1.663	1.681	1.693	1.700	1.708	1.720	1.727	1.726	1.731	1.738	1.739	1.739	1.745
61	1.573	1.580	1.589	1.599	1.609	1.623	1.640	1.656	1.674	1.685	1.693	1.705	1.716	1.725	1.723	1.727	1.735	1.737	1.737	1.742
62	1.570	1.576	1.583	1.595	1.605	1.618	1.635	1.652	1.667	1.678	1.685	1.698	1.713	1.719	1.722	1.726	1.728	1.731	1.736	1.739
63	1.565	1.572	1.579	1.590	1.599	1.611	1.625	1.642	1.658	1.669	1.677	1.690	1.705	1.715	1.722	1.727	1.728	1.725	1.729	1.739

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 10

IR SCAN TIME 7.68 SEC
INITIAL TEMP 534.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	1.150	1.150	1.148	1.148	1.152	1.155	1.160	1.162	1.161	1.156	1.155	1.156	1.157	1.155	1.153	1.150	1.152	1.146	1.141	1.132
30	1.163	1.168	1.162	1.165	1.163	1.168	1.165	1.169	1.161	1.156	1.145	1.145	1.135	1.134	1.131	1.128	1.121	1.116	1.108	1.100
31	1.174	1.174	1.166	1.161	1.152	1.147	1.141	1.134	1.121	1.110	1.096	1.091	1.082	1.076	1.067	1.065	1.056	1.060	1.051	1.056
32	1.138	1.130	1.116	1.107	1.089	1.082	1.067	1.063	1.053	1.053	1.051	1.056	1.051	1.053	1.049	1.053	1.049	1.051	1.051	1.051
33	1.067	1.065	1.060	1.060	1.056	1.056	1.051	1.053	1.053	1.053	1.051	1.058	1.053	1.051	1.049	1.051	1.046	1.051	1.049	1.051
34	1.058	1.060	1.058	1.058	1.053	1.056	1.053	1.056	1.053	1.056	1.053	1.056	1.051	1.053	1.049	1.051	1.049	1.051	1.051	1.051
35	1.063	1.056	1.058	1.060	1.060	1.058	1.060	1.060	1.053	1.058	1.051	1.053	1.053	1.053	1.056	1.051	1.053	1.053	1.051	1.049
36	1.060	1.060	1.060	1.063	1.060	1.065	1.058	1.060	1.060	1.060	1.058	1.060	1.056	1.056	1.053	1.053	1.053	1.056	1.053	1.056
37	1.065	1.053	1.065	1.056	1.065	1.051	1.063	1.053	1.063	1.051	1.065	1.060	1.060	1.058	1.058	1.058	1.056	1.058	1.058	1.056
38	1.067	1.069	1.067	1.069	1.067	1.067	1.067	1.067	1.065	1.067	1.065	1.067	1.063	1.063	1.053	1.063	1.056	1.060	1.056	1.060
39	1.073	1.073	1.071	1.071	1.073	1.071	1.069	1.071	1.071	1.067	1.069	1.067	1.067	1.065	1.069	1.067	1.063	1.065	1.065	1.063
40	1.076	1.076	1.076	1.076	1.076	1.073	1.073	1.073	1.071	1.076	1.076	1.071	1.067	1.073	1.071	1.071	1.067	1.067	1.065	1.069
41	1.082	1.085	1.078	1.080	1.078	1.082	1.078	1.078	1.076	1.076	1.073	1.078	1.073	1.073	1.071	1.073	1.071	1.073	1.067	1.069
42	1.085	1.087	1.083	1.087	1.083	1.085	1.085	1.085	1.080	1.080	1.080	1.080	1.076	1.080	1.073	1.076	1.073	1.076	1.071	1.073
43	1.087	1.089	1.085	1.091	1.087	1.089	1.083	1.087	1.085	1.087	1.083	1.085	1.080	1.080	1.078	1.080	1.078	1.078	1.076	1.073
44	1.087	1.093	1.087	1.093	1.085	1.091	1.082	1.089	1.082	1.091	1.085	1.087	1.083	1.085	1.082	1.083	1.080	1.083	1.080	1.082
45	1.102	1.098	1.102	1.095	1.098	1.095	1.096	1.091	1.093	1.089	1.089	1.085	1.089	1.080	1.087	1.082	1.087	1.078	1.085	1.080
46	1.113	1.115	1.110	1.110	1.105	1.110	1.103	1.107	1.102	1.105	1.100	1.102	1.096	1.100	1.095	1.100	1.095	1.098	1.095	1.098
47	1.128	1.124	1.127	1.122	1.121	1.118	1.116	1.115	1.115	1.112	1.115	1.112	1.112	1.107	1.110	1.105	1.108	1.103	1.107	1.103
48	1.135	1.137	1.132	1.134	1.131	1.128	1.125	1.127	1.119	1.119	1.119	1.118	1.115	1.116	1.113	1.115	1.112	1.110	1.108	1.110
49	1.146	1.146	1.143	1.141	1.137	1.135	1.131	1.131	1.127	1.128	1.125	1.124	1.119	1.121	1.118	1.119	1.118	1.118	1.113	1.115
50	1.161	1.155	1.150	1.147	1.142	1.141	1.137	1.135	1.132	1.134	1.132	1.130	1.127	1.127	1.122	1.125	1.124	1.124	1.119	1.121
51	1.210	1.181	1.157	1.151	1.143	1.145	1.138	1.141	1.138	1.137	1.132	1.132	1.130	1.132	1.128	1.128	1.125	1.125	1.124	1.124
52	1.271	1.215	1.188	1.166	1.156	1.150	1.147	1.142	1.142	1.138	1.139	1.134	1.134	1.130	1.132	1.127	1.131	1.128	1.127	1.124
53	1.461	1.294	1.212	1.175	1.158	1.151	1.145	1.143	1.138	1.138	1.132	1.134	1.131	1.131	1.127	1.128	1.124	1.124	1.121	1.124
54	1.689	1.538	1.343	1.231	1.181	1.152	1.137	1.127	1.125	1.121	1.118	1.112	1.112	1.108	1.110	1.103	1.103	1.100	1.102	1.105
55	1.755	1.703	1.546	1.345	1.234	1.184	1.153	1.135	1.124	1.121	1.115	1.113	1.105	1.107	1.102	1.103	1.098	1.100	1.100	1.107
56	1.768	1.766	1.732	1.598	1.390	1.253	1.195	1.161	1.142	1.130	1.125	1.119	1.116	1.112	1.112	1.108	1.110	1.107	1.110	1.112
57	1.772	1.770	1.769	1.754	1.657	1.459	1.288	1.212	1.174	1.150	1.137	1.130	1.125	1.122	1.121	1.116	1.116	1.115	1.121	1.122
58	1.773	1.773	1.773	1.769	1.759	1.681	1.493	1.306	1.222	1.176	1.153	1.135	1.130	1.124	1.121	1.118	1.118	1.115	1.119	1.121
59	1.757	1.764	1.772	1.774	1.771	1.762	1.699	1.527	1.332	1.232	1.185	1.153	1.134	1.121	1.121	1.119	1.121	1.116	1.119	1.118
60	1.745	1.744	1.749	1.760	1.770	1.772	1.766	1.733	1.598	1.384	1.251	1.195	1.158	1.138	1.125	1.121	1.115	1.113	1.107	1.110
61	1.750	1.750	1.746	1.743	1.746	1.755	1.765	1.766	1.735	1.602	1.390	1.253	1.194	1.161	1.135	1.121	1.116	1.112	1.110	1.102
62	1.744	1.753	1.756	1.754	1.748	1.742	1.741	1.748	1.755	1.742	1.638	1.430	1.271	1.203	1.165	1.139	1.125	1.116	1.112	1.107
63	1.740	1.743	1.750	1.757	1.760	1.759	1.753	1.746	1.739	1.741	1.741	1.680	1.497	1.306	1.217	1.176	1.147	1.130	1.118	1.115

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 10

IR SCAN TIME 7.68 SEC
INITIAL TEMP 534.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	1.121	1.112	1.108	1.110	1.115	1.113	1.115	1.112	1.110	1.110	1.118	1.122	1.122	1.119	1.119	1.113	1.108	1.102	1.102	1.096
30	1.089	1.085	1.080	1.080	1.076	1.076	1.071	1.071	1.067	1.069	1.071	1.071	1.071	1.069	1.069	1.069	1.067	1.069	1.065	1.067
31	1.049	1.056	1.046	1.056	1.046	1.053	1.046	1.051	1.043	1.053	1.046	1.056	1.053	1.053	1.051	1.053	1.053	1.056	1.051	1.059
32	1.049	1.051	1.051	1.051	1.046	1.049	1.046	1.051	1.046	1.051	1.043	1.051	1.046	1.051	1.036	1.051	1.041	1.051	1.041	1.051
33	1.051	1.051	1.051	1.049	1.046	1.049	1.046	1.049	1.046	1.049	1.046	1.049	1.043	1.046	1.043	1.046	1.046	1.049	1.049	1.049
34	1.051	1.051	1.049	1.049	1.046	1.051	1.046	1.051	1.046	1.051	1.041	1.049	1.043	1.049	1.046	1.049	1.046	1.046	1.046	1.049
35	1.051	1.049	1.046	1.053	1.053	1.051	1.046	1.043	1.049	1.043	1.049	1.049	1.049	1.036	1.046	1.046	1.046	1.046	1.043	1.046
36	1.051	1.051	1.049	1.051	1.049	1.053	1.049	1.051	1.046	1.051	1.046	1.049	1.046	1.049	1.046	1.049	1.046	1.046	1.041	1.046
37	1.056	1.051	1.053	1.053	1.056	1.051	1.053	1.053	1.051	1.051	1.051	1.051	1.051	1.051	1.049	1.046	1.049	1.046	1.049	1.046
38	1.051	1.056	1.053	1.058	1.051	1.056	1.051	1.053	1.051	1.058	1.058	1.056	1.051	1.053	1.051	1.053	1.053	1.056	1.046	1.051
39	1.063	1.060	1.063	1.063	1.063	1.060	1.058	1.058	1.060	1.058	1.058	1.051	1.056	1.049	1.058	1.049	1.053	1.046	1.051	1.049
40	1.067	1.067	1.063	1.067	1.065	1.065	1.063	1.063	1.060	1.063	1.060	1.063	1.058	1.060	1.060	1.060	1.056	1.058	1.053	1.058
41	1.067	1.071	1.067	1.071	1.065	1.067	1.065	1.069	1.065	1.067	1.063	1.067	1.063	1.065	1.063	1.060	1.060	1.063	1.060	1.060
42	1.071	1.071	1.071	1.073	1.069	1.069	1.067	1.069	1.069	1.067	1.065	1.069	1.067	1.067	1.065	1.067	1.063	1.067	1.063	1.067
43	1.073	1.076	1.073	1.076	1.073	1.073	1.069	1.071	1.069	1.073	1.071	1.071	1.067	1.071	1.067	1.067	1.067	1.067	1.060	1.065
44	1.076	1.078	1.073	1.078	1.073	1.078	1.076	1.076	1.073	1.073	1.071	1.073	1.073	1.073	1.071	1.071	1.067	1.071	1.067	1.071
45	1.083	1.080	1.083	1.076	1.080	1.076	1.080	1.078	1.080	1.078	1.078	1.076	1.076	1.073	1.076	1.073	1.076	1.078	1.076	1.071
46	1.091	1.096	1.091	1.095	1.087	1.093	1.087	1.091	1.085	1.091	1.078	1.089	1.080	1.089	1.080	1.089	1.078	1.087	1.076	1.085
47	1.107	1.103	1.103	1.100	1.100	1.098	1.102	1.100	1.100	1.098	1.098	1.095	1.096	1.093	1.095	1.093	1.095	1.093	1.093	1.091
48	1.107	1.110	1.108	1.110	1.105	1.107	1.102	1.105	1.102	1.103	1.100	1.103	1.100	1.105	1.098	1.102	1.098	1.100	1.098	1.102
49	1.112	1.115	1.112	1.112	1.112	1.112	1.108	1.110	1.107	1.108	1.107	1.108	1.107	1.108	1.105	1.107	1.100	1.105	1.102	1.105
50	1.115	1.119	1.115	1.119	1.115	1.116	1.113	1.113	1.112	1.115	1.110	1.113	1.110	1.112	1.107	1.108	1.107	1.107	1.107	1.110
51	1.121	1.125	1.119	1.121	1.118	1.119	1.116	1.119	1.118	1.116	1.113	1.113	1.112	1.113	1.112	1.113	1.110	1.110	1.108	1.110
52	1.127	1.121	1.124	1.119	1.122	1.121	1.122	1.119	1.121	1.118	1.118	1.116	1.119	1.116	1.116	1.112	1.115	1.112	1.115	1.113
53	1.121	1.124	1.121	1.124	1.121	1.124	1.119	1.122	1.115	1.121	1.115	1.119	1.112	1.119	1.112	1.118	1.110	1.115	1.108	1.115
54	1.112	1.112	1.115	1.116	1.119	1.118	1.118	1.116	1.119	1.119	1.121	1.118	1.118	1.115	1.115	1.115	1.115	1.110	1.112	1.107
55	1.110	1.119	1.115	1.119	1.119	1.124	1.121	1.124	1.121	1.124	1.122	1.125	1.121	1.121	1.118	1.121	1.116	1.118	1.112	1.113
56	1.119	1.122	1.127	1.127	1.128	1.127	1.128	1.128	1.130	1.128	1.128	1.127	1.128	1.127	1.128	1.122	1.122	1.119	1.121	1.115
57	1.130	1.128	1.132	1.130	1.132	1.132	1.134	1.132	1.134	1.131	1.131	1.131	1.131	1.128	1.130	1.127	1.125	1.121	1.121	1.118
58	1.125	1.127	1.128	1.127	1.127	1.127	1.125	1.122	1.125	1.122	1.124	1.121	1.122	1.118	1.118	1.113	1.115	1.110	1.112	1.107
59	1.121	1.116	1.122	1.121	1.124	1.119	1.121	1.119	1.121	1.118	1.119	1.118	1.119	1.115	1.115	1.112	1.112	1.110	1.112	1.110
60	1.102	1.107	1.100	1.103	1.098	1.100	1.091	1.096	1.089	1.096	1.087	1.093	1.083	1.089	1.082	1.085	1.076	1.082	1.073	1.076
61	1.103	1.094	1.096	1.091	1.093	1.087	1.091	1.089	1.091	1.083	1.085	1.082	1.080	1.078	1.078	1.076	1.076	1.071	1.073	1.067
62	1.107	1.107	1.095	1.093	1.095	1.096	1.095	1.093	1.091	1.091	1.091	1.083	1.085	1.078	1.078	1.071	1.078	1.076	1.076	1.073
63	1.110	1.110	1.103	1.105	1.100	1.100	1.093	1.095	1.089	1.093	1.089	1.091	1.085	1.085	1.080	1.082	1.078	1.078	1.076	1.078

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 10

IR SCAN TIME 7.68 SEC
INITIAL TEMP 534.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	1.098	1.093	1.095	1.087	1.087	1.087	1.089	1.087	1.089	1.085	1.087	1.085	1.089	1.085	1.085	1.083	1.087	1.085	1.089	1.085
30	1.063	1.063	1.060	1.063	1.063	1.065	1.060	1.058	1.056	1.058	1.056	1.058	1.053	1.056	1.049	1.051	1.049	1.051	1.046	1.051
31	1.053	1.056	1.051	1.053	1.051	1.056	1.053	1.056	1.053	1.053	1.051	1.051	1.046	1.051	1.046	1.049	1.049	1.049	1.043	1.043
32	1.043	1.051	1.041	1.051	1.041	1.053	1.043	1.053	1.043	1.051	1.046	1.046	1.046	1.049	1.041	1.046	1.043	1.049	1.038	1.041
33	1.046	1.046	1.043	1.046	1.046	1.051	1.046	1.051	1.046	1.046	1.043	1.046	1.038	1.043	1.038	1.043	1.036	1.041	1.030	1.041
34	1.043	1.046	1.043	1.046	1.046	1.049	1.043	1.049	1.043	1.046	1.041	1.046	1.041	1.046	1.041	1.043	1.041	1.043	1.036	1.038
35	1.043	1.043	1.046	1.043	1.033	1.043	1.046	1.038	1.049	1.033	1.043	1.043	1.038	1.038	1.041	1.033	1.038	1.046	1.033	1.036
36	1.041	1.046	1.041	1.046	1.038	1.046	1.036	1.041	1.041	1.041	1.041	1.046	1.038	1.038	1.033	1.038	1.036	1.041	1.041	1.041
37	1.043	1.046	1.046	1.043	1.043	1.046	1.046	1.043	1.043	1.041	1.041	1.041	1.043	1.041	1.043	1.041	1.041	1.038	1.043	1.038
38	1.046	1.049	1.049	1.051	1.046	1.046	1.046	1.051	1.051	1.049	1.046	1.046	1.046	1.049	1.046	1.049	1.046	1.046	1.046	1.046
39	1.053	1.051	1.051	1.046	1.051	1.046	1.053	1.051	1.051	1.049	1.051	1.049	1.049	1.046	1.051	1.049	1.051	1.049	1.046	1.049
40	1.056	1.053	1.053	1.053	1.051	1.053	1.053	1.053	1.051	1.051	1.043	1.051	1.046	1.051	1.041	1.051	1.043	1.053	1.043	1.051
41	1.058	1.060	1.058	1.060	1.056	1.058	1.051	1.058	1.053	1.058	1.053	1.053	1.051	1.056	1.051	1.056	1.051	1.053	1.051	1.056
42	1.058	1.063	1.058	1.060	1.060	1.060	1.058	1.058	1.058	1.058	1.056	1.060	1.053	1.056	1.053	1.058	1.056	1.058	1.053	1.056
43	1.063	1.065	1.065	1.067	1.063	1.063	1.058	1.063	1.060	1.063	1.058	1.060	1.056	1.060	1.058	1.060	1.058	1.060	1.056	1.058
44	1.067	1.069	1.067	1.067	1.063	1.067	1.063	1.065	1.063	1.065	1.063	1.063	1.060	1.063	1.060	1.063	1.063	1.065	1.060	1.063
45	1.073	1.071	1.071	1.069	1.073	1.071	1.071	1.071	1.071	1.067	1.067	1.067	1.069	1.071	1.071	1.067	1.063	1.067	1.067	1.063
46	1.076	1.085	1.080	1.085	1.078	1.083	1.082	1.082	1.082	1.083	1.082	1.083	1.082	1.082	1.080	1.080	1.078	1.080	1.078	1.083
47	1.093	1.093	1.095	1.093	1.095	1.093	1.095	1.091	1.093	1.087	1.091	1.087	1.091	1.087	1.093	1.089	1.087	1.085	1.089	1.083
48	1.100	1.103	1.102	1.105	1.102	1.102	1.096	1.100	1.098	1.100	1.096	1.098	1.093	1.098	1.093	1.096	1.095	1.098	1.095	1.096
49	1.103	1.110	1.107	1.110	1.105	1.107	1.102	1.103	1.100	1.103	1.102	1.102	1.098	1.100	1.098	1.102	1.100	1.102	1.096	1.098
50	1.108	1.112	1.103	1.112	1.107	1.110	1.107	1.108	1.103	1.105	1.102	1.105	1.102	1.105	1.102	1.105	1.100	1.103	1.098	1.102
51	1.108	1.112	1.108	1.110	1.105	1.108	1.107	1.108	1.105	1.107	1.102	1.107	1.103	1.107	1.103	1.105	1.102	1.103	1.102	1.105
52	1.113	1.110	1.112	1.112	1.112	1.110	1.110	1.107	1.110	1.110	1.110	1.107	1.107	1.103	1.107	1.105	1.107	1.103	1.103	1.102
53	1.110	1.112	1.107	1.110	1.107	1.107	1.102	1.102	1.100	1.103	1.100	1.100	1.095	1.100	1.095	1.100	1.093	1.095	1.091	1.098
54	1.110	1.105	1.103	1.098	1.098	1.089	1.089	1.080	1.083	1.076	1.082	1.076	1.080	1.073	1.076	1.071	1.076	1.071	1.073	1.069
55	1.107	1.110	1.103	1.103	1.095	1.091	1.083	1.083	1.078	1.073	1.073	1.071	1.071	1.071	1.067	1.069	1.065	1.067	1.063	1.065
56	1.116	1.110	1.108	1.103	1.103	1.095	1.091	1.083	1.082	1.076	1.076	1.073	1.076	1.071	1.071	1.067	1.067	1.065	1.060	1.063
57	1.118	1.113	1.110	1.105	1.103	1.098	1.095	1.085	1.085	1.082	1.078	1.076	1.073	1.071	1.071	1.069	1.071	1.063	1.063	1.060
58	1.108	1.102	1.102	1.095	1.096	1.091	1.089	1.083	1.083	1.076	1.076	1.071	1.071	1.069	1.069	1.067	1.069	1.067	1.065	1.060
59	1.110	1.105	1.105	1.102	1.102	1.100	1.102	1.096	1.098	1.093	1.095	1.089	1.087	1.085	1.089	1.087	1.089	1.087	1.089	1.083
60	1.071	1.078	1.073	1.073	1.067	1.067	1.063	1.065	1.060	1.063	1.058	1.063	1.056	1.058	1.051	1.056	1.051	1.053	1.053	1.051
61	1.067	1.065	1.067	1.063	1.063	1.056	1.060	1.053	1.056	1.049	1.053	1.051	1.049	1.049	1.051	1.046	1.049	1.041	1.046	1.043
62	1.071	1.069	1.069	1.067	1.067	1.065	1.065	1.058	1.063	1.053	1.056	1.058	1.056	1.058	1.053	1.058	1.051	1.046	1.046	1.051
63	1.076	1.073	1.071	1.069	1.067	1.069	1.063	1.067	1.063	1.065	1.056	1.060	1.056	1.060	1.056	1.056	1.051	1.053	1.049	1.049

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 10

IR SCAN TIME 7.68 SEC
INITIAL TEMP 534.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	1.087	1.083	1.085	1.085	1.085	1.085	1.085	1.083	1.083	1.083
30	1.046	1.049	1.043	1.046	1.043	1.043	1.043	1.049	1.043	1.043
31	1.038	1.043	1.041	1.043	1.038	1.041	1.036	1.038	1.036	1.041
32	1.036	1.038	1.036	1.038	1.036	1.041	1.036	1.036	1.036	1.033
33	1.027	1.036	1.030	1.038	1.027	1.036	1.027	1.033	1.033	1.036
34	1.033	1.038	1.036	1.041	1.033	1.038	1.033	1.033	1.030	1.036
35	1.036	1.036	1.038	1.036	1.036	1.041	1.036	1.033	1.033	1.036
36	1.036	1.041	1.030	1.036	1.033	1.038	1.036	1.041	1.036	1.036
37	1.043	1.038	1.041	1.036	1.038	1.036	1.041	1.038	1.041	1.038
38	1.046	1.046	1.043	1.046	1.041	1.046	1.043	1.046	1.041	1.043
39	1.049	1.049	1.051	1.046	1.049	1.049	1.049	1.049	1.046	1.046
40	1.043	1.051	1.046	1.051	1.041	1.051	1.049	1.051	1.051	1.051
41	1.051	1.053	1.049	1.053	1.051	1.053	1.051	1.053	1.043	1.053
42	1.053	1.056	1.053	1.056	1.051	1.056	1.051	1.056	1.053	1.053
43	1.056	1.058	1.053	1.058	1.053	1.058	1.053	1.058	1.056	1.060
44	1.058	1.060	1.058	1.060	1.058	1.063	1.058	1.060	1.058	1.060
45	1.067	1.065	1.069	1.067	1.065	1.065	1.065	1.063	1.065	1.063
46	1.078	1.080	1.078	1.078	1.073	1.076	1.076	1.078	1.078	1.078
47	1.087	1.083	1.089	1.085	1.089	1.087	1.087	1.082	1.085	1.085
48	1.091	1.093	1.091	1.093	1.091	1.093	1.087	1.093	1.085	1.091
49	1.093	1.098	1.093	1.100	1.095	1.096	1.095	1.096	1.091	1.093
50	1.100	1.103	1.100	1.102	1.095	1.100	1.095	1.100	1.095	1.102
51	1.102	1.103	1.100	1.102	1.100	1.102	1.098	1.102	1.098	1.100
52	1.105	1.102	1.103	1.100	1.102	1.100	1.102	1.100	1.098	1.096
53	1.093	1.095	1.089	1.093	1.091	1.093	1.089	1.089	1.087	1.089
54	1.073	1.073	1.073	1.069	1.069	1.067	1.067	1.067	1.067	1.065
55	1.060	1.063	1.058	1.060	1.049	1.058	1.043	1.056	1.043	1.056
56	1.060	1.058	1.058	1.058	1.058	1.053	1.053	1.051	1.051	1.046
57	1.060	1.058	1.058	1.056	1.056	1.051	1.051	1.049	1.051	1.049
58	1.060	1.058	1.060	1.056	1.056	1.053	1.053	1.051	1.051	1.046
59	1.083	1.080	1.082	1.080	1.080	1.078	1.080	1.076	1.073	1.069
60	1.051	1.051	1.046	1.049	1.046	1.049	1.041	1.046	1.043	1.046
61	1.046	1.043	1.046	1.038	1.043	1.036	1.038	1.033	1.041	1.033
62	1.046	1.046	1.043	1.036	1.043	1.038	1.036	1.033	1.036	1.027
63	1.046	1.049	1.046	1.049	1.046	1.046	1.038	1.041	1.038	1.041

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 10

IR SCAN TIME 7.68 SEC
INITIAL TEMP 534.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	1.046	1.046	1.051	1.049	1.051	1.051	1.060	1.063	1.069	1.067	1.076	1.076	1.087	1.089	1.128	1.287	1.445	1.506	1.533	1.548
65	1.041	1.041	1.046	1.046	1.049	1.051	1.060	1.063	1.065	1.065	1.067	1.073	1.085	1.093	1.134	1.302	1.447	1.501	1.527	1.545
66	1.041	1.046	1.046	1.049	1.051	1.056	1.060	1.055	1.067	1.067	1.071	1.076	1.087	1.093	1.157	1.340	1.460	1.502	1.527	1.542
67	1.041	1.046	1.046	1.049	1.051	1.053	1.063	1.067	1.069	1.071	1.069	1.073	1.085	1.102	1.208	1.387	1.473	1.506	1.527	1.540
68	1.046	1.046	1.049	1.051	1.051	1.058	1.063	1.071	1.071	1.071	1.071	1.076	1.087	1.113	1.246	1.411	1.478	1.508	1.526	1.536
69	1.049	1.051	1.051	1.051	1.053	1.056	1.063	1.069	1.071	1.073	1.076	1.076	1.089	1.128	1.298	1.433	1.482	1.507	1.524	1.533
70	1.053	1.053	1.041	1.051	1.043	1.056	1.067	1.073	1.071	1.073	1.073	1.080	1.093	1.163	1.340	1.449	1.487	1.510	1.525	1.536
71	1.051	1.046	1.051	1.049	1.053	1.056	1.067	1.069	1.073	1.067	1.071	1.071	1.095	1.174	1.356	1.451	1.486	1.506	1.519	1.529
72	1.049	1.051	1.046	1.051	1.051	1.058	1.067	1.076	1.076	1.076	1.073	1.078	1.093	1.190	1.364	1.453	1.485	1.504	1.517	1.527
73	1.046	1.049	1.049	1.051	1.051	1.063	1.067	1.078	1.073	1.078	1.073	1.080	1.095	1.202	1.370	1.453	1.483	1.502	1.513	1.523
74	1.043	1.046	1.046	1.051	1.049	1.060	1.067	1.078	1.076	1.073	1.071	1.078	1.103	1.237	1.391	1.458	1.484	1.502	1.513	1.522
75	1.043	1.043	1.043	1.049	1.049	1.058	1.067	1.076	1.076	1.076	1.073	1.083	1.125	1.288	1.417	1.467	1.489	1.504	1.513	1.521
76	1.041	1.043	1.043	1.049	1.051	1.060	1.067	1.076	1.073	1.076	1.073	1.087	1.162	1.335	1.434	1.470	1.489	1.503	1.513	1.521
77	1.036	1.036	1.043	1.046	1.049	1.056	1.069	1.076	1.076	1.069	1.076	1.089	1.206	1.370	1.445	1.473	1.490	1.501	1.511	1.517
78	1.041	1.051	1.053	1.053	1.051	1.063	1.073	1.078	1.067	1.071	1.067	1.107	1.253	1.398	1.451	1.474	1.489	1.499	1.507	1.515
79	1.053	1.071	1.080	1.093	1.098	1.095	1.091	1.085	1.091	1.078	1.073	1.112	1.273	1.405	1.451	1.473	1.486	1.496	1.503	1.510
80	1.080	1.089	1.087	1.116	1.107	1.112	1.102	1.093	1.083	1.091	1.089	1.132	1.296	1.414	1.452	1.472	1.483	1.491	1.497	1.503
81	1.082	1.102	1.110	1.151	1.143	1.125	1.103	1.100	1.098	1.095	1.095	1.151	1.307	1.417	1.452	1.471	1.481	1.488	1.491	1.497
82	1.127	1.141	1.166	1.200	1.226	1.180	1.127	1.103	1.087	1.100	1.110	1.176	1.334	1.423	1.452	1.469	1.478	1.484	1.487	1.491
83	1.301	1.208	1.180	1.219	1.263	1.210	1.148	1.127	1.105	1.096	1.110	1.222	1.367	1.429	1.452	1.467	1.475	1.482	1.486	1.488
84	1.382	1.255	1.205	1.220	1.272	1.232	1.155	1.110	1.091	1.098	1.130	1.260	1.389	1.433	1.452	1.461	1.469	1.474	1.480	1.483
85	1.258	1.180	1.147	1.150	1.170	1.169	1.139	1.113	1.091	1.110	1.157	1.285	1.396	1.445	1.471	1.489	1.499	1.503	1.499	1.494
86	1.125	1.116	1.115	1.125	1.142	1.146	1.151	1.146	1.137	1.142	1.148	1.145	1.152	1.165	1.184	1.208	1.252	1.303	1.356	1.396
87	1.125	1.112	1.100	1.105	1.118	1.130	1.127	1.127	1.122	1.125	1.135	1.134	1.131	1.134	1.134	1.137	1.137	1.139	1.141	1.145
88	1.103	1.095	1.093	1.087	1.093	1.095	1.096	1.095	1.102	1.112	1.137	1.130	1.127	1.124	1.124	1.124	1.125	1.125	1.130	1.128
89	1.069	1.069	1.058	1.060	1.065	1.067	1.071	1.083	1.096	1.127	1.145	1.131	1.118	1.124	1.118	1.119	1.113	1.118	1.122	1.118
90	1.046	1.043	1.053	1.056	1.058	1.060	1.067	1.073	1.087	1.112	1.131	1.125	1.118	1.113	1.115	1.113	1.115	1.112	1.115	1.115
91	1.038	1.043	1.046	1.046	1.049	1.046	1.053	1.053	1.065	1.093	1.110	1.112	1.113	1.112	1.115	1.115	1.112	1.110	1.112	1.110
92	1.038	1.038	1.030	1.043	1.033	1.041	1.038	1.046	1.046	1.078	1.095	1.110	1.107	1.112	1.105	1.110	1.107	1.110	1.107	1.110
93	1.036	1.038	1.041	1.036	1.036	1.041	1.049	1.046	1.051	1.063	1.093	1.105	1.110	1.107	1.110	1.107	1.108	1.105	1.105	1.095
94	1.051	1.046	1.041	1.043	1.038	1.046	1.056	1.060	1.058	1.067	1.093	1.108	1.102	1.108	1.105	1.108	1.103	1.105	1.098	1.103
95	1.078	1.073	1.071	1.067	1.067	1.067	1.071	1.065	1.067	1.076	1.098	1.103	1.105	1.103	1.108	1.105	1.107	1.100	1.100	1.098
96	1.089	1.087	1.089	1.095	1.085	1.089	1.082	1.083	1.080	1.091	1.103	1.112	1.103	1.107	1.103	1.107	1.102	1.107	1.102	1.103
97	1.093	1.089	1.087	1.095	1.096	1.096	1.085	1.080	1.078	1.096	1.113	1.118	1.107	1.110	1.105	1.110	1.110	1.113	1.110	1.107
98	1.089	1.089	1.087	1.093	1.098	1.093	1.087	1.076	1.078	1.095	1.119	1.112	1.107	1.105	1.110	1.116	1.122	1.119	1.118	1.107

NASA/RI OH90 TRANSITION TEST
V41R-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 10

IR SCAN TIME 7.68 SEC
INITIAL TEMP 534.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	1.560	1.566	1.575	1.584	1.594	1.603	1.616	1.634	1.653	1.664	1.672	1.685	1.701	1.710	1.716	1.719	1.725	1.729	1.729	1.734
65	1.556	1.562	1.570	1.578	1.585	1.597	1.611	1.624	1.642	1.655	1.664	1.674	1.690	1.700	1.707	1.711	1.716	1.722	1.727	1.731
66	1.551	1.557	1.566	1.575	1.583	1.593	1.607	1.619	1.635	1.650	1.658	1.668	1.683	1.690	1.695	1.702	1.709	1.715	1.719	1.727
67	1.550	1.555	1.563	1.572	1.582	1.592	1.604	1.616	1.629	1.646	1.661	1.666	1.675	1.684	1.689	1.697	1.704	1.705	1.708	1.715
68	1.545	1.553	1.560	1.569	1.578	1.589	1.600	1.614	1.629	1.643	1.658	1.667	1.671	1.676	1.685	1.692	1.696	1.698	1.703	1.710
69	1.544	1.551	1.559	1.568	1.576	1.586	1.596	1.608	1.622	1.636	1.651	1.664	1.670	1.672	1.678	1.687	1.691	1.695	1.700	1.703
70	1.544	1.551	1.558	1.567	1.576	1.588	1.595	1.603	1.615	1.630	1.644	1.658	1.665	1.670	1.673	1.674	1.677	1.684	1.688	1.691
71	1.539	1.545	1.554	1.563	1.572	1.582	1.594	1.602	1.610	1.623	1.639	1.652	1.661	1.665	1.668	1.670	1.674	1.678	1.682	1.686
72	1.535	1.541	1.547	1.557	1.565	1.572	1.584	1.595	1.605	1.617	1.632	1.644	1.654	1.659	1.661	1.665	1.671	1.675	1.677	1.681
73	1.531	1.537	1.544	1.550	1.558	1.566	1.575	1.588	1.597	1.610	1.624	1.635	1.645	1.651	1.654	1.656	1.661	1.667	1.671	1.674
74	1.529	1.536	1.542	1.549	1.557	1.568	1.578	1.589	1.600	1.610	1.620	1.630	1.637	1.647	1.650	1.651	1.652	1.657	1.663	1.669
75	1.529	1.537	1.543	1.550	1.557	1.567	1.579	1.590	1.601	1.613	1.622	1.632	1.642	1.652	1.652	1.651	1.650	1.652	1.657	1.665
76	1.527	1.532	1.539	1.550	1.559	1.569	1.579	1.590	1.601	1.612	1.622	1.633	1.638	1.643	1.648	1.651	1.655	1.656	1.654	1.656
77	1.525	1.533	1.539	1.546	1.556	1.566	1.578	1.590	1.600	1.611	1.623	1.633	1.640	1.645	1.649	1.652	1.654	1.656	1.658	1.659
78	1.520	1.528	1.535	1.543	1.550	1.561	1.572	1.584	1.595	1.606	1.614	1.625	1.636	1.644	1.650	1.654	1.657	1.660	1.662	1.665
79	1.518	1.524	1.531	1.538	1.548	1.556	1.568	1.580	1.593	1.603	1.614	1.621	1.629	1.632	1.637	1.641	1.648	1.653	1.657	1.661
80	1.508	1.517	1.525	1.534	1.542	1.551	1.561	1.573	1.584	1.596	1.608	1.617	1.624	1.629	1.633	1.637	1.641	1.645	1.647	1.650
81	1.500	1.506	1.513	1.521	1.530	1.539	1.548	1.561	1.574	1.589	1.601	1.613	1.621	1.627	1.630	1.634	1.635	1.637	1.640	1.643
82	1.494	1.498	1.503	1.510	1.518	1.529	1.540	1.551	1.561	1.573	1.585	1.597	1.606	1.614	1.620	1.624	1.628	1.632	1.634	1.637
83	1.488	1.491	1.494	1.500	1.508	1.518	1.528	1.539	1.550	1.562	1.572	1.581	1.588	1.595	1.601	1.606	1.610	1.616	1.620	1.625
84	1.485	1.487	1.489	1.493	1.500	1.508	1.518	1.529	1.540	1.551	1.561	1.570	1.576	1.581	1.588	1.591	1.594	1.597	1.600	1.604
85	1.491	1.490	1.490	1.492	1.495	1.501	1.509	1.519	1.529	1.540	1.550	1.559	1.565	1.570	1.574	1.577	1.579	1.581	1.582	1.584
86	1.440	1.475	1.490	1.503	1.522	1.532	1.532	1.522	1.516	1.518	1.532	1.551	1.564	1.569	1.571	1.572	1.575	1.576	1.577	1.579
87	1.147	1.151	1.155	1.165	1.179	1.196	1.201	1.201	1.195	1.196	1.205	1.230	1.252	1.274	1.292	1.309	1.326	1.345	1.364	1.386
88	1.132	1.132	1.135	1.132	1.135	1.137	1.138	1.138	1.139	1.139	1.142	1.145	1.146	1.148	1.152	1.152	1.155	1.156	1.158	1.158
89	1.116	1.121	1.119	1.121	1.124	1.122	1.127	1.130	1.128	1.128	1.128	1.127	1.132	1.139	1.135	1.137	1.135	1.138	1.138	1.137
90	1.113	1.110	1.112	1.110	1.113	1.112	1.118	1.116	1.121	1.119	1.122	1.121	1.124	1.124	1.125	1.127	1.128	1.125	1.128	1.130
91	1.112	1.108	1.108	1.107	1.110	1.110	1.112	1.110	1.113	1.113	1.118	1.118	1.121	1.119	1.121	1.121	1.125	1.122	1.124	1.122
92	1.105	1.107	1.102	1.105	1.103	1.110	1.103	1.106	1.107	1.113	1.116	1.162	1.270	1.296	1.212	1.145	1.127	1.122	1.121	1.122
93	1.103	1.093	1.102	1.093	1.100	1.093	1.103	1.096	1.105	1.100	1.115	1.174	1.312	1.340	1.252	1.156	1.128	1.116	1.116	1.115
94	1.102	1.107	1.098	1.098	1.095	1.098	1.096	1.098	1.096	1.103	1.102	1.110	1.118	1.127	1.116	1.113	1.110	1.112	1.107	1.112
95	1.100	1.102	1.102	1.093	1.093	1.091	1.096	1.095	1.096	1.093	1.098	1.100	1.102	1.098	1.102	1.102	1.107	1.103	1.110	1.105
96	1.098	1.102	1.095	1.095	1.091	1.095	1.089	1.095	1.089	1.095	1.091	1.095	1.091	1.098	1.098	1.107	1.102	1.107	1.102	1.102
97	1.098	1.102	1.095	1.095	1.091	1.093	1.085	1.091	1.087	1.093	1.091	1.096	1.091	1.093	1.091	1.098	1.096	1.103	1.100	1.103
98	1.103	1.096	1.098	1.093	1.095	1.091	1.095	1.093	1.095	1.089	1.093	1.093	1.095	1.091	1.093	1.089	1.093	1.093	1.098	1.098

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 10

IR SCAN TIME 7.68 SEC
INITIAL TEMP 534.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	11	52	53	54	55	56	57	58	59	60
64	1.739	1.743	1.743	1.746	1.753	1.760	1.762	1.760	1.755	1.746	1.138	1.734	1.709	1.579	1.370	1.247	1.191	1.156	1.135	1.122
65	1.734	1.738	1.742	1.743	1.741	1.744	1.751	1.757	1.760	1.759	1.155	1.744	1.734	1.726	1.670	1.504	1.319	1.223	1.175	1.145
66	1.733	1.737	1.740	1.743	1.746	1.744	1.741	1.737	1.740	1.744	1.149	1.752	1.749	1.740	1.732	1.698	1.545	1.334	1.233	1.179
67	1.723	1.729	1.732	1.734	1.739	1.743	1.746	1.745	1.738	1.729	1.124	1.728	1.739	1.746	1.748	1.741	1.716	1.595	1.381	1.248
68	1.713	1.718	1.722	1.729	1.732	1.736	1.742	1.745	1.744	1.739	1.131	1.721	1.715	1.720	1.730	1.742	1.743	1.733	1.644	1.437
69	1.708	1.710	1.710	1.714	1.723	1.726	1.730	1.735	1.737	1.739	1.138	1.737	1.734	1.725	1.719	1.720	1.725	1.730	1.734	1.673
70	1.695	1.702	1.705	1.705	1.712	1.719	1.721	1.722	1.724	1.729	1.133	1.735	1.738	1.740	1.742	1.736	1.724	1.719	1.721	1.728
71	1.689	1.693	1.696	1.701	1.707	1.712	1.716	1.717	1.715	1.715	1.120	1.723	1.726	1.732	1.737	1.740	1.742	1.736	1.728	1.722
72	1.684	1.690	1.694	1.695	1.695	1.702	1.705	1.707	1.708	1.708	1.109	1.712	1.712	1.715	1.721	1.724	1.729	1.736	1.739	1.738
73	1.677	1.682	1.686	1.685	1.693	1.687	1.694	1.701	1.702	1.703	1.103	1.704	1.703	1.702	1.701	1.702	1.703	1.703	1.712	1.728
74	1.674	1.676	1.672	1.672	1.676	1.682	1.690	1.696	1.697	1.697	1.097	1.696	1.698	1.699	1.695	1.696	1.698	1.697	1.695	1.691
75	1.672	1.673	1.672	1.671	1.677	1.687	1.690	1.695	1.694	1.692	1.092	1.689	1.688	1.690	1.690	1.696	1.698	1.697	1.696	1.695
76	1.660	1.668	1.673	1.672	1.672	1.680	1.686	1.688	1.687	1.688	1.097	1.686	1.684	1.684	1.683	1.684	1.682	1.683	1.686	1.689
77	1.662	1.666	1.669	1.673	1.677	1.679	1.678	1.679	1.679	1.680	1.081	1.679	1.678	1.678	1.679	1.677	1.673	1.671	1.670	1.672
78	1.666	1.670	1.672	1.673	1.674	1.674	1.672	1.671	1.670	1.670	1.070	1.670	1.669	1.670	1.672	1.673	1.674	1.675	1.674	1.670
79	1.664	1.668	1.670	1.671	1.671	1.670	1.671	1.671	1.672	1.671	1.069	1.666	1.664	1.661	1.660	1.659	1.657	1.656	1.657	1.660
80	1.653	1.656	1.659	1.662	1.663	1.665	1.666	1.668	1.668	1.669	1.068	1.667	1.664	1.662	1.660	1.660	1.659	1.661	1.660	1.658
81	1.646	1.650	1.652	1.653	1.653	1.655	1.658	1.662	1.664	1.667	1.070	1.672	1.671	1.669	1.667	1.664	1.662	1.662	1.660	1.658
82	1.641	1.645	1.647	1.650	1.652	1.655	1.656	1.657	1.658	1.661	1.063	1.665	1.667	1.669	1.671	1.673	1.673	1.671	1.666	1.660
83	1.630	1.634	1.638	1.643	1.648	1.652	1.655	1.657	1.659	1.661	1.062	1.664	1.665	1.667	1.668	1.668	1.671	1.670	1.668	1.665
84	1.608	1.613	1.619	1.625	1.632	1.637	1.642	1.647	1.652	1.655	1.058	1.660	1.662	1.663	1.666	1.668	1.670	1.668	1.665	1.662
85	1.587	1.591	1.596	1.600	1.604	1.608	1.611	1.615	1.620	1.626	1.632	1.639	1.645	1.652	1.657	1.661	1.666	1.669	1.669	1.668
86	1.581	1.582	1.584	1.585	1.585	1.585	1.585	1.585	1.586	1.586	1.589	1.592	1.597	1.603	1.612	1.623	1.634	1.646	1.657	1.665
87	1.408	1.431	1.450	1.467	1.480	1.491	1.498	1.503	1.505	1.508	1.508	1.508	1.508	1.510	1.513	1.521	1.530	1.541	1.557	1.575
88	1.162	1.163	1.166	1.169	1.171	1.174	1.176	1.176	1.179	1.176	1.178	1.176	1.179	1.180	1.183	1.185	1.190	1.192	1.201	1.211
89	1.141	1.142	1.145	1.146	1.148	1.150	1.152	1.151	1.152	1.153	1.152	1.155	1.155	1.155	1.156	1.153	1.156	1.156	1.157	1.158
90	1.132	1.132	1.134	1.134	1.135	1.134	1.135	1.135	1.138	1.138	1.142	1.141	1.142	1.141	1.142	1.142	1.145	1.145	1.146	1.146
91	1.127	1.125	1.128	1.127	1.130	1.128	1.131	1.132	1.134	1.135	1.138	1.138	1.139	1.135	1.137	1.135	1.138	1.137	1.138	1.138
92	1.121	1.121	1.121	1.124	1.125	1.128	1.128	1.132	1.138	1.161	1.192	1.181	1.148	1.141	1.134	1.135	1.132	1.135	1.131	1.132
93	1.115	1.116	1.116	1.118	1.121	1.122	1.125	1.130	1.150	1.263	1.367	1.334	1.224	1.160	1.141	1.132	1.131	1.128	1.130	1.132
94	1.110	1.116	1.110	1.118	1.113	1.121	1.121	1.128	1.128	1.156	1.213	1.208	1.155	1.138	1.130	1.132	1.127	1.130	1.130	1.132
95	1.110	1.110	1.113	1.115	1.121	1.119	1.124	1.121	1.124	1.122	1.122	1.122	1.127	1.127	1.128	1.122	1.125	1.124	1.131	1.131
96	1.110	1.112	1.107	1.113	1.113	1.121	1.119	1.121	1.118	1.121	1.119	1.125	1.122	1.127	1.125	1.127	1.127	1.130	1.130	1.132
97	1.102	1.107	1.105	1.110	1.110	1.118	1.115	1.119	1.115	1.121	1.118	1.124	1.121	1.127	1.125	1.128	1.127	1.131	1.128	1.132
98	1.100	1.100	1.105	1.103	1.110	1.110	1.113	1.118	1.116	1.118	1.121	1.121	1.124	1.122	1.127	1.127	1.128	1.128	1.132	1.132

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 10

IR SCAN TIME 7.68 SEC
INITIAL TEMP 534.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	1.119	1.115	1.112	1.107	1.107	1.100	1.102	1.096	1.098	1.091	1.091	1.085	1.089	1.085	1.089	1.085	1.085	1.080	1.080	1.076
65	1.127	1.119	1.116	1.112	1.110	1.105	1.103	1.100	1.100	1.093	1.095	1.091	1.091	1.087	1.089	1.089	1.087	1.085	1.083	1.082
66	1.150	1.130	1.121	1.116	1.113	1.110	1.107	1.102	1.100	1.096	1.096	1.091	1.091	1.089	1.091	1.087	1.089	1.085	1.085	1.083
67	1.191	1.153	1.132	1.116	1.115	1.107	1.108	1.100	1.100	1.093	1.096	1.089	1.093	1.087	1.087	1.083	1.085	1.082	1.085	1.082
68	1.272	1.204	1.161	1.134	1.121	1.115	1.110	1.108	1.100	1.100	1.093	1.096	1.091	1.089	1.083	1.087	1.083	1.085	1.082	1.080
69	1.481	1.292	1.213	1.165	1.135	1.118	1.112	1.103	1.102	1.096	1.096	1.087	1.087	1.085	1.085	1.083	1.082	1.076	1.076	1.073
70	1.682	1.506	1.314	1.222	1.170	1.137	1.115	1.110	1.102	1.100	1.095	1.095	1.085	1.087	1.083	1.085	1.080	1.082	1.076	1.076
71	1.720	1.698	1.563	1.351	1.234	1.179	1.143	1.119	1.112	1.102	1.100	1.093	1.093	1.089	1.089	1.085	1.085	1.078	1.078	1.076
72	1.732	1.720	1.696	1.584	1.382	1.248	1.188	1.151	1.121	1.112	1.103	1.103	1.095	1.095	1.087	1.087	1.083	1.083	1.078	1.078
73	1.738	1.738	1.728	1.709	1.637	1.462	1.285	1.206	1.163	1.132	1.112	1.105	1.096	1.098	1.091	1.091	1.069	1.087	1.083	1.082
74	1.687	1.691	1.703	1.714	1.712	1.669	1.520	1.324	1.218	1.171	1.131	1.113	1.100	1.100	1.091	1.093	1.082	1.089	1.085	1.082
75	1.689	1.683	1.682	1.683	1.687	1.693	1.673	1.550	1.351	1.233	1.176	1.141	1.113	1.103	1.095	1.095	1.087	1.087	1.083	1.083
76	1.692	1.693	1.690	1.682	1.673	1.666	1.663	1.650	1.562	1.389	1.245	1.183	1.145	1.116	1.102	1.098	1.091	1.091	1.083	1.085
77	1.677	1.682	1.686	1.686	1.682	1.676	1.666	1.652	1.631	1.544	1.369	1.233	1.179	1.145	1.121	1.100	1.095	1.087	1.087	1.080
78	1.664	1.662	1.662	1.666	1.671	1.672	1.674	1.670	1.655	1.629	1.552	1.391	1.242	1.181	1.147	1.127	1.103	1.095	1.085	1.085
79	1.664	1.667	1.667	1.665	1.662	1.660	1.657	1.658	1.662	1.659	1.640	1.578	1.433	1.270	1.189	1.153	1.134	1.115	1.100	1.085
80	1.655	1.652	1.654	1.657	1.660	1.660	1.658	1.657	1.651	1.646	1.642	1.635	1.598	1.482	1.312	1.206	1.158	1.138	1.128	1.113
81	1.657	1.652	1.646	1.648	1.651	1.653	1.651	1.650	1.651	1.651	1.645	1.634	1.621	1.607	1.544	1.404	1.249	1.175	1.142	1.131
82	1.658	1.656	1.651	1.645	1.645	1.648	1.652	1.652	1.648	1.646	1.647	1.645	1.635	1.620	1.598	1.536	1.386	1.238	1.163	1.135
83	1.664	1.665	1.663	1.658	1.652	1.649	1.649	1.652	1.654	1.651	1.647	1.647	1.645	1.637	1.623	1.600	1.533	1.392	1.242	1.168
84	1.659	1.656	1.659	1.663	1.666	1.667	1.668	1.668	1.667	1.661	1.657	1.657	1.655	1.650	1.644	1.633	1.616	1.561	1.428	1.268
85	1.665	1.662	1.662	1.665	1.665	1.666	1.667	1.669	1.671	1.676	1.680	1.682	1.679	1.673	1.665	1.656	1.645	1.630	1.581	1.457
86	1.670	1.671	1.671	1.669	1.667	1.667	1.668	1.670	1.670	1.670	1.670	1.670	1.670	1.672	1.674	1.672	1.665	1.661	1.653	1.610
87	1.597	1.622	1.645	1.665	1.682	1.694	1.701	1.704	1.702	1.700	1.697	1.693	1.688	1.682	1.677	1.671	1.665	1.666	1.671	1.672
88	1.229	1.248	1.281	1.318	1.363	1.412	1.463	1.500	1.525	1.542	1.559	1.572	1.584	1.592	1.600	1.611	1.623	1.632	1.640	1.648
89	1.163	1.162	1.166	1.168	1.169	1.170	1.172	1.175	1.181	1.184	1.192	1.197	1.204	1.209	1.210	1.203	1.196	1.191	1.194	1.197
90	1.148	1.146	1.147	1.146	1.148	1.147	1.150	1.151	1.152	1.156	1.163	1.168	1.175	1.179	1.179	1.174	1.165	1.156	1.155	1.153
91	1.138	1.137	1.138	1.138	1.138	1.139	1.139	1.138	1.138	1.141	1.152	1.158	1.163	1.166	1.170	1.170	1.162	1.148	1.143	1.142
92	1.132	1.135	1.134	1.137	1.137	1.141	1.145	1.146	1.141	1.143	1.158	1.171	1.165	1.168	1.176	1.195	1.180	1.153	1.139	1.135
93	1.132	1.131	1.134	1.135	1.148	1.232	1.333	1.322	1.228	1.166	1.155	1.152	1.158	1.162	1.165	1.163	1.157	1.142	1.138	1.134
94	1.132	1.135	1.132	1.138	1.142	1.192	1.273	1.276	1.204	1.162	1.151	1.155	1.160	1.165	1.168	1.165	1.156	1.148	1.143	1.141
95	1.134	1.130	1.134	1.131	1.138	1.138	1.142	1.138	1.141	1.142	1.151	1.158	1.166	1.170	1.174	1.172	1.168	1.156	1.151	1.148
96	1.132	1.135	1.134	1.137	1.138	1.141	1.141	1.145	1.142	1.148	1.157	1.163	1.170	1.179	1.180	1.184	1.175	1.168	1.158	1.160
97	1.132	1.137	1.137	1.143	1.139	1.142	1.143	1.146	1.145	1.148	1.155	1.168	1.178	1.189	1.194	1.196	1.190	1.180	1.169	1.169
98	1.135	1.137	1.138	1.139	1.145	1.145	1.148	1.146	1.147	1.146	1.163	1.179	1.192	1.200	1.208	1.208	1.201	1.185	1.174	1.171

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 10

IR SCAN TIME 7.68 SEC
INITIAL TEMP 534.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	1.078	1.076	1.076	1.076	1.073	1.071	1.069	1.067	1.067	1.067	1.065	1.060	1.060	1.053	1.058	1.053	1.058	1.053	1.051	1.049
65	1.080	1.078	1.080	1.076	1.071	1.071	1.071	1.069	1.069	1.065	1.065	1.063	1.063	1.060	1.060	1.058	1.053	1.051	1.053	1.051
66	1.083	1.082	1.078	1.076	1.076	1.073	1.073	1.069	1.067	1.065	1.067	1.065	1.065	1.058	1.056	1.056	1.056	1.053	1.053	1.049
67	1.080	1.080	1.078	1.078	1.071	1.071	1.071	1.071	1.069	1.063	1.063	1.060	1.063	1.058	1.058	1.056	1.053	1.053	1.051	1.051
68	1.073	1.076	1.069	1.073	1.067	1.067	1.060	1.067	1.060	1.063	1.053	1.058	1.051	1.058	1.046	1.053	1.043	1.051	1.049	1.051
69	1.076	1.069	1.071	1.067	1.067	1.067	1.065	1.063	1.058	1.056	1.058	1.053	1.053	1.049	1.049	1.046	1.046	1.046	1.046	1.027
70	1.071	1.071	1.069	1.071	1.067	1.065	1.063	1.058	1.058	1.060	1.053	1.056	1.051	1.051	1.046	1.049	1.046	1.046	1.038	1.041
71	1.073	1.071	1.071	1.071	1.069	1.063	1.063	1.060	1.060	1.058	1.058	1.056	1.053	1.049	1.049	1.046	1.046	1.043	1.046	1.041
72	1.071	1.076	1.073	1.073	1.067	1.067	1.063	1.065	1.058	1.063	1.058	1.058	1.058	1.051	1.046	1.049	1.046	1.049	1.043	1.046
73	1.076	1.076	1.073	1.073	1.065	1.069	1.067	1.067	1.063	1.060	1.056	1.058	1.053	1.053	1.051	1.053	1.049	1.049	1.041	1.046
74	1.078	1.078	1.073	1.076	1.073	1.073	1.067	1.069	1.060	1.060	1.058	1.058	1.053	1.056	1.053	1.051	1.049	1.049	1.046	1.046
75	1.073	1.076	1.069	1.071	1.063	1.069	1.063	1.067	1.060	1.063	1.053	1.056	1.051	1.053	1.046	1.053	1.049	1.051	1.046	1.046
76	1.076	1.078	1.073	1.076	1.071	1.071	1.067	1.067	1.060	1.060	1.058	1.058	1.056	1.056	1.051	1.051	1.046	1.049	1.038	1.046
77	1.078	1.076	1.076	1.073	1.071	1.067	1.065	1.065	1.063	1.060	1.060	1.056	1.056	1.051	1.051	1.049	1.051	1.049	1.049	1.041
78	1.082	1.080	1.076	1.073	1.073	1.071	1.071	1.067	1.063	1.065	1.058	1.060	1.053	1.058	1.053	1.053	1.046	1.049	1.046	1.049
79	1.085	1.082	1.078	1.073	1.071	1.067	1.067	1.065	1.065	1.060	1.060	1.053	1.056	1.051	1.053	1.049	1.049	1.046	1.046	1.043
80	1.093	1.085	1.078	1.076	1.071	1.069	1.063	1.065	1.060	1.060	1.053	1.056	1.051	1.053	1.049	1.051	1.046	1.046	1.043	1.046
81	1.121	1.113	1.096	1.087	1.076	1.076	1.067	1.067	1.065	1.067	1.065	1.065	1.060	1.063	1.063	1.063	1.058	1.060	1.060	1.060
82	1.121	1.121	1.113	1.112	1.093	1.089	1.073	1.069	1.058	1.058	1.049	1.053	1.046	1.051	1.046	1.046	1.043	1.046	1.041	1.043
83	1.132	1.122	1.115	1.116	1.112	1.112	1.103	1.103	1.091	1.085	1.071	1.067	1.058	1.056	1.049	1.051	1.033	1.043	1.027	1.041
84	1.179	1.138	1.124	1.116	1.113	1.110	1.110	1.107	1.108	1.103	1.103	1.096	1.093	1.082	1.073	1.067	1.063	1.051	1.046	1.038
85	1.293	1.191	1.146	1.128	1.113	1.110	1.103	1.107	1.102	1.103	1.098	1.100	1.100	1.103	1.096	1.098	1.089	1.087	1.076	1.073
86	1.494	1.327	1.207	1.147	1.121	1.107	1.103	1.100	1.100	1.091	1.096	1.095	1.102	1.098	1.100	1.098	1.102	1.096	1.098	1.093
87	1.655	1.572	1.411	1.253	1.164	1.125	1.105	1.103	1.098	1.100	1.095	1.098	1.093	1.096	1.095	1.096	1.096	1.100	1.093	1.096
88	1.652	1.641	1.559	1.386	1.232	1.156	1.125	1.110	1.110	1.105	1.105	1.102	1.100	1.093	1.093	1.091	1.095	1.095	1.098	1.095
89	1.205	1.208	1.200	1.173	1.147	1.134	1.128	1.124	1.118	1.112	1.108	1.110	1.102	1.098	1.095	1.091	1.093	1.087	1.087	1.083
90	1.157	1.155	1.148	1.138	1.132	1.125	1.122	1.118	1.116	1.110	1.110	1.103	1.103	1.093	1.096	1.087	1.093	1.085	1.089	1.076
91	1.139	1.135	1.130	1.124	1.124	1.119	1.122	1.121	1.119	1.112	1.112	1.107	1.105	1.102	1.102	1.095	1.095	1.091	1.093	1.085
92	1.131	1.130	1.124	1.125	1.121	1.122	1.119	1.122	1.119	1.119	1.113	1.115	1.110	1.110	1.102	1.103	1.098	1.100	1.091	1.093
93	1.134	1.130	1.130	1.127	1.127	1.124	1.125	1.119	1.121	1.119	1.119	1.116	1.115	1.110	1.110	1.107	1.105	1.098	1.100	1.093
94	1.137	1.137	1.134	1.135	1.134	1.134	1.128	1.131	1.128	1.130	1.125	1.124	1.121	1.121	1.118	1.118	1.112	1.110	1.105	1.107
95	1.147	1.146	1.146	1.143	1.145	1.142	1.142	1.142	1.139	1.138	1.137	1.137	1.135	1.131	1.131	1.127	1.125	1.121	1.119	1.113
96	1.156	1.161	1.156	1.162	1.158	1.160	1.155	1.155	1.150	1.153	1.151	1.151	1.148	1.146	1.146	1.139	1.141	1.139	1.134	1.132
97	1.169	1.170	1.171	1.174	1.172	1.173	1.171	1.173	1.171	1.175	1.174	1.175	1.170	1.171	1.166	1.170	1.165	1.169	1.163	1.165
98	1.172	1.174	1.181	1.183	1.188	1.193	1.195	1.201	1.203	1.206	1.210	1.210	1.212	1.208	1.208	1.204	1.204	1.201	1.201	1.197

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 10

IR SCAN TIME 7.68 SEC
INITIAL TEMP 534.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	1.051	1.046	1.051	1.046	1.049	1.046	1.046	1.041	1.043	1.041
65	1.051	1.051	1.049	1.046	1.046	1.043	1.049	1.046	1.041	1.036
66	1.051	1.046	1.049	1.046	1.043	1.041	1.043	1.041	1.038	1.036
67	1.046	1.046	1.046	1.046	1.043	1.041	1.041	1.036	1.038	1.036
68	1.046	1.043	1.041	1.038	1.036	1.038	1.033	1.033	1.027	1.033
69	1.038	1.027	1.036	1.024	1.033	1.018	1.027	1.015	1.024	1.015
70	1.036	1.038	1.033	1.036	1.030	1.030	1.024	1.024	1.018	1.024
71	1.041	1.033	1.036	1.033	1.030	1.030	1.030	1.027	1.024	1.018
72	1.041	1.041	1.036	1.036	1.030	1.030	1.027	1.030	1.024	1.030
73	1.038	1.041	1.036	1.036	1.033	1.033	1.024	1.027	1.024	1.027
74	1.043	1.043	1.038	1.041	1.033	1.033	1.027	1.030	1.021	1.027
75	1.041	1.043	1.038	1.038	1.036	1.036	1.027	1.030	1.021	1.024
76	1.033	1.046	1.030	1.036	1.024	1.033	1.021	1.030	1.021	1.024
77	1.043	1.038	1.038	1.036	1.033	1.033	1.030	1.024	1.021	1.018
78	1.041	1.043	1.038	1.038	1.033	1.036	1.027	1.030	1.024	1.024
79	1.046	1.041	1.041	1.036	1.038	1.036	1.030	1.024	1.030	1.024
80	1.041	1.041	1.036	1.038	1.036	1.033	1.027	1.030	1.027	1.030
81	1.058	1.060	1.053	1.056	1.053	1.056	1.051	1.049	1.046	1.049
82	1.033	1.038	1.033	1.036	1.027	1.033	1.021	1.027	1.021	1.027
83	1.027	1.038	1.021	1.033	1.018	1.030	1.015	1.030	1.011	1.024
84	1.038	1.033	1.033	1.030	1.030	1.024	1.024	1.018	1.024	1.018
85	1.060	1.058	1.046	1.043	1.033	1.033	1.024	1.027	1.018	1.024
86	1.093	1.085	1.082	1.069	1.065	1.056	1.049	1.041	1.038	1.030
87	1.091	1.096	1.091	1.095	1.085	1.085	1.076	1.073	1.065	1.063
88	1.093	1.091	1.093	1.089	1.091	1.085	1.083	1.078	1.078	1.076
89	1.080	1.076	1.080	1.080	1.080	1.073	1.071	1.071	1.069	1.069
90	1.078	1.069	1.071	1.071	1.073	1.069	1.069	1.063	1.067	1.065
91	1.085	1.082	1.082	1.080	1.082	1.076	1.073	1.071	1.069	1.065
92	1.085	1.087	1.085	1.089	1.087	1.089	1.083	1.080	1.078	1.078
93	1.095	1.089	1.091	1.087	1.093	1.091	1.093	1.087	1.091	1.089
94	1.102	1.103	1.098	1.102	1.100	1.103	1.102	1.103	1.100	1.102
95	1.115	1.112	1.116	1.112	1.113	1.112	1.116	1.115	1.115	1.110
96	1.131	1.135	1.132	1.135	1.131	1.135	1.134	1.137	1.134	1.134
97	1.160	1.165	1.163	1.168	1.164	1.168	1.163	1.165	1.163	1.163
98	1.199	1.197	1.199	1.199	1.201	1.201	1.201	1.199	1.200	1.195

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 7.68 SEC
HRFR = 0.397E-01

GROUP 10

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	0.049	0.052	0.058	0.062	0.065	0.067	0.065	0.065	0.064	0.063	0.063	0.060	0.062	0.063	0.062	0.062	0.064	0.066	0.068	0.066
30	0.055	0.061	0.064	0.065	0.065	0.064	0.062	0.063	0.063	0.063	0.062	0.062	0.062	0.063	0.064	0.066	0.065	0.067	0.067	0.068
31	0.063	0.065	0.065	0.064	0.062	0.059	0.059	0.062	0.063	0.064	0.064	0.064	0.065	0.065	0.065	0.066	0.066	0.068	0.067	0.067
32	0.065	0.064	0.062	0.062	0.060	0.059	0.062	0.064	0.065	0.065	0.065	0.066	0.065	0.065	0.065	0.067	0.066	0.065	0.063	0.061
33	0.064	0.060	0.060	0.062	0.064	0.065	0.065	0.066	0.065	0.065	0.064	0.065	0.065	0.066	0.065	0.063	0.059	0.057	0.054	0.053
34	0.062	0.062	0.063	0.064	0.065	0.065	0.064	0.064	0.064	0.065	0.064	0.064	0.060	0.057	0.055	0.054	0.055	0.056	0.056	0.057
35	0.065	0.066	0.064	0.064	0.060	0.063	0.062	0.062	0.058	0.058	0.054	0.053	0.050	0.052	0.055	0.056	0.058	0.059	0.059	0.060
36	0.065	0.064	0.063	0.062	0.062	0.058	0.055	0.053	0.052	0.052	0.053	0.054	0.055	0.056	0.056	0.058	0.059	0.062	0.060	0.063
37	0.060	0.059	0.058	0.055	0.052	0.051	0.051	0.052	0.054	0.054	0.055	0.056	0.058	0.058	0.059	0.059	0.060	0.058	0.054	0.046
38	0.055	0.051	0.050	0.050	0.051	0.054	0.054	0.055	0.056	0.057	0.057	0.059	0.059	0.060	0.056	0.052	0.044	0.037	0.030	0.027
39	0.050	0.051	0.051	0.052	0.054	0.054	0.055	0.056	0.057	0.058	0.059	0.057	0.053	0.046	0.039	0.031	0.028	0.026	0.026	0.026
40	0.051	0.052	0.053	0.055	0.055	0.056	0.056	0.058	0.058	0.055	0.048	0.041	0.032	0.030	0.027	0.027	0.026	0.028	0.028	0.028
41	0.053	0.054	0.054	0.055	0.055	0.056	0.055	0.051	0.044	0.037	0.030	0.028	0.028	0.028	0.028	0.028	0.027	0.028	0.028	0.029
42	0.056	0.057	0.056	0.058	0.053	0.049	0.039	0.033	0.027	0.029	0.026	0.028	0.026	0.030	0.029	0.030	0.028	0.030	0.030	0.031
43	0.062	0.062	0.057	0.049	0.039	0.033	0.030	0.030	0.028	0.028	0.028	0.030	0.030	0.031	0.029	0.030	0.028	0.032	0.029	0.032
44	0.059	0.050	0.038	0.032	0.030	0.031	0.030	0.030	0.029	0.030	0.030	0.032	0.031	0.033	0.031	0.032	0.031	0.033	0.032	0.035
45	0.039	0.032	0.032	0.031	0.031	0.031	0.032	0.031	0.032	0.030	0.032	0.032	0.035	0.033	0.035	0.033	0.034	0.035	0.037	0.037
46	0.035	0.033	0.033	0.034	0.033	0.035	0.034	0.036	0.035	0.036	0.035	0.037	0.037	0.038	0.038	0.040	0.039	0.042	0.054	0.073
47	0.037	0.035	0.037	0.036	0.037	0.037	0.038	0.038	0.039	0.038	0.039	0.039	0.041	0.041	0.042	0.044	0.046	0.054	0.113	0.205
48	0.037	0.039	0.038	0.040	0.039	0.041	0.039	0.041	0.040	0.042	0.041	0.043	0.043	0.044	0.044	0.046	0.048	0.059	0.129	0.230
49	0.039	0.038	0.037	0.041	0.039	0.042	0.041	0.042	0.041	0.043	0.041	0.044	0.045	0.046	0.046	0.049	0.051	0.063	0.135	0.237
50	0.041	0.041	0.041	0.043	0.042	0.044	0.042	0.044	0.044	0.044	0.045	0.046	0.045	0.048	0.047	0.050	0.051	0.070	0.152	0.250
51	0.041	0.042	0.041	0.043	0.042	0.045	0.044	0.046	0.045	0.046	0.046	0.047	0.048	0.050	0.050	0.051	0.055	0.085	0.182	0.269
52	0.041	0.042	0.043	0.042	0.042	0.043	0.044	0.044	0.046	0.046	0.047	0.047	0.049	0.050	0.051	0.052	0.058	0.103	0.208	0.282
53	0.038	0.038	0.037	0.040	0.039	0.041	0.041	0.042	0.042	0.044	0.044	0.045	0.045	0.047	0.048	0.052	0.060	0.130	0.234	0.292
54	0.030	0.031	0.032	0.032	0.032	0.032	0.035	0.034	0.035	0.035	0.037	0.037	0.040	0.041	0.042	0.045	0.066	0.156	0.251	0.295
55	0.025	0.026	0.026	0.026	0.026	0.028	0.027	0.030	0.030	0.032	0.032	0.035	0.035	0.037	0.037	0.043	0.075	0.176	0.262	0.299
56	0.024	0.025	0.025	0.022	0.026	0.024	0.028	0.024	0.031	0.031	0.033	0.033	0.035	0.035	0.039	0.044	0.087	0.191	0.270	0.302
57	0.024	0.025	0.025	0.026	0.027	0.028	0.029	0.030	0.031	0.031	0.034	0.033	0.035	0.035	0.040	0.045	0.093	0.199	0.273	0.304
58	0.024	0.025	0.025	0.026	0.026	0.027	0.029	0.030	0.031	0.031	0.032	0.032	0.035	0.036	0.041	0.049	0.113	0.219	0.279	0.305
59	0.022	0.023	0.023	0.024	0.026	0.026	0.026	0.027	0.029	0.030	0.032	0.031	0.035	0.035	0.040	0.056	0.146	0.243	0.289	0.311
60	0.021	0.021	0.022	0.024	0.023	0.025	0.025	0.026	0.026	0.026	0.028	0.029	0.032	0.033	0.041	0.085	0.190	0.261	0.291	0.308
61	0.019	0.019	0.021	0.022	0.022	0.023	0.025	0.026	0.026	0.026	0.030	0.030	0.032	0.031	0.035	0.038	0.067	0.167	0.253	0.290	0.309
62	0.018	0.020	0.021	0.022	0.020	0.023	0.026	0.023	0.027	0.027	0.030	0.025	0.032	0.036	0.044	0.103	0.205	0.263	0.289	0.307
63	0.017	0.017	0.015	0.019	0.017	0.022	0.021	0.024	0.026	0.026	0.027	0.029	0.031	0.036	0.046	0.116	0.213	0.263	0.288	0.304

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HPFR
IR SCAN TIME 7.68 SEC
GROUP 10 HRFR = 0.397E-01

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	0.067	0.068	0.069	0.068	0.071	0.070	0.070	0.065	0.063	0.059	0.058	0.054	0.053	0.052	0.054	0.054	0.054	0.053	0.054	0.055
30	0.068	0.070	0.070	0.069	0.067	0.065	0.062	0.060	0.058	0.057	0.056	0.055	0.054	0.055	0.055	0.057	0.058	0.059	0.058	0.062
31	0.066	0.065	0.063	0.061	0.058	0.056	0.054	0.054	0.054	0.057	0.058	0.060	0.061	0.061	0.061	0.064	0.064	0.065	0.065	0.066
32	0.058	0.055	0.053	0.055	0.055	0.057	0.057	0.059	0.059	0.063	0.063	0.064	0.065	0.066	0.066	0.067	0.065	0.063	0.058	0.055
33	0.053	0.055	0.057	0.059	0.061	0.062	0.062	0.063	0.063	0.064	0.065	0.066	0.054	0.061	0.056	0.051	0.045	0.040	0.032	0.029
34	0.058	0.059	0.060	0.063	0.064	0.065	0.064	0.063	0.060	0.059	0.052	0.049	0.042	0.035	0.027	0.024	0.022	0.022	0.021	0.022
35	0.062	0.064	0.062	0.062	0.059	0.055	0.051	0.043	0.036	0.029	0.026	0.022	0.020	0.021	0.021	0.021	0.022	0.022	0.023	0.022
36	0.058	0.055	0.047	0.042	0.032	0.028	0.022	0.022	0.018	0.021	0.018	0.021	0.019	0.022	0.022	0.022	0.022	0.022	0.021	0.022
37	0.039	0.031	0.026	0.024	0.022	0.022	0.023	0.022	0.023	0.022	0.022	0.021	0.022	0.022	0.023	0.019	0.024	0.019	0.023	0.018
38	0.026	0.025	0.024	0.026	0.025	0.026	0.026	0.025	0.024	0.024	0.023	0.025	0.024	0.025	0.024	0.024	0.024	0.026	0.026	0.026
39	0.026	0.026	0.027	0.026	0.026	0.026	0.026	0.027	0.026	0.026	0.026	0.026	0.027	0.026	0.027	0.026	0.027	0.027	0.028	0.027
40	0.027	0.028	0.027	0.028	0.029	0.027	0.027	0.028	0.028	0.028	0.027	0.028	0.029	0.030	0.029	0.030	0.028	0.029	0.028	0.029
41	0.028	0.029	0.028	0.030	0.030	0.031	0.029	0.030	0.030	0.032	0.031	0.031	0.030	0.031	0.030	0.032	0.030	0.030	0.030	0.030
42	0.030	0.030	0.031	0.032	0.031	0.032	0.032	0.032	0.031	0.033	0.032	0.032	0.031	0.032	0.032	0.033	0.032	0.032	0.031	0.032
43	0.030	0.032	0.030	0.033	0.032	0.035	0.032	0.034	0.031	0.035	0.032	0.035	0.034	0.035	0.034	0.035	0.033	0.035	0.033	0.035
44	0.034	0.035	0.035	0.036	0.035	0.037	0.036	0.037	0.037	0.038	0.035	0.036	0.035	0.037	0.034	0.037	0.033	0.035	0.032	0.035
45	0.039	0.039	0.039	0.039	0.040	0.039	0.041	0.041	0.041	0.041	0.041	0.039	0.039	0.039	0.041	0.039	0.039	0.038	0.038	0.037
46	0.080	0.077	0.072	0.065	0.058	0.055	0.051	0.050	0.048	0.048	0.046	0.047	0.045	0.047	0.044	0.045	0.043	0.044	0.042	0.044
47	0.260	0.279	0.284	0.279	0.265	0.242	0.209	0.167	0.127	0.095	0.074	0.062	0.056	0.054	0.052	0.050	0.050	0.048	0.049	0.047
48	0.290	0.319	0.337	0.356	0.374	0.392	0.410	0.420	0.410	0.376	0.318	0.243	0.164	0.108	0.076	0.063	0.057	0.054	0.052	0.052
49	0.296	0.323	0.341	0.359	0.379	0.399	0.421	0.445	0.465	0.476	0.476	0.462	0.433	0.378	0.290	0.187	0.109	0.075	0.062	0.057
50	0.299	0.327	0.346	0.364	0.380	0.400	0.424	0.449	0.465	0.476	0.482	0.481	0.476	0.473	0.461	0.397	0.267	0.153	0.098	0.073
51	0.308	0.332	0.350	0.367	0.384	0.404	0.427	0.448	0.466	0.488	0.507	0.516	0.516	0.515	0.509	0.494	0.439	0.305	0.171	0.108
52	0.314	0.331	0.345	0.364	0.383	0.403	0.427	0.452	0.478	0.497	0.508	0.514	0.519	0.523	0.528	0.526	0.515	0.476	0.350	0.198
53	0.317	0.335	0.348	0.362	0.381	0.402	0.423	0.450	0.479	0.497	0.505	0.513	0.518	0.523	0.526	0.531	0.536	0.532	0.502	0.390
54	0.317	0.331	0.342	0.356	0.372	0.392	0.417	0.444	0.471	0.493	0.505	0.515	0.523	0.532	0.542	0.556	0.564	0.560	0.549	0.525
55	0.319	0.332	0.341	0.353	0.370	0.391	0.415	0.439	0.465	0.490	0.507	0.518	0.524	0.534	0.538	0.541	0.544	0.549	0.554	0.558
56	0.321	0.333	0.342	0.353	0.369	0.389	0.410	0.433	0.459	0.482	0.501	0.515	0.524	0.534	0.542	0.548	0.556	0.560	0.563	0.564
57	0.321	0.332	0.341	0.351	0.366	0.382	0.403	0.427	0.452	0.472	0.485	0.494	0.500	0.507	0.516	0.528	0.545	0.556	0.566	0.573
58	0.321	0.331	0.340	0.351	0.365	0.382	0.402	0.424	0.444	0.463	0.479	0.487	0.495	0.504	0.509	0.511	0.521	0.532	0.549	0.568
59	0.324	0.331	0.338	0.349	0.363	0.380	0.399	0.422	0.445	0.464	0.473	0.483	0.499	0.509	0.510	0.512	0.515	0.521	0.529	0.537
60	0.321	0.329	0.336	0.348	0.362	0.377	0.395	0.417	0.439	0.456	0.464	0.476	0.492	0.503	0.502	0.509	0.519	0.521	0.522	0.531
61	0.320	0.327	0.336	0.346	0.356	0.371	0.389	0.408	0.431	0.445	0.455	0.471	0.490	0.501	0.498	0.503	0.515	0.518	0.519	0.526
62	0.318	0.324	0.331	0.342	0.352	0.366	0.384	0.403	0.423	0.436	0.446	0.462	0.482	0.491	0.496	0.502	0.504	0.509	0.516	0.521
63	0.314	0.320	0.326	0.337	0.346	0.358	0.374	0.392	0.411	0.424	0.435	0.452	0.472	0.485	0.496	0.504	0.505	0.500	0.507	0.521

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 7.68 SEC
HRFR = 0.397E-01

GROUP 10

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	0.057	0.057	0.056	0.056	0.058	0.059	0.061	0.062	0.062	0.059	0.059	0.059	0.060	0.059	0.058	0.057	0.058	0.055	0.053	0.050
30	0.063	0.064	0.062	0.064	0.063	0.064	0.064	0.065	0.062	0.059	0.055	0.055	0.051	0.050	0.049	0.048	0.045	0.043	0.040	0.037
31	0.067	0.067	0.064	0.062	0.058	0.056	0.053	0.050	0.045	0.041	0.035	0.033	0.030	0.027	0.024	0.023	0.020	0.022	0.018	0.020
32	0.052	0.048	0.043	0.039	0.032	0.030	0.024	0.022	0.019	0.019	0.018	0.020	0.018	0.019	0.017	0.019	0.017	0.018	0.018	0.018
33	0.024	0.023	0.022	0.022	0.020	0.020	0.018	0.019	0.019	0.019	0.018	0.021	0.019	0.018	0.017	0.018	0.016	0.018	0.017	0.018
34	0.021	0.022	0.021	0.021	0.019	0.020	0.019	0.020	0.019	0.020	0.019	0.020	0.018	0.019	0.017	0.018	0.017	0.018	0.018	0.018
35	0.022	0.020	0.021	0.022	0.022	0.021	0.022	0.022	0.019	0.021	0.018	0.019	0.019	0.019	0.020	0.018	0.022	0.019	0.018	0.017
36	0.022	0.022	0.022	0.022	0.022	0.023	0.021	0.022	0.022	0.022	0.021	0.022	0.020	0.020	0.019	0.019	0.019	0.020	0.019	0.020
37	0.023	0.019	0.023	0.020	0.023	0.018	0.022	0.019	0.022	0.018	0.023	0.022	0.022	0.021	0.021	0.021	0.020	0.021	0.021	0.020
38	0.024	0.025	0.024	0.025	0.024	0.024	0.024	0.024	0.023	0.024	0.023	0.024	0.022	0.022	0.019	0.022	0.020	0.022	0.020	0.022
39	0.026	0.026	0.026	0.026	0.026	0.026	0.025	0.026	0.026	0.024	0.025	0.024	0.024	0.023	0.025	0.024	0.022	0.023	0.023	0.022
40	0.027	0.027	0.027	0.027	0.027	0.026	0.026	0.026	0.026	0.027	0.027	0.026	0.024	0.026	0.026	0.026	0.024	0.024	0.023	0.025
41	0.030	0.031	0.028	0.029	0.028	0.030	0.028	0.028	0.027	0.027	0.026	0.028	0.026	0.026	0.026	0.026	0.026	0.026	0.024	0.025
42	0.031	0.032	0.030	0.032	0.030	0.031	0.031	0.031	0.029	0.029	0.029	0.029	0.027	0.029	0.026	0.027	0.026	0.027	0.026	0.026
43	0.032	0.032	0.031	0.033	0.032	0.032	0.030	0.032	0.031	0.032	0.030	0.031	0.029	0.029	0.028	0.029	0.028	0.028	0.027	0.026
44	0.032	0.034	0.032	0.034	0.031	0.033	0.030	0.032	0.030	0.033	0.031	0.032	0.030	0.031	0.030	0.030	0.029	0.030	0.029	0.030
45	0.037	0.036	0.037	0.035	0.036	0.035	0.035	0.033	0.034	0.032	0.032	0.031	0.032	0.029	0.032	0.030	0.032	0.028	0.031	0.029
46	0.042	0.042	0.041	0.041	0.039	0.041	0.038	0.039	0.037	0.039	0.037	0.037	0.035	0.037	0.035	0.037	0.035	0.036	0.035	0.036
47	0.048	0.046	0.047	0.046	0.045	0.044	0.043	0.042	0.042	0.041	0.042	0.041	0.041	0.039	0.041	0.039	0.040	0.038	0.039	0.038
48	0.051	0.051	0.050	0.050	0.049	0.048	0.047	0.047	0.044	0.044	0.044	0.044	0.042	0.043	0.042	0.042	0.041	0.041	0.040	0.041
49	0.055	0.055	0.054	0.053	0.051	0.051	0.049	0.049	0.047	0.048	0.047	0.046	0.044	0.045	0.044	0.044	0.044	0.044	0.042	0.042
50	0.062	0.059	0.057	0.056	0.054	0.053	0.051	0.051	0.050	0.050	0.050	0.048	0.047	0.047	0.046	0.047	0.046	0.046	0.044	0.045
51	0.083	0.070	0.060	0.057	0.054	0.055	0.052	0.053	0.052	0.051	0.050	0.050	0.048	0.050	0.048	0.048	0.047	0.047	0.046	0.046
52	0.113	0.086	0.073	0.064	0.059	0.057	0.056	0.054	0.054	0.052	0.052	0.050	0.050	0.048	0.050	0.047	0.049	0.048	0.047	0.046
53	0.228	0.125	0.084	0.068	0.060	0.057	0.055	0.054	0.052	0.052	0.050	0.050	0.049	0.049	0.047	0.048	0.046	0.046	0.045	0.046
54	0.450	0.289	0.152	0.093	0.070	0.058	0.051	0.047	0.047	0.045	0.044	0.041	0.041	0.040	0.041	0.038	0.038	0.037	0.037	0.039
55	0.547	0.470	0.296	0.153	0.095	0.072	0.058	0.051	0.046	0.045	0.042	0.042	0.039	0.039	0.037	0.038	0.036	0.037	0.037	0.039
56	0.568	0.564	0.511	0.346	0.180	0.104	0.076	0.062	0.054	0.048	0.047	0.044	0.043	0.041	0.041	0.040	0.041	0.039	0.041	0.041
57	0.575	0.572	0.570	0.545	0.410	0.227	0.122	0.084	0.067	0.057	0.051	0.048	0.047	0.046	0.045	0.043	0.043	0.042	0.045	0.046
58	0.576	0.577	0.576	0.571	0.554	0.440	0.252	0.131	0.089	0.068	0.058	0.051	0.048	0.046	0.045	0.044	0.044	0.042	0.044	0.045
59	0.549	0.562	0.574	0.578	0.574	0.557	0.464	0.280	0.145	0.094	0.072	0.058	0.050	0.045	0.045	0.044	0.045	0.043	0.044	0.044
60	0.530	0.529	0.537	0.555	0.571	0.575	0.565	0.512	0.345	0.176	0.103	0.076	0.060	0.052	0.047	0.045	0.042	0.042	0.039	0.041
61	0.538	0.538	0.531	0.527	0.531	0.546	0.562	0.564	0.514	0.349	0.180	0.104	0.076	0.062	0.051	0.045	0.043	0.041	0.041	0.037
62	0.528	0.542	0.548	0.545	0.536	0.525	0.524	0.535	0.546	0.526	0.388	0.206	0.113	0.080	0.064	0.052	0.047	0.043	0.041	0.039
63	0.523	0.528	0.538	0.550	0.556	0.553	0.543	0.531	0.522	0.524	0.524	0.438	0.255	0.131	0.087	0.068	0.056	0.048	0.044	0.042

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 7.68 SEC
GROUP 10 HREF = 0.397E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.045	0.041	0.040	0.041	0.042	0.042	0.042	0.041	0.041	0.041	0.044	0.046	0.046	0.044	0.044	0.042	0.040	0.037	0.037	0.035
30	0.032	0.031	0.029	0.029	0.027	0.027	0.026	0.026	0.024	0.025	0.026	0.026	0.026	0.025	0.025	0.025	0.024	0.025	0.023	0.024
31	0.017	0.020	0.016	0.020	0.015	0.019	0.016	0.018	0.015	0.019	0.016	0.020	0.019	0.019	0.018	0.019	0.019	0.020	0.018	0.021
32	0.017	0.018	0.018	0.018	0.016	0.017	0.016	0.018	0.016	0.018	0.015	0.018	0.016	0.018	0.012	0.018	0.014	0.018	0.014	0.018
33	0.018	0.018	0.018	0.017	0.016	0.017	0.016	0.017	0.016	0.017	0.016	0.017	0.015	0.016	0.015	0.016	0.016	0.017	0.017	0.017
34	0.018	0.018	0.017	0.017	0.016	0.018	0.016	0.018	0.016	0.018	0.014	0.017	0.015	0.017	0.016	0.017	0.016	0.016	0.016	0.017
35	0.018	0.017	0.016	0.019	0.019	0.018	0.016	0.015	0.017	0.015	0.017	0.017	0.017	0.012	0.016	0.016	0.016	0.016	0.015	0.016
36	0.018	0.018	0.017	0.018	0.017	0.019	0.017	0.018	0.016	0.018	0.016	0.017	0.016	0.017	0.016	0.017	0.016	0.016	0.014	0.016
37	0.020	0.018	0.019	0.019	0.020	0.018	0.019	0.019	0.018	0.018	0.018	0.018	0.018	0.018	0.017	0.016	0.017	0.016	0.017	0.016
38	0.018	0.020	0.019	0.021	0.018	0.020	0.018	0.019	0.018	0.021	0.021	0.020	0.018	0.019	0.018	0.019	0.019	0.020	0.016	0.016
39	0.022	0.022	0.022	0.022	0.022	0.022	0.021	0.021	0.022	0.021	0.021	0.018	0.020	0.017	0.021	0.017	0.019	0.016	0.018	0.017
40	0.024	0.024	0.022	0.024	0.023	0.023	0.022	0.022	0.022	0.022	0.022	0.022	0.021	0.022	0.022	0.022	0.020	0.021	0.019	0.021
41	0.024	0.026	0.024	0.026	0.023	0.024	0.023	0.025	0.023	0.024	0.022	0.024	0.022	0.023	0.022	0.022	0.022	0.022	0.022	0.022
42	0.026	0.026	0.026	0.026	0.025	0.025	0.024	0.025	0.025	0.024	0.023	0.025	0.024	0.024	0.023	0.024	0.022	0.024	0.022	0.024
43	0.026	0.027	0.026	0.027	0.026	0.026	0.025	0.026	0.025	0.026	0.026	0.026	0.024	0.026	0.024	0.024	0.024	0.024	0.022	0.023
44	0.027	0.028	0.026	0.028	0.026	0.028	0.027	0.027	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.024	0.026	0.024	0.026
45	0.030	0.029	0.030	0.027	0.029	0.027	0.029	0.028	0.029	0.028	0.028	0.027	0.027	0.026	0.027	0.026	0.027	0.028	0.027	0.026
46	0.033	0.035	0.033	0.035	0.032	0.034	0.032	0.033	0.031	0.033	0.028	0.032	0.029	0.032	0.029	0.032	0.028	0.032	0.027	0.031
47	0.039	0.038	0.038	0.037	0.037	0.036	0.037	0.037	0.037	0.036	0.036	0.035	0.035	0.034	0.035	0.034	0.035	0.034	0.034	0.033
48	0.039	0.041	0.040	0.041	0.039	0.039	0.037	0.039	0.037	0.038	0.037	0.038	0.037	0.039	0.036	0.037	0.036	0.037	0.036	0.037
49	0.041	0.042	0.041	0.041	0.041	0.041	0.040	0.041	0.039	0.040	0.039	0.040	0.039	0.040	0.039	0.039	0.037	0.039	0.037	0.039
50	0.042	0.044	0.042	0.044	0.042	0.043	0.042	0.042	0.041	0.042	0.041	0.042	0.041	0.041	0.039	0.040	0.039	0.039	0.039	0.041
51	0.045	0.047	0.044	0.045	0.044	0.044	0.043	0.044	0.044	0.043	0.042	0.042	0.041	0.042	0.041	0.042	0.041	0.041	0.040	0.041
52	0.047	0.045	0.046	0.044	0.046	0.045	0.046	0.044	0.045	0.044	0.044	0.043	0.044	0.043	0.043	0.041	0.042	0.041	0.042	0.042
53	0.045	0.046	0.045	0.046	0.045	0.046	0.044	0.046	0.042	0.045	0.042	0.044	0.041	0.044	0.041	0.044	0.041	0.042	0.040	0.042
54	0.041	0.041	0.042	0.043	0.044	0.044	0.044	0.043	0.044	0.044	0.045	0.044	0.044	0.042	0.042	0.042	0.042	0.041	0.041	0.039
55	0.041	0.044	0.042	0.044	0.044	0.046	0.045	0.046	0.045	0.046	0.046	0.047	0.045	0.045	0.044	0.045	0.043	0.044	0.041	0.042
56	0.044	0.046	0.047	0.047	0.048	0.047	0.048	0.048	0.048	0.048	0.048	0.047	0.048	0.047	0.048	0.046	0.046	0.044	0.045	0.042
57	0.048	0.048	0.050	0.048	0.050	0.050	0.050	0.050	0.050	0.049	0.049	0.049	0.049	0.048	0.048	0.047	0.047	0.045	0.045	0.044
58	0.047	0.047	0.048	0.047	0.047	0.047	0.047	0.046	0.047	0.046	0.046	0.045	0.046	0.044	0.044	0.042	0.042	0.041	0.041	0.039
59	0.045	0.043	0.046	0.045	0.046	0.044	0.045	0.044	0.045	0.044	0.044	0.044	0.044	0.042	0.042	0.041	0.041	0.041	0.041	0.041
60	0.037	0.039	0.037	0.038	0.036	0.037	0.033	0.035	0.032	0.035	0.032	0.034	0.030	0.032	0.030	0.031	0.028	0.030	0.026	0.027
61	0.038	0.036	0.035	0.033	0.034	0.032	0.033	0.032	0.033	0.030	0.031	0.030	0.029	0.028	0.028	0.027	0.027	0.026	0.026	0.024
62	0.039	0.039	0.035	0.034	0.035	0.035	0.035	0.034	0.033	0.033	0.033	0.030	0.031	0.028	0.028	0.026	0.028	0.027	0.027	0.026
63	0.041	0.041	0.038	0.039	0.037	0.037	0.034	0.035	0.032	0.034	0.032	0.033	0.031	0.031	0.029	0.030	0.028	0.028	0.027	0.028

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 7.68 SEC
HREF = 0.397E-01

GROUP 10

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.036	0.034	0.035	0.032	0.032	0.032	0.032	0.032	0.032	0.031	0.032	0.031	0.032	0.031	0.031	0.030	0.032	0.031	0.032	0.031
30	0.022	0.022	0.022	0.022	0.022	0.023	0.022	0.021	0.020	0.021	0.020	0.021	0.019	0.020	0.017	0.018	0.017	0.018	0.016	0.018
31	0.019	0.020	0.018	0.019	0.018	0.020	0.019	0.020	0.019	0.019	0.018	0.018	0.016	0.018	0.016	0.017	0.017	0.017	0.015	0.015
32	0.015	0.018	0.014	0.018	0.014	0.019	0.015	0.019	0.015	0.018	0.016	0.016	0.016	0.017	0.014	0.016	0.015	0.017	0.013	0.014
33	0.016	0.016	0.015	0.016	0.016	0.018	0.016	0.018	0.016	0.016	0.015	0.016	0.013	0.015	0.013	0.015	0.012	0.014	0.010	0.014
34	0.015	0.016	0.015	0.016	0.016	0.017	0.015	0.017	0.015	0.016	0.014	0.016	0.014	0.016	0.014	0.015	0.014	0.015	0.012	0.013
35	0.015	0.015	0.016	0.015	0.011	0.015	0.016	0.013	0.017	0.011	0.015	0.015	0.013	0.013	0.014	0.011	0.013	0.016	0.011	0.012
36	0.014	0.016	0.014	0.016	0.013	0.016	0.012	0.014	0.014	0.014	0.014	0.016	0.013	0.013	0.011	0.013	0.012	0.014	0.014	0.014
37	0.015	0.016	0.016	0.015	0.015	0.016	0.016	0.015	0.015	0.014	0.014	0.014	0.015	0.014	0.015	0.014	0.014	0.013	0.015	0.013
38	0.016	0.017	0.017	0.018	0.016	0.016	0.016	0.018	0.018	0.017	0.016	0.016	0.016	0.017	0.016	0.017	0.016	0.016	0.016	0.016
39	0.019	0.018	0.018	0.016	0.018	0.016	0.019	0.018	0.018	0.017	0.018	0.017	0.017	0.016	0.018	0.017	0.018	0.017	0.016	0.017
40	0.020	0.021	0.019	0.019	0.018	0.019	0.019	0.019	0.018	0.018	0.015	0.018	0.016	0.018	0.014	0.018	0.015	0.019	0.015	0.018
41	0.021	0.022	0.021	0.022	0.020	0.021	0.018	0.021	0.019	0.021	0.019	0.019	0.018	0.020	0.018	0.020	0.018	0.019	0.018	0.020
42	0.021	0.022	0.021	0.022	0.022	0.022	0.021	0.021	0.021	0.021	0.020	0.022	0.019	0.020	0.019	0.021	0.020	0.021	0.019	0.020
43	0.022	0.023	0.023	0.024	0.022	0.022	0.021	0.022	0.022	0.022	0.021	0.022	0.020	0.022	0.021	0.022	0.021	0.022	0.020	0.021
44	0.024	0.025	0.024	0.024	0.022	0.024	0.022	0.023	0.022	0.023	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.023	0.022	0.022
45	0.026	0.026	0.026	0.025	0.026	0.026	0.026	0.026	0.026	0.024	0.024	0.024	0.025	0.026	0.026	0.024	0.022	0.024	0.024	0.022
46	0.027	0.031	0.029	0.031	0.028	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.029	0.029	0.028	0.029	0.028	0.030
47	0.034	0.034	0.035	0.034	0.035	0.034	0.035	0.033	0.034	0.032	0.033	0.032	0.033	0.032	0.034	0.032	0.032	0.031	0.032	0.030
48	0.037	0.038	0.037	0.039	0.037	0.037	0.035	0.037	0.036	0.037	0.035	0.036	0.034	0.036	0.034	0.035	0.035	0.036	0.035	0.035
49	0.038	0.041	0.039	0.041	0.039	0.039	0.037	0.038	0.037	0.038	0.037	0.037	0.036	0.037	0.036	0.037	0.037	0.037	0.035	0.036
50	0.040	0.041	0.038	0.041	0.039	0.041	0.039	0.040	0.038	0.039	0.037	0.039	0.037	0.039	0.037	0.039	0.037	0.038	0.036	0.037
51	0.040	0.041	0.040	0.041	0.039	0.040	0.039	0.040	0.039	0.039	0.037	0.039	0.038	0.039	0.038	0.039	0.037	0.038	0.037	0.039
52	0.042	0.041	0.041	0.041	0.041	0.041	0.041	0.039	0.041	0.041	0.041	0.039	0.039	0.038	0.039	0.039	0.039	0.038	0.038	0.037
53	0.041	0.041	0.039	0.041	0.039	0.039	0.037	0.037	0.037	0.038	0.037	0.037	0.035	0.037	0.035	0.037	0.034	0.035	0.033	0.036
54	0.041	0.039	0.038	0.036	0.036	0.032	0.032	0.029	0.030	0.027	0.030	0.027	0.029	0.026	0.027	0.026	0.027	0.026	0.026	0.025
55	0.039	0.041	0.038	0.038	0.035	0.033	0.030	0.030	0.028	0.026	0.026	0.026	0.026	0.026	0.024	0.025	0.023	0.024	0.022	0.023
56	0.043	0.041	0.040	0.038	0.038	0.035	0.033	0.030	0.030	0.027	0.027	0.026	0.027	0.026	0.026	0.024	0.024	0.023	0.022	0.022
57	0.044	0.042	0.041	0.039	0.038	0.036	0.035	0.031	0.031	0.030	0.028	0.027	0.026	0.026	0.026	0.025	0.026	0.022	0.022	0.022
58	0.040	0.037	0.037	0.035	0.035	0.033	0.032	0.030	0.030	0.027	0.027	0.026	0.026	0.025	0.025	0.024	0.025	0.024	0.023	0.022
59	0.041	0.039	0.039	0.037	0.037	0.037	0.037	0.035	0.036	0.034	0.035	0.032	0.032	0.031	0.032	0.032	0.032	0.032	0.032	0.030
60	0.026	0.026	0.026	0.026	0.024	0.024	0.022	0.023	0.022	0.022	0.021	0.022	0.020	0.021	0.018	0.020	0.018	0.019	0.019	0.018
61	0.024	0.023	0.024	0.022	0.022	0.020	0.022	0.019	0.020	0.017	0.019	0.018	0.017	0.017	0.018	0.016	0.017	0.014	0.016	0.015
62	0.026	0.025	0.025	0.024	0.024	0.023	0.023	0.021	0.022	0.019	0.020	0.021	0.020	0.021	0.019	0.021	0.018	0.016	0.016	0.018
63	0.027	0.026	0.026	0.025	0.024	0.025	0.022	0.024	0.022	0.023	0.020	0.022	0.020	0.022	0.020	0.020	0.018	0.019	0.017	0.017

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 7.68 SEC
GROUP 10 HREF = 0.397E-01

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.032	0.030	0.031	0.031	0.031	0.031	0.031	0.030	0.030	0.030
30	0.016	0.017	0.015	0.016	0.015	0.015	0.015	0.017	0.015	0.015
31	0.013	0.015	0.014	0.015	0.013	0.014	0.012	0.013	0.012	0.014
32	0.012	0.013	0.012	0.013	0.012	0.014	0.012	0.012	0.012	0.011
33	0.009	0.012	0.010	0.013	0.009	0.012	0.009	0.011	0.011	0.012
34	0.011	0.013	0.012	0.014	0.011	0.013	0.011	0.011	0.010	0.012
35	0.012	0.012	0.013	0.012	0.012	0.014	0.012	0.011	0.011	0.012
36	0.012	0.014	0.010	0.012	0.011	0.013	0.012	0.014	0.012	0.012
37	0.015	0.013	0.014	0.012	0.013	0.012	0.014	0.013	0.014	0.013
38	0.016	0.016	0.015	0.016	0.014	0.016	0.015	0.016	0.014	0.015
39	0.017	0.017	0.018	0.016	0.017	0.017	0.017	0.017	0.016	0.016
40	0.015	0.018	0.016	0.018	0.014	0.018	0.017	0.018	0.018	0.018
41	0.018	0.019	0.017	0.019	0.018	0.019	0.018	0.019	0.015	0.019
42	0.019	0.020	0.019	0.020	0.018	0.020	0.018	0.020	0.019	0.019
43	0.020	0.021	0.019	0.021	0.019	0.021	0.019	0.021	0.020	0.022
44	0.021	0.022	0.021	0.022	0.021	0.022	0.021	0.022	0.021	0.022
45	0.024	0.023	0.025	0.024	0.023	0.023	0.023	0.022	0.023	0.022
46	0.028	0.029	0.028	0.028	0.026	0.027	0.027	0.028	0.028	0.028
47	0.032	0.030	0.032	0.031	0.032	0.032	0.032	0.030	0.031	0.031
48	0.033	0.034	0.033	0.034	0.033	0.034	0.032	0.034	0.031	0.033
49	0.034	0.036	0.034	0.037	0.035	0.035	0.035	0.035	0.033	0.034
50	0.037	0.038	0.037	0.037	0.035	0.037	0.035	0.037	0.035	0.037
51	0.037	0.038	0.037	0.037	0.037	0.037	0.036	0.037	0.036	0.037
52	0.039	0.037	0.038	0.037	0.037	0.037	0.037	0.037	0.036	0.035
53	0.034	0.035	0.032	0.034	0.033	0.034	0.032	0.032	0.032	0.032
54	0.026	0.026	0.026	0.025	0.025	0.024	0.024	0.024	0.024	0.023
55	0.022	0.022	0.021	0.022	0.017	0.021	0.015	0.020	0.015	0.020
56	0.022	0.021	0.021	0.021	0.021	0.019	0.019	0.018	0.018	0.016
57	0.022	0.021	0.021	0.020	0.020	0.018	0.018	0.017	0.018	0.017
58	0.022	0.021	0.022	0.020	0.020	0.019	0.019	0.018	0.018	0.016
59	0.030	0.029	0.030	0.029	0.029	0.028	0.029	0.027	0.026	0.025
60	0.018	0.018	0.016	0.017	0.016	0.017	0.014	0.016	0.015	0.016
61	0.016	0.015	0.016	0.013	0.015	0.012	0.013	0.011	0.014	0.011
62	0.016	0.016	0.015	0.012	0.015	0.013	0.012	0.011	0.012	0.009
63	0.016	0.017	0.016	0.017	0.016	0.016	0.013	0.014	0.013	0.014

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT = H(,9TO)/HRFR
IR SCAN TIME 7.68 SEC
HRFR = 0.397E-01

GROUP 10

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.016	0.016	0.018	0.017	0.018	0.018	0.022	0.022	0.025	0.024	0.027	0.027	0.032	0.032	0.048	0.121	0.217	0.262	0.285	0.298
65	0.014	0.014	0.016	0.016	0.017	0.018	0.022	0.022	0.023	0.023	0.024	0.026	0.031	0.034	0.050	0.129	0.218	0.258	0.280	0.295
66	0.014	0.016	0.016	0.017	0.018	0.020	0.022	0.023	0.024	0.024	0.026	0.027	0.032	0.034	0.060	0.150	0.227	0.259	0.280	0.293
67	0.014	0.016	0.016	0.017	0.018	0.019	0.022	0.024	0.025	0.026	0.025	0.026	0.031	0.037	0.082	0.178	0.237	0.263	0.280	0.291
68	0.016	0.016	0.017	0.018	0.018	0.021	0.022	0.026	0.026	0.026	0.026	0.028	0.032	0.042	0.101	0.194	0.240	0.264	0.279	0.288
69	0.017	0.018	0.018	0.018	0.019	0.020	0.022	0.025	0.026	0.026	0.027	0.027	0.032	0.048	0.127	0.208	0.244	0.263	0.277	0.285
70	0.019	0.019	0.014	0.018	0.015	0.021	0.024	0.026	0.026	0.026	0.026	0.029	0.034	0.063	0.150	0.219	0.247	0.266	0.278	0.287
71	0.018	0.016	0.018	0.017	0.019	0.021	0.024	0.025	0.026	0.024	0.026	0.026	0.035	0.067	0.159	0.221	0.247	0.262	0.273	0.281
72	0.017	0.018	0.016	0.018	0.018	0.021	0.024	0.027	0.027	0.027	0.026	0.028	0.034	0.074	0.164	0.222	0.246	0.261	0.271	0.280
73	0.016	0.017	0.017	0.018	0.018	0.022	0.024	0.028	0.026	0.028	0.026	0.029	0.035	0.080	0.168	0.222	0.244	0.259	0.268	0.276
74	0.015	0.016	0.016	0.018	0.017	0.022	0.024	0.028	0.027	0.026	0.026	0.028	0.038	0.096	0.181	0.226	0.246	0.259	0.268	0.275
75	0.015	0.015	0.015	0.017	0.017	0.021	0.024	0.027	0.027	0.027	0.026	0.030	0.047	0.121	0.198	0.232	0.249	0.261	0.268	0.275
76	0.014	0.015	0.015	0.017	0.018	0.022	0.024	0.027	0.026	0.027	0.026	0.032	0.062	0.147	0.209	0.235	0.249	0.260	0.268	0.274
77	0.012	0.012	0.015	0.016	0.017	0.020	0.025	0.027	0.027	0.025	0.027	0.032	0.082	0.168	0.217	0.237	0.250	0.259	0.266	0.272
78	0.014	0.018	0.019	0.019	0.018	0.022	0.026	0.028	0.024	0.026	0.024	0.039	0.104	0.185	0.221	0.238	0.249	0.257	0.263	0.269
79	0.019	0.026	0.029	0.034	0.036	0.035	0.033	0.031	0.033	0.028	0.026	0.041	0.114	0.190	0.221	0.237	0.247	0.254	0.260	0.266
80	0.029	0.032	0.032	0.043	0.039	0.041	0.037	0.034	0.030	0.033	0.032	0.050	0.126	0.196	0.221	0.236	0.245	0.251	0.255	0.260
81	0.030	0.037	0.041	0.057	0.054	0.047	0.039	0.037	0.036	0.035	0.035	0.057	0.132	0.197	0.222	0.235	0.243	0.248	0.251	0.255
82	0.047	0.053	0.064	0.079	0.091	0.070	0.047	0.038	0.032	0.037	0.041	0.068	0.147	0.201	0.222	0.234	0.241	0.245	0.248	0.250
83	0.128	0.082	0.070	0.088	0.109	0.083	0.056	0.047	0.039	0.035	0.041	0.089	0.166	0.206	0.222	0.232	0.238	0.244	0.246	0.248
84	0.175	0.105	0.081	0.088	0.113	0.094	0.059	0.041	0.033	0.036	0.048	0.107	0.180	0.209	0.221	0.228	0.234	0.238	0.242	0.245
85	0.107	0.070	0.056	0.057	0.065	0.065	0.052	0.042	0.033	0.041	0.060	0.120	0.184	0.217	0.236	0.249	0.257	0.260	0.257	0.253
86	0.047	0.043	0.042	0.047	0.054	0.055	0.057	0.055	0.051	0.054	0.056	0.055	0.058	0.064	0.072	0.082	0.103	0.130	0.160	0.184
87	0.047	0.041	0.037	0.039	0.044	0.048	0.047	0.047	0.046	0.047	0.051	0.050	0.049	0.050	0.050	0.051	0.051	0.052	0.053	0.055
88	0.038	0.035	0.034	0.032	0.034	0.035	0.035	0.035	0.037	0.041	0.051	0.048	0.047	0.046	0.046	0.046	0.047	0.047	0.048	0.048
89	0.025	0.025	0.021	0.022	0.023	0.024	0.026	0.030	0.035	0.047	0.055	0.049	0.044	0.046	0.044	0.044	0.042	0.044	0.046	0.044
90	0.016	0.015	0.019	0.020	0.021	0.022	0.024	0.026	0.032	0.041	0.049	0.047	0.044	0.042	0.042	0.042	0.042	0.041	0.042	0.042
91	0.013	0.015	0.016	0.016	0.017	0.016	0.019	0.019	0.023	0.034	0.041	0.041	0.042	0.041	0.042	0.042	0.041	0.041	0.041	0.041
92	0.013	0.013	0.010	0.015	0.011	0.014	0.013	0.016	0.016	0.028	0.035	0.041	0.039	0.041	0.039	0.041	0.039	0.041	0.039	0.041
93	0.012	0.013	0.014	0.012	0.012	0.014	0.017	0.016	0.018	0.022	0.034	0.039	0.041	0.039	0.041	0.039	0.040	0.039	0.039	0.035
94	0.018	0.016	0.014	0.015	0.013	0.016	0.020	0.022	0.021	0.024	0.034	0.040	0.037	0.040	0.039	0.040	0.038	0.039	0.036	0.038
95	0.028	0.026	0.026	0.024	0.024	0.024	0.026	0.023	0.024	0.027	0.036	0.038	0.039	0.038	0.040	0.039	0.039	0.037	0.037	0.036
96	0.032	0.032	0.032	0.035	0.031	0.032	0.030	0.030	0.029	0.033	0.038	0.041	0.038	0.039	0.038	0.039	0.037	0.039	0.037	0.038
97	0.034	0.032	0.032	0.035	0.035	0.035	0.031	0.029	0.028	0.035	0.042	0.044	0.039	0.041	0.039	0.041	0.041	0.042	0.041	0.039
98	0.032	0.032	0.032	0.034	0.036	0.034	0.032	0.027	0.028	0.035	0.044	0.041	0.039	0.039	0.041	0.043	0.046	0.044	0.044	0.039

IR HEAT TRANSFER COEFFICIENT = H(,9TO)/HREF
IR SCAN TIME 7.68 SEC
GROUP 10 HREF = 0.397E-01

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	0.308	0.315	0.323	0.331	0.341	0.350	0.364	0.383	0.405	0.418	0.428	0.445	0.466	0.479	0.487	0.492	0.500	0.506	0.506	0.513
65	0.305	0.311	0.318	0.326	0.332	0.344	0.358	0.372	0.393	0.407	0.418	0.431	0.452	0.464	0.474	0.481	0.487	0.496	0.504	0.509
66	0.301	0.306	0.314	0.323	0.330	0.340	0.354	0.366	0.384	0.401	0.411	0.424	0.442	0.451	0.459	0.468	0.478	0.485	0.492	0.503
67	0.300	0.304	0.311	0.320	0.329	0.339	0.351	0.364	0.377	0.397	0.415	0.421	0.432	0.443	0.451	0.460	0.470	0.471	0.476	0.486
68	0.295	0.302	0.309	0.317	0.325	0.336	0.347	0.361	0.377	0.394	0.411	0.423	0.427	0.434	0.445	0.454	0.460	0.463	0.469	0.478
69	0.294	0.301	0.307	0.316	0.324	0.333	0.343	0.355	0.370	0.385	0.403	0.418	0.425	0.428	0.436	0.448	0.453	0.458	0.464	0.470
70	0.295	0.300	0.307	0.315	0.323	0.335	0.342	0.350	0.363	0.378	0.395	0.412	0.419	0.426	0.429	0.431	0.435	0.443	0.449	0.452
71	0.269	0.295	0.303	0.311	0.319	0.329	0.341	0.349	0.357	0.372	0.389	0.403	0.415	0.420	0.424	0.426	0.431	0.436	0.441	0.446
72	0.287	0.291	0.297	0.306	0.313	0.320	0.331	0.342	0.352	0.365	0.381	0.394	0.406	0.412	0.415	0.419	0.427	0.433	0.435	0.439
73	0.283	0.289	0.294	0.300	0.307	0.314	0.323	0.335	0.344	0.357	0.372	0.384	0.395	0.403	0.406	0.408	0.415	0.422	0.427	0.432
74	0.282	0.288	0.293	0.299	0.306	0.316	0.325	0.336	0.347	0.357	0.367	0.378	0.387	0.397	0.401	0.402	0.404	0.409	0.417	0.424
75	0.282	0.288	0.293	0.300	0.306	0.315	0.326	0.337	0.348	0.361	0.370	0.381	0.392	0.403	0.404	0.402	0.401	0.403	0.409	0.419
76	0.280	0.284	0.290	0.300	0.308	0.317	0.326	0.337	0.348	0.359	0.371	0.382	0.387	0.394	0.399	0.403	0.407	0.408	0.406	0.408
77	0.278	0.284	0.290	0.296	0.305	0.314	0.325	0.337	0.347	0.358	0.371	0.382	0.390	0.396	0.401	0.404	0.406	0.408	0.411	0.413
78	0.274	0.281	0.287	0.293	0.300	0.309	0.320	0.331	0.342	0.353	0.362	0.374	0.385	0.394	0.401	0.406	0.410	0.413	0.416	0.419
79	0.273	0.277	0.283	0.289	0.298	0.305	0.316	0.327	0.340	0.350	0.361	0.369	0.376	0.381	0.386	0.391	0.399	0.405	0.410	0.415
80	0.264	0.272	0.278	0.286	0.293	0.301	0.310	0.321	0.332	0.343	0.355	0.365	0.372	0.377	0.382	0.387	0.391	0.396	0.398	0.402
81	0.258	0.262	0.268	0.275	0.282	0.290	0.298	0.309	0.322	0.336	0.348	0.361	0.369	0.375	0.379	0.383	0.384	0.386	0.390	0.393
82	0.253	0.256	0.260	0.266	0.273	0.281	0.291	0.300	0.309	0.320	0.332	0.344	0.353	0.362	0.368	0.372	0.377	0.381	0.383	0.386
83	0.249	0.251	0.253	0.257	0.264	0.273	0.281	0.290	0.300	0.310	0.320	0.328	0.335	0.342	0.348	0.353	0.357	0.364	0.368	0.373
84	0.246	0.247	0.249	0.252	0.258	0.264	0.272	0.281	0.291	0.301	0.310	0.318	0.323	0.329	0.335	0.338	0.341	0.344	0.348	0.351
85	0.251	0.250	0.250	0.251	0.254	0.259	0.264	0.273	0.282	0.291	0.300	0.308	0.313	0.318	0.322	0.325	0.326	0.328	0.330	0.332
86	0.213	0.238	0.250	0.260	0.275	0.284	0.284	0.276	0.270	0.273	0.284	0.300	0.312	0.317	0.319	0.320	0.322	0.323	0.325	0.326
87	0.056	0.057	0.059	0.064	0.069	0.077	0.079	0.079	0.076	0.077	0.081	0.093	0.103	0.114	0.124	0.133	0.142	0.153	0.164	0.178
88	0.050	0.050	0.051	0.050	0.051	0.051	0.052	0.052	0.052	0.052	0.054	0.055	0.055	0.056	0.058	0.058	0.059	0.059	0.060	0.060
89	0.043	0.045	0.044	0.045	0.046	0.046	0.047	0.048	0.048	0.048	0.048	0.047	0.050	0.052	0.051	0.051	0.051	0.052	0.052	0.051
90	0.042	0.041	0.041	0.041	0.042	0.041	0.044	0.043	0.045	0.044	0.046	0.045	0.046	0.046	0.047	0.047	0.048	0.047	0.048	0.048
91	0.041	0.040	0.040	0.039	0.041	0.041	0.041	0.041	0.042	0.042	0.044	0.044	0.045	0.044	0.045	0.045	0.047	0.046	0.046	0.046
92	0.039	0.039	0.037	0.039	0.038	0.041	0.038	0.040	0.039	0.042	0.043	0.062	0.112	0.126	0.084	0.055	0.047	0.046	0.045	0.046
93	0.038	0.034	0.037	0.034	0.037	0.034	0.038	0.035	0.039	0.037	0.042	0.067	0.135	0.150	0.103	0.059	0.048	0.043	0.043	0.042
94	0.037	0.039	0.036	0.036	0.035	0.036	0.035	0.036	0.035	0.038	0.037	0.041	0.044	0.047	0.043	0.042	0.041	0.041	0.039	0.041
95	0.037	0.037	0.037	0.034	0.034	0.033	0.035	0.035	0.035	0.034	0.036	0.037	0.037	0.036	0.037	0.037	0.039	0.038	0.041	0.039
96	0.036	0.037	0.035	0.035	0.033	0.035	0.032	0.035	0.032	0.035	0.033	0.035	0.033	0.036	0.036	0.039	0.037	0.039	0.037	0.037
97	0.036	0.037	0.035	0.035	0.033	0.034	0.031	0.033	0.032	0.034	0.033	0.035	0.033	0.034	0.033	0.036	0.035	0.038	0.037	0.038
98	0.038	0.035	0.036	0.034	0.035	0.033	0.035	0.034	0.035	0.032	0.034	0.034	0.035	0.033	0.034	0.032	0.034	0.034	0.036	0.036

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 7.68 SEC
HRFR = 0.397E-01

GROUP 10

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	0.521	0.527	0.528	0.533	0.544	0.555	0.559	0.554	0.546	0.532	0.519	0.513	0.478	0.326	0.168	0.101	0.075	0.059	0.051	0.046
65	0.514	0.519	0.525	0.527	0.525	0.529	0.539	0.550	0.555	0.553	0.546	0.529	0.514	0.502	0.426	0.261	0.138	0.089	0.068	0.055
66	0.512	0.518	0.522	0.528	0.531	0.528	0.524	0.518	0.523	0.528	0.536	0.542	0.537	0.523	0.510	0.462	0.295	0.147	0.094	0.069
67	0.497	0.506	0.511	0.514	0.521	0.527	0.532	0.530	0.519	0.505	0.499	0.505	0.521	0.533	0.536	0.524	0.488	0.342	0.174	0.102
68	0.483	0.490	0.495	0.506	0.511	0.517	0.526	0.531	0.529	0.521	0.509	0.495	0.485	0.492	0.507	0.525	0.528	0.512	0.394	0.211
69	0.476	0.479	0.478	0.484	0.497	0.501	0.508	0.516	0.518	0.522	0.520	0.518	0.513	0.500	0.491	0.493	0.500	0.507	0.513	0.429
70	0.459	0.468	0.472	0.472	0.481	0.492	0.495	0.495	0.499	0.507	0.512	0.515	0.520	0.523	0.526	0.517	0.499	0.492	0.495	0.505
71	0.450	0.456	0.460	0.467	0.475	0.481	0.487	0.488	0.486	0.486	0.492	0.496	0.501	0.511	0.517	0.522	0.526	0.517	0.505	0.496
72	0.444	0.451	0.457	0.458	0.459	0.467	0.472	0.475	0.476	0.476	0.478	0.482	0.481	0.486	0.494	0.499	0.506	0.516	0.522	0.519
73	0.435	0.441	0.446	0.445	0.442	0.447	0.457	0.466	0.468	0.469	0.469	0.470	0.469	0.468	0.466	0.468	0.469	0.469	0.482	0.504
74	0.431	0.433	0.428	0.429	0.433	0.441	0.451	0.459	0.460	0.461	0.461	0.460	0.462	0.463	0.458	0.459	0.462	0.461	0.458	0.453
75	0.428	0.430	0.428	0.427	0.434	0.448	0.452	0.458	0.457	0.454	0.454	0.451	0.449	0.451	0.451	0.460	0.462	0.461	0.459	0.459
76	0.413	0.424	0.430	0.428	0.429	0.438	0.446	0.449	0.448	0.449	0.448	0.447	0.444	0.444	0.443	0.443	0.442	0.443	0.446	0.451
77	0.416	0.421	0.425	0.429	0.435	0.437	0.436	0.437	0.437	0.438	0.439	0.438	0.436	0.436	0.437	0.434	0.429	0.428	0.426	0.428
78	0.421	0.425	0.428	0.429	0.430	0.430	0.428	0.427	0.426	0.426	0.426	0.425	0.424	0.425	0.428	0.430	0.431	0.433	0.431	0.426
79	0.419	0.423	0.426	0.427	0.427	0.426	0.427	0.427	0.428	0.427	0.425	0.421	0.419	0.415	0.414	0.412	0.409	0.409	0.410	0.414
80	0.405	0.409	0.412	0.416	0.417	0.420	0.421	0.424	0.424	0.425	0.424	0.422	0.418	0.416	0.414	0.414	0.412	0.415	0.414	0.411
81	0.397	0.402	0.404	0.405	0.405	0.408	0.411	0.416	0.419	0.422	0.426	0.428	0.427	0.425	0.422	0.419	0.416	0.416	0.414	0.411
82	0.391	0.395	0.398	0.402	0.404	0.407	0.408	0.409	0.412	0.415	0.417	0.420	0.423	0.425	0.427	0.429	0.429	0.427	0.422	0.414
83	0.378	0.383	0.388	0.393	0.399	0.404	0.407	0.410	0.412	0.415	0.416	0.419	0.420	0.422	0.423	0.424	0.427	0.426	0.423	0.420
84	0.356	0.361	0.367	0.373	0.381	0.387	0.392	0.398	0.404	0.407	0.411	0.414	0.416	0.418	0.422	0.423	0.426	0.424	0.419	0.416
85	0.334	0.338	0.343	0.347	0.351	0.355	0.358	0.363	0.367	0.374	0.380	0.388	0.396	0.404	0.409	0.415	0.421	0.425	0.425	0.423
86	0.328	0.329	0.331	0.332	0.333	0.332	0.332	0.332	0.333	0.334	0.336	0.339	0.344	0.351	0.360	0.371	0.384	0.397	0.409	0.420
87	0.191	0.207	0.220	0.232	0.242	0.251	0.256	0.260	0.262	0.264	0.264	0.264	0.264	0.266	0.268	0.274	0.282	0.292	0.305	0.322
88	0.062	0.063	0.064	0.065	0.066	0.067	0.068	0.068	0.069	0.068	0.069	0.068	0.069	0.070	0.071	0.072	0.074	0.075	0.079	0.084
89	0.053	0.054	0.055	0.055	0.056	0.057	0.058	0.057	0.058	0.058	0.058	0.059	0.059	0.059	0.059	0.058	0.059	0.059	0.060	0.060
90	0.050	0.050	0.050	0.050	0.051	0.050	0.051	0.051	0.052	0.052	0.054	0.053	0.054	0.053	0.054	0.054	0.055	0.055	0.055	0.055
91	0.047	0.047	0.048	0.047	0.048	0.048	0.049	0.050	0.050	0.051	0.052	0.052	0.052	0.051	0.051	0.051	0.052	0.051	0.052	0.052
92	0.045	0.045	0.045	0.046	0.047	0.048	0.048	0.050	0.052	0.062	0.075	0.070	0.056	0.053	0.050	0.051	0.050	0.051	0.049	0.050
93	0.042	0.043	0.043	0.044	0.045	0.046	0.048	0.048	0.057	0.109	0.166	0.147	0.090	0.061	0.053	0.050	0.049	0.048	0.048	0.050
94	0.041	0.043	0.041	0.044	0.042	0.045	0.045	0.048	0.048	0.059	0.085	0.082	0.059	0.052	0.048	0.050	0.047	0.048	0.048	0.050
95	0.041	0.041	0.042	0.042	0.045	0.044	0.046	0.045	0.046	0.046	0.046	0.046	0.047	0.047	0.048	0.046	0.047	0.046	0.049	0.049
96	0.041	0.041	0.039	0.042	0.042	0.045	0.044	0.045	0.044	0.045	0.044	0.047	0.046	0.047	0.047	0.047	0.047	0.048	0.048	0.050
97	0.037	0.039	0.039	0.041	0.041	0.044	0.042	0.044	0.042	0.045	0.044	0.046	0.045	0.047	0.047	0.048	0.047	0.049	0.048	0.050
98	0.037	0.037	0.039	0.038	0.041	0.041	0.042	0.044	0.043	0.044	0.045	0.045	0.046	0.046	0.047	0.047	0.048	0.048	0.050	0.050

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 7.68 SEC
GROUP 10 HRFR = 0.397E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.044	0.042	0.041	0.039	0.039	0.037	0.037	0.035	0.036	0.033	0.033	0.031	0.032	0.031	0.032	0.031	0.031	0.029	0.029	0.027
65	0.047	0.044	0.043	0.041	0.041	0.039	0.038	0.037	0.037	0.034	0.035	0.033	0.033	0.032	0.032	0.032	0.032	0.031	0.030	0.030
66	0.057	0.048	0.045	0.043	0.042	0.041	0.039	0.037	0.037	0.035	0.035	0.033	0.033	0.032	0.033	0.032	0.032	0.031	0.031	0.030
67	0.075	0.058	0.050	0.043	0.042	0.039	0.040	0.037	0.037	0.034	0.035	0.032	0.034	0.032	0.032	0.030	0.031	0.030	0.031	0.030
68	0.113	0.081	0.062	0.050	0.045	0.042	0.041	0.040	0.037	0.037	0.034	0.035	0.033	0.032	0.030	0.032	0.030	0.031	0.030	0.029
69	0.243	0.124	0.085	0.064	0.051	0.044	0.041	0.038	0.037	0.035	0.035	0.032	0.032	0.031	0.031	0.030	0.030	0.027	0.027	0.026
70	0.441	0.262	0.135	0.089	0.065	0.051	0.042	0.041	0.037	0.037	0.035	0.035	0.031	0.032	0.030	0.031	0.029	0.030	0.027	0.027
71	0.493	0.462	0.312	0.156	0.095	0.069	0.054	0.044	0.041	0.037	0.037	0.034	0.034	0.032	0.032	0.031	0.031	0.028	0.028	0.027
72	0.510	0.493	0.459	0.332	0.175	0.101	0.073	0.057	0.045	0.041	0.038	0.038	0.035	0.035	0.032	0.032	0.030	0.030	0.028	0.028
73	0.520	0.519	0.504	0.478	0.386	0.229	0.120	0.082	0.063	0.050	0.041	0.039	0.035	0.036	0.033	0.033	0.032	0.032	0.030	0.030
74	0.447	0.453	0.469	0.484	0.481	0.425	0.274	0.141	0.087	0.066	0.049	0.042	0.037	0.037	0.033	0.034	0.030	0.032	0.031	0.030
75	0.450	0.443	0.441	0.442	0.448	0.455	0.429	0.300	0.156	0.094	0.068	0.053	0.042	0.038	0.035	0.035	0.032	0.032	0.030	0.030
76	0.454	0.455	0.451	0.442	0.430	0.421	0.417	0.401	0.311	0.180	0.100	0.071	0.055	0.043	0.037	0.036	0.033	0.033	0.030	0.031
77	0.434	0.441	0.447	0.447	0.441	0.434	0.421	0.404	0.379	0.294	0.167	0.094	0.069	0.055	0.045	0.037	0.035	0.032	0.032	0.029
78	0.419	0.416	0.416	0.421	0.427	0.429	0.430	0.426	0.407	0.378	0.301	0.181	0.099	0.070	0.056	0.047	0.038	0.035	0.031	0.031
79	0.419	0.422	0.422	0.419	0.417	0.414	0.410	0.410	0.416	0.412	0.390	0.326	0.208	0.112	0.074	0.058	0.050	0.042	0.037	0.031
80	0.407	0.403	0.406	0.410	0.414	0.414	0.411	0.410	0.403	0.397	0.392	0.384	0.345	0.244	0.135	0.082	0.060	0.052	0.048	0.042
81	0.410	0.403	0.397	0.399	0.402	0.405	0.403	0.401	0.402	0.403	0.396	0.383	0.369	0.354	0.294	0.189	0.102	0.068	0.054	0.049
82	0.411	0.409	0.402	0.396	0.395	0.399	0.404	0.404	0.399	0.397	0.398	0.395	0.384	0.368	0.345	0.288	0.178	0.097	0.063	0.051
83	0.419	0.419	0.417	0.412	0.404	0.401	0.400	0.404	0.406	0.403	0.397	0.398	0.395	0.387	0.372	0.347	0.285	0.181	0.098	0.064
84	0.412	0.409	0.412	0.417	0.421	0.423	0.424	0.423	0.422	0.415	0.410	0.410	0.407	0.401	0.395	0.382	0.363	0.309	0.205	0.111
85	0.419	0.416	0.416	0.419	0.420	0.420	0.422	0.425	0.428	0.433	0.439	0.441	0.437	0.429	0.420	0.409	0.395	0.379	0.328	0.225
86	0.426	0.427	0.427	0.425	0.423	0.422	0.424	0.425	0.426	0.426	0.426	0.426	0.426	0.429	0.431	0.428	0.419	0.415	0.405	0.358
87	0.344	0.370	0.395	0.419	0.441	0.457	0.467	0.470	0.467	0.465	0.461	0.456	0.449	0.441	0.435	0.427	0.420	0.422	0.428	0.429
88	0.092	0.101	0.118	0.138	0.164	0.194	0.230	0.258	0.278	0.293	0.307	0.320	0.331	0.339	0.347	0.358	0.371	0.381	0.390	0.399
89	0.063	0.062	0.064	0.064	0.065	0.065	0.066	0.068	0.070	0.072	0.075	0.077	0.081	0.083	0.083	0.080	0.077	0.075	0.076	0.077
90	0.056	0.055	0.056	0.055	0.056	0.056	0.057	0.057	0.058	0.059	0.063	0.064	0.068	0.069	0.069	0.067	0.064	0.059	0.059	0.058
91	0.052	0.051	0.052	0.052	0.052	0.052	0.052	0.052	0.052	0.053	0.058	0.060	0.063	0.064	0.065	0.065	0.062	0.056	0.054	0.054
92	0.050	0.051	0.050	0.051	0.051	0.053	0.055	0.055	0.053	0.054	0.060	0.066	0.064	0.064	0.068	0.076	0.070	0.058	0.052	0.051
93	0.050	0.049	0.050	0.051	0.056	0.094	0.146	0.140	0.092	0.064	0.059	0.058	0.060	0.062	0.064	0.063	0.060	0.054	0.052	0.050
94	0.050	0.051	0.050	0.052	0.054	0.075	0.114	0.115	0.091	0.062	0.057	0.059	0.061	0.064	0.064	0.064	0.059	0.056	0.054	0.053
95	0.050	0.048	0.050	0.049	0.052	0.052	0.054	0.052	0.053	0.054	0.057	0.060	0.064	0.065	0.067	0.066	0.064	0.059	0.057	0.056
96	0.050	0.051	0.050	0.051	0.052	0.053	0.053	0.055	0.054	0.056	0.058	0.063	0.065	0.069	0.070	0.072	0.068	0.064	0.060	0.061
97	0.050	0.051	0.051	0.054	0.052	0.051	0.054	0.055	0.055	0.056	0.059	0.064	0.069	0.074	0.076	0.077	0.074	0.070	0.065	0.065
98	0.051	0.051	0.052	0.052	0.055	0.055	0.056	0.055	0.056	0.055	0.063	0.069	0.075	0.079	0.082	0.082	0.079	0.072	0.067	0.066

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NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 7.68 SEC
HREF = 0.397E-01

GROUP 10

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.028	0.027	0.027	0.027	0.026	0.026	0.025	0.024	0.024	0.024	0.023	0.022	0.022	0.019	0.021	0.019	0.021	0.019	0.018	0.017
65	0.029	0.028	0.029	0.027	0.026	0.026	0.026	0.025	0.025	0.023	0.023	0.022	0.022	0.022	0.022	0.021	0.019	0.018	0.019	0.018
66	0.030	0.030	0.028	0.027	0.027	0.025	0.026	0.025	0.024	0.023	0.024	0.023	0.023	0.021	0.020	0.020	0.020	0.019	0.019	0.017
67	0.029	0.029	0.028	0.028	0.026	0.026	0.026	0.026	0.025	0.022	0.022	0.022	0.022	0.021	0.021	0.020	0.019	0.019	0.018	0.018
68	0.026	0.027	0.025	0.026	0.024	0.024	0.022	0.024	0.022	0.022	0.019	0.021	0.018	0.021	0.016	0.019	0.015	0.018	0.017	0.018
69	0.027	0.025	0.026	0.024	0.024	0.024	0.023	0.022	0.021	0.020	0.021	0.019	0.019	0.017	0.017	0.016	0.016	0.016	0.016	0.009
70	0.026	0.026	0.025	0.026	0.024	0.023	0.022	0.021	0.021	0.022	0.019	0.020	0.018	0.018	0.016	0.017	0.016	0.016	0.013	0.014
71	0.026	0.026	0.026	0.026	0.025	0.022	0.022	0.022	0.022	0.021	0.021	0.020	0.019	0.017	0.017	0.016	0.016	0.015	0.016	0.014
72	0.026	0.027	0.026	0.026	0.024	0.024	0.022	0.023	0.021	0.022	0.021	0.021	0.021	0.018	0.016	0.017	0.016	0.017	0.015	0.016
73	0.027	0.027	0.026	0.026	0.023	0.025	0.024	0.024	0.022	0.022	0.020	0.021	0.019	0.019	0.018	0.019	0.017	0.017	0.014	0.016
74	0.028	0.028	0.026	0.027	0.026	0.026	0.024	0.025	0.022	0.022	0.021	0.021	0.019	0.020	0.019	0.018	0.017	0.017	0.016	0.016
75	0.026	0.027	0.025	0.026	0.022	0.025	0.022	0.024	0.022	0.022	0.019	0.020	0.018	0.019	0.016	0.019	0.017	0.018	0.016	0.016
76	0.027	0.028	0.026	0.027	0.026	0.026	0.024	0.024	0.022	0.022	0.021	0.021	0.020	0.020	0.018	0.018	0.016	0.017	0.013	0.016
77	0.028	0.027	0.027	0.026	0.026	0.024	0.023	0.023	0.022	0.022	0.022	0.020	0.020	0.018	0.018	0.017	0.018	0.017	0.017	0.014
78	0.030	0.029	0.027	0.026	0.026	0.026	0.026	0.024	0.022	0.023	0.021	0.022	0.019	0.021	0.019	0.019	0.016	0.017	0.016	0.017
79	0.031	0.030	0.028	0.026	0.025	0.024	0.024	0.023	0.023	0.022	0.022	0.019	0.020	0.018	0.019	0.017	0.017	0.016	0.016	0.015
80	0.034	0.031	0.028	0.027	0.026	0.025	0.022	0.023	0.022	0.022	0.019	0.020	0.018	0.019	0.017	0.018	0.016	0.016	0.015	0.016
81	0.045	0.042	0.035	0.032	0.027	0.027	0.024	0.024	0.023	0.024	0.023	0.023	0.022	0.022	0.022	0.022	0.021	0.022	0.022	0.022
82	0.045	0.045	0.042	0.041	0.034	0.032	0.026	0.025	0.021	0.021	0.017	0.019	0.016	0.018	0.016	0.016	0.015	0.016	0.014	0.015
83	0.050	0.046	0.042	0.043	0.041	0.041	0.038	0.038	0.033	0.031	0.026	0.024	0.021	0.020	0.017	0.018	0.011	0.015	0.009	0.014
84	0.069	0.052	0.046	0.043	0.042	0.041	0.041	0.039	0.040	0.038	0.038	0.035	0.034	0.030	0.026	0.024	0.022	0.018	0.016	0.013
85	0.124	0.075	0.055	0.048	0.042	0.041	0.038	0.039	0.037	0.038	0.036	0.037	0.037	0.038	0.035	0.036	0.032	0.032	0.027	0.026
86	0.253	0.143	0.082	0.056	0.045	0.039	0.038	0.037	0.037	0.033	0.035	0.035	0.037	0.036	0.037	0.036	0.037	0.035	0.036	0.034
87	0.407	0.320	0.194	0.104	0.063	0.047	0.039	0.038	0.036	0.037	0.035	0.036	0.034	0.035	0.035	0.035	0.035	0.037	0.034	0.035
88	0.403	0.391	0.308	0.178	0.094	0.059	0.047	0.041	0.041	0.039	0.039	0.037	0.037	0.034	0.034	0.033	0.035	0.035	0.036	0.035
89	0.081	0.082	0.079	0.067	0.056	0.050	0.048	0.046	0.044	0.041	0.040	0.041	0.037	0.036	0.035	0.033	0.034	0.032	0.032	0.030
90	0.060	0.059	0.056	0.052	0.050	0.047	0.046	0.044	0.043	0.041	0.041	0.038	0.038	0.034	0.035	0.032	0.034	0.031	0.032	0.027
91	0.052	0.051	0.048	0.046	0.046	0.044	0.046	0.045	0.044	0.041	0.041	0.039	0.039	0.037	0.037	0.035	0.035	0.033	0.034	0.031
92	0.049	0.048	0.046	0.047	0.045	0.046	0.044	0.046	0.044	0.044	0.042	0.042	0.041	0.041	0.037	0.038	0.036	0.037	0.033	0.034
93	0.050	0.048	0.048	0.047	0.047	0.046	0.047	0.044	0.045	0.044	0.044	0.043	0.042	0.041	0.041	0.039	0.039	0.036	0.037	0.034
94	0.051	0.051	0.050	0.051	0.050	0.050	0.048	0.049	0.048	0.048	0.047	0.046	0.045	0.045	0.044	0.044	0.041	0.041	0.039	0.039
95	0.056	0.055	0.055	0.054	0.055	0.054	0.054	0.054	0.052	0.052	0.051	0.051	0.051	0.049	0.049	0.047	0.047	0.045	0.044	0.042
96	0.059	0.062	0.059	0.062	0.060	0.061	0.059	0.059	0.057	0.058	0.057	0.057	0.056	0.055	0.055	0.052	0.053	0.052	0.050	0.050
97	0.065	0.065	0.066	0.067	0.066	0.067	0.066	0.067	0.066	0.068	0.067	0.068	0.065	0.066	0.064	0.065	0.064	0.065	0.063	0.064
98	0.066	0.067	0.070	0.071	0.073	0.076	0.076	0.079	0.080	0.082	0.083	0.083	0.084	0.082	0.082	0.081	0.081	0.079	0.079	0.077

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 7.68 SEC
GROUP 10 HREF = 0.397E-01

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.018	0.016	0.018	0.016	0.017	0.016	0.016	0.014	0.015	0.014
65	0.018	0.018	0.017	0.016	0.016	0.015	0.017	0.016	0.014	0.012
66	0.018	0.016	0.017	0.016	0.015	0.014	0.015	0.014	0.013	0.012
67	0.016	0.016	0.016	0.016	0.015	0.014	0.014	0.012	0.013	0.012
68	0.016	0.015	0.014	0.013	0.013	0.013	0.011	0.011	0.009	0.011
69	0.013	0.009	0.012	0.008	0.011	0.006	0.009	0.005	0.008	0.005
70	0.012	0.013	0.011	0.012	0.010	0.010	0.008	0.008	0.006	0.008
71	0.014	0.011	0.012	0.011	0.010	0.010	0.010	0.009	0.008	0.006
72	0.014	0.014	0.012	0.012	0.010	0.010	0.009	0.010	0.008	0.010
73	0.013	0.014	0.012	0.012	0.011	0.011	0.008	0.009	0.008	0.009
74	0.015	0.015	0.013	0.014	0.011	0.011	0.009	0.010	0.007	0.009
75	0.014	0.015	0.013	0.013	0.012	0.012	0.009	0.010	0.007	0.008
76	0.011	0.016	0.010	0.012	0.008	0.011	0.007	0.010	0.007	0.008
77	0.015	0.013	0.013	0.012	0.011	0.011	0.010	0.008	0.007	0.006
78	0.014	0.015	0.013	0.013	0.011	0.012	0.009	0.010	0.008	0.008
79	0.016	0.014	0.014	0.012	0.013	0.012	0.010	0.008	0.010	0.008
80	0.014	0.014	0.012	0.013	0.012	0.011	0.009	0.010	0.009	0.010
81	0.021	0.022	0.019	0.020	0.019	0.020	0.018	0.017	0.016	0.017
82	0.011	0.013	0.011	0.012	0.009	0.011	0.007	0.009	0.007	0.009
83	0.009	0.013	0.007	0.011	0.006	0.010	0.005	0.010	0.004	0.008
84	0.013	0.011	0.011	0.010	0.010	0.008	0.008	0.006	0.008	0.006
85	0.022	0.021	0.016	0.015	0.011	0.011	0.008	0.009	0.006	0.008
86	0.034	0.031	0.030	0.025	0.023	0.020	0.017	0.014	0.013	0.010
87	0.033	0.035	0.033	0.035	0.031	0.031	0.027	0.026	0.023	0.022
88	0.034	0.033	0.034	0.032	0.033	0.031	0.030	0.028	0.028	0.027
89	0.029	0.027	0.029	0.029	0.029	0.026	0.026	0.026	0.025	0.025
90	0.028	0.025	0.026	0.026	0.026	0.025	0.025	0.022	0.024	0.023
91	0.031	0.030	0.030	0.029	0.030	0.027	0.026	0.026	0.025	0.023
92	0.031	0.032	0.031	0.032	0.032	0.032	0.030	0.029	0.028	0.028
93	0.035	0.032	0.033	0.032	0.034	0.033	0.034	0.032	0.033	0.032
94	0.037	0.038	0.036	0.037	0.037	0.038	0.037	0.038	0.037	0.037
95	0.042	0.041	0.043	0.041	0.042	0.041	0.043	0.042	0.042	0.041
96	0.049	0.051	0.050	0.051	0.049	0.051	0.050	0.051	0.050	0.050
97	0.061	0.064	0.063	0.064	0.063	0.064	0.063	0.064	0.063	0.063
98	0.078	0.077	0.078	0.078	0.079	0.079	0.079	0.078	0.079	0.076

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

GROUP 13

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
234 57	593.936	593.979	593.979	593.979	0.000	591.671
234 58	594.066	594.110	593.979	594.066	0.000	591.671
234 59	594.153	594.197	593.979	594.197	0.000	591.671
235 0	594.284	594.328	593.979	594.284	0.000	591.671
235 1	594.415	594.415	593.979	594.371	0.000	591.671
235 1	594.458	594.415	593.979	594.415	0.000	591.671
235 2	594.502	594.458	593.979	594.415	0.000	591.671
235 3	594.545	594.502	593.979	594.458	0.000	591.671
235 4	594.589	594.589	593.979	594.545	0.000	591.671
235 5	594.676	594.632	593.979	594.545	0.000	591.671
235 6	594.719	594.676	593.979	594.589	0.000	591.671
235 7	594.719	594.676	593.979	594.632	0.000	591.671
235 8	594.763	594.719	593.979	594.632	0.000	591.671
235 9	594.806	594.763	593.979	594.676	0.000	591.671
235 10	594.850	594.806	593.979	594.676	0.000	591.671
235 11	594.850	594.806	593.979	594.719	0.000	591.671
235 12	594.894	594.850	593.979	594.719	0.000	591.671
235 13	594.937	594.850	593.979	594.763	0.000	591.671
235 14	594.937	594.894	593.979	594.763	0.000	591.671
235 15	594.937	594.894	593.979	594.763	0.000	591.671
235 16	594.981	594.894	593.979	594.763	0.000	591.671
235 17	594.981	594.937	593.979	594.806	0.000	591.671
235 18	595.024	594.937	593.979	594.806	0.000	591.671
235 19	595.024	594.981	593.979	594.806	0.000	591.671
235 20	595.024	594.981	593.979	594.806	0.000	591.671
235 21	595.068	594.981	593.979	594.850	0.000	591.671
235 22	595.068	594.981	593.979	594.850	0.000	591.671
235 23	595.068	595.024	593.979	594.850	0.000	591.671
235 24	595.111	595.024	593.979	594.850	0.000	591.671
235 25	595.111	595.024	593.979	594.850	0.000	591.671
235 25	595.111	595.024	593.979	594.850	0.000	591.671
235 25	595.111	595.024	593.979	594.850	0.000	591.671
235 26	595.111	595.024	593.979	594.850	0.000	591.671
235 27	595.111	595.024	593.979	594.894	0.000	591.671

NASA/R1 OH90 TRANSITION TEST
V416-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

GROUP	* * * * TITLE TYPE	MODEL DESCRIPTION * * * * GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
13	RSI FORWARD	0.01	0.000	-0.01	30.01	0.053	2	34	21

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/F FT-1	HRFR BTU/FT2-SEC-R	INITIAL TEMP DEG R
7.94	206.12	1287.67	94.62	0.0222	3786.	0.100E+04	0.762E-07	0.977E+06	0.204E-01	536.7

IR CAMERA INFORMATION

MOUNTING LOCATION	260
F STOP	1.8
LENS-DEG	15
SENSITIVITY	1000.
BLACK LEVEL VOLTAGE	2.4542
LINE SCAN PHI	90
MODEL EMISSIVITY	0.96
REF EMISSIVITY	0.94
WINDOW FACTOR	0.860

TIME RECORDS

LIFT OFF	0.00
CENTER LINE	1.00
IR SCAN TIME	28.00
DELTA TIME,SEC	27.44
PHOTO 1 TIME	235
PHOTO 2 TIME	0
PHOTO 3 TIME	0
PHOTO 4 TIME	0

REFERENCE TARGET INFORMATION

TCR5	500.57
TCR6	-228.49
POINT	0
LINE	-1265

DIGITAL DATA AREA PRINTOUT LOCATION

LINE 29 THROUGH 98
POINT 1 THROUGH 110

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 13

IR SCAN TIME 27.44 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	1.078	1.074	1.074	1.070	1.069	1.068	1.067	1.066	1.065	1.066	1.065	1.060	1.063	1.065	1.061	1.058	1.060	1.060	1.060	1.059
30	1.074	1.071	1.070	1.070	1.069	1.069	1.066	1.066	1.065	1.063	1.061	1.061	1.060	1.061	1.060	1.061	1.059	1.060	1.058	1.058
31	1.072	1.072	1.072	1.069	1.067	1.066	1.065	1.063	1.063	1.062	1.063	1.062	1.062	1.059	1.060	1.058	1.060	1.059	1.059	1.058
32	1.070	1.070	1.069	1.067	1.068	1.066	1.066	1.062	1.063	1.062	1.062	1.060	1.060	1.059	1.061	1.059	1.059	1.054	1.054	1.053
33	1.069	1.068	1.068	1.067	1.067	1.065	1.065	1.063	1.062	1.060	1.060	1.059	1.058	1.058	1.057	1.057	1.057	1.054	1.058	1.056
34	1.068	1.068	1.067	1.066	1.061	1.063	1.061	1.061	1.060	1.056	1.056	1.053	1.053	1.054	1.054	1.056	1.058	1.060	1.061	1.063
35	1.067	1.068	1.066	1.059	1.061	1.057	1.060	1.054	1.056	1.053	1.057	1.053	1.057	1.056	1.061	1.062	1.065	1.065	1.066	1.065
36	1.065	1.061	1.061	1.060	1.059	1.058	1.056	1.054	1.056	1.057	1.061	1.061	1.065	1.062	1.063	1.061	1.063	1.061	1.065	1.061
37	1.061	1.057	1.058	1.054	1.056	1.056	1.056	1.058	1.060	1.061	1.063	1.062	1.063	1.062	1.063	1.062	1.062	1.057	1.051	1.041
38	1.057	1.057	1.057	1.059	1.060	1.062	1.061	1.061	1.062	1.062	1.062	1.063	1.062	1.061	1.057	1.051	1.041	1.030	1.017	1.013
39	1.059	1.061	1.062	1.062	1.063	1.063	1.063	1.061	1.061	1.061	1.063	1.059	1.053	1.044	1.035	1.020	1.017	1.011	1.013	1.008
40	1.063	1.065	1.066	1.063	1.063	1.062	1.062	1.062	1.062	1.057	1.049	1.037	1.029	1.019	1.017	1.009	1.014	1.013	1.016	1.013
41	1.066	1.065	1.066	1.063	1.065	1.061	1.060	1.053	1.047	1.030	1.023	1.016	1.017	1.014	1.017	1.014	1.016	1.014	1.016	1.014
42	1.066	1.066	1.061	1.065	1.058	1.052	1.037	1.030	1.017	1.020	1.013	1.017	1.013	1.019	1.017	1.019	1.017	1.019	1.014	1.019
43	1.066	1.063	1.059	1.051	1.037	1.029	1.023	1.022	1.017	1.020	1.016	1.019	1.016	1.020	1.019	1.019	1.013	1.019	1.014	1.020
44	1.061	1.051	1.038	1.030	1.023	1.023	1.020	1.022	1.020	1.023	1.020	1.023	1.017	1.020	1.019	1.020	1.020	1.023	1.020	1.025
45	1.042	1.035	1.032	1.029	1.029	1.026	1.029	1.025	1.026	1.023	1.026	1.023	1.026	1.023	1.026	1.025	1.029	1.026	1.029	1.028
46	1.038	1.036	1.035	1.032	1.033	1.030	1.032	1.030	1.032	1.029	1.032	1.029	1.033	1.030	1.030	1.030	1.036	1.044	1.062	1.079
47	1.041	1.040	1.040	1.041	1.038	1.038	1.035	1.038	1.035	1.036	1.036	1.038	1.037	1.040	1.038	1.040	1.045	1.075	1.139	1.195
48	1.046	1.046	1.044	1.044	1.041	1.042	1.041	1.042	1.041	1.042	1.040	1.041	1.041	1.044	1.044	1.047	1.053	1.094	1.174	1.238
49	1.049	1.049	1.042	1.047	1.042	1.042	1.041	1.045	1.042	1.042	1.041	1.045	1.044	1.045	1.046	1.049	1.057	1.108	1.191	1.255
50	1.051	1.047	1.047	1.046	1.046	1.046	1.046	1.046	1.046	1.045	1.046	1.045	1.047	1.044	1.049	1.047	1.065	1.126	1.215	1.273
51	1.047	1.047	1.049	1.047	1.049	1.046	1.046	1.046	1.047	1.046	1.049	1.046	1.047	1.049	1.051	1.052	1.074	1.145	1.226	1.276
52	1.044	1.044	1.044	1.042	1.041	1.041	1.041	1.041	1.044	1.041	1.042	1.041	1.046	1.044	1.046	1.047	1.074	1.140	1.204	1.244
53	1.037	1.036	1.035	1.033	1.032	1.030	1.032	1.032	1.033	1.032	1.033	1.033	1.035	1.035	1.038	1.041	1.074	1.132	1.176	1.201
54	1.023	1.022	1.022	1.020	1.019	1.016	1.019	1.016	1.020	1.016	1.019	1.017	1.022	1.019	1.023	1.032	1.078	1.131	1.163	1.179
55	1.014	1.011	1.008	1.008	1.006	1.009	1.008	1.008	1.003	1.006	1.006	1.008	1.008	1.009	1.008	1.026	1.079	1.132	1.159	1.172
56	1.004	1.004	0.996	1.001	0.992	0.997	0.992	0.996	0.990	0.999	0.997	1.001	0.999	0.999	0.999	1.029	1.086	1.135	1.156	1.166
57	1.001	0.999	0.997	0.999	0.996	0.996	0.994	0.994	0.992	0.996	0.996	0.997	0.994	0.999	0.997	1.032	1.091	1.137	1.154	1.165
58	1.001	1.001	0.999	0.996	0.999	0.996	0.994	0.990	0.994	0.992	0.994	0.996	0.997	0.997	1.011	1.042	1.105	1.139	1.154	1.162
59	0.999	0.996	0.997	0.994	0.994	0.990	0.994	0.990	0.994	0.992	0.992	0.988	0.994	0.992	1.006	1.060	1.117	1.144	1.157	1.164
60	0.999	0.994	0.996	0.992	0.994	0.990	0.992	0.990	0.992	0.988	0.990	0.986	0.990	0.992	1.019	1.075	1.124	1.143	1.153	1.160
61	0.999	0.996	0.990	0.990	0.984	0.986	0.990	0.992	0.988	0.990	0.992	0.996	0.992	0.997	1.032	1.090	1.130	1.148	1.156	1.161
62	0.999	0.997	0.996	0.994	0.992	0.992	0.990	0.994	0.992	0.992	0.990	0.992	0.994	1.001	1.050	1.108	1.139	1.150	1.159	1.163
63	1.001	0.999	0.992	0.999	0.992	0.994	0.988	0.992	0.992	0.994	0.992	0.994	0.996	1.008	1.060	1.117	1.143	1.154	1.162	1.168

NASA/RI OH90 TRANSITION TEST
V416-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 13

IR SCAN TIME 27.44 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	1.060	1.057	1.058	1.056	1.059	1.056	1.058	1.054	1.054	1.049	1.050	1.046	1.050	1.046	1.051	1.051	1.051	1.050	1.050	1.051
30	1.057	1.059	1.059	1.058	1.057	1.054	1.052	1.052	1.051	1.052	1.052	1.053	1.053	1.054	1.053	1.056	1.057	1.058	1.057	1.061
31	1.058	1.054	1.056	1.053	1.056	1.053	1.052	1.054	1.057	1.058	1.061	1.060	1.062	1.062	1.065	1.065	1.067	1.066	1.067	1.065
32	1.054	1.053	1.056	1.057	1.060	1.060	1.062	1.062	1.063	1.063	1.066	1.067	1.069	1.067	1.069	1.063	1.061	1.054	1.051	1.044
33	1.058	1.059	1.063	1.062	1.066	1.065	1.067	1.066	1.066	1.065	1.067	1.060	1.057	1.051	1.047	1.040	1.035	1.025	1.019	1.006
34	1.065	1.063	1.065	1.065	1.066	1.067	1.067	1.059	1.056	1.051	1.041	1.030	1.025	1.016	1.006	1.003	0.997	0.997	0.996	0.996
35	1.066	1.065	1.065	1.060	1.056	1.047	1.041	1.030	1.022	1.008	1.004	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.997	0.999
36	1.058	1.049	1.044	1.029	1.022	1.008	1.006	0.999	1.003	0.996	0.999	0.996	0.999	0.999	0.999	0.999	1.001	0.999	1.001	0.999
37	1.030	1.014	1.011	1.006	1.008	1.003	1.006	0.999	1.001	1.001	1.001	1.001	1.001	0.999	1.003	0.994	1.003	0.996	1.006	0.994
38	1.008	1.009	1.008	1.008	1.006	1.008	1.004	1.006	1.008	1.006	1.003	1.006	1.006	1.008	1.004	1.006	1.006	1.008	1.008	1.009
39	1.011	1.008	1.013	1.009	1.011	1.008	1.013	1.009	1.011	1.008	1.011	1.008	1.011	1.009	1.011	1.008	1.011	1.008	1.013	1.009
40	1.014	1.011	1.014	1.011	1.016	1.013	1.013	1.009	1.014	1.013	1.016	1.009	1.014	1.011	1.016	1.013	1.016	1.009	1.014	1.011
41	1.017	1.014	1.016	1.014	1.017	1.016	1.020	1.014	1.016	1.013	1.016	1.014	1.017	1.013	1.016	1.014	1.017	1.014	1.017	1.013
42	1.014	1.019	1.017	1.019	1.017	1.020	1.017	1.020	1.019	1.020	1.017	1.019	1.017	1.019	1.017	1.020	1.017	1.019	1.016	1.020
43	1.014	1.019	1.014	1.022	1.016	1.020	1.016	1.020	1.020	1.022	1.017	1.023	1.020	1.022	1.019	1.023	1.020	1.023	1.020	1.022
44	1.022	1.025	1.022	1.023	1.022	1.025	1.023	1.026	1.023	1.025	1.022	1.025	1.020	1.023	1.019	1.023	1.020	1.023	1.019	1.023
45	1.033	1.029	1.032	1.030	1.032	1.029	1.032	1.029	1.030	1.029	1.030	1.029	1.030	1.029	1.030	1.029	1.029	1.026	1.029	1.025
46	1.091	1.091	1.089	1.082	1.077	1.068	1.063	1.056	1.053	1.046	1.044	1.038	1.038	1.037	1.038	1.036	1.038	1.036	1.038	1.033
47	1.225	1.238	1.238	1.235	1.226	1.217	1.203	1.190	1.173	1.153	1.131	1.110	1.089	1.073	1.059	1.051	1.045	1.045	1.044	1.046
48	1.274	1.293	1.305	1.311	1.314	1.312	1.309	1.306	1.303	1.302	1.291	1.272	1.249	1.220	1.185	1.149	1.110	1.079	1.060	1.054
49	1.289	1.310	1.324	1.338	1.349	1.356	1.356	1.349	1.336	1.323	1.316	1.313	1.312	1.319	1.327	1.313	1.262	1.194	1.131	1.088
50	1.307	1.327	1.344	1.359	1.374	1.388	1.400	1.403	1.396	1.376	1.352	1.329	1.315	1.311	1.318	1.328	1.323	1.280	1.212	1.148
51	1.308	1.330	1.351	1.370	1.389	1.407	1.424	1.436	1.441	1.439	1.428	1.404	1.374	1.345	1.330	1.326	1.328	1.322	1.290	1.223
52	1.273	1.298	1.323	1.349	1.375	1.400	1.423	1.445	1.461	1.470	1.470	1.462	1.445	1.416	1.382	1.350	1.331	1.327	1.327	1.305
53	1.221	1.240	1.263	1.288	1.318	1.348	1.379	1.409	1.436	1.454	1.462	1.466	1.467	1.462	1.449	1.424	1.390	1.355	1.332	1.324
54	1.191	1.201	1.214	1.229	1.248	1.270	1.297	1.326	1.358	1.386	1.407	1.422	1.432	1.439	1.445	1.447	1.444	1.428	1.399	1.366
55	1.180	1.187	1.194	1.203	1.214	1.227	1.240	1.257	1.274	1.295	1.317	1.339	1.358	1.377	1.392	1.402	1.410	1.419	1.425	1.423
56	1.173	1.180	1.186	1.194	1.202	1.213	1.222	1.231	1.239	1.248	1.257	1.266	1.279	1.296	1.313	1.330	1.346	1.359	1.368	1.378
57	1.172	1.178	1.182	1.190	1.196	1.205	1.211	1.221	1.227	1.232	1.235	1.238	1.241	1.246	1.254	1.264	1.278	1.293	1.307	1.320
58	1.170	1.175	1.182	1.188	1.196	1.204	1.214	1.220	1.226	1.228	1.230	1.229	1.231	1.235	1.240	1.243	1.248	1.254	1.264	1.275
59	1.170	1.174	1.181	1.186	1.195	1.201	1.210	1.218	1.225	1.229	1.232	1.233	1.236	1.238	1.237	1.236	1.240	1.244	1.249	1.254
60	1.167	1.170	1.178	1.185	1.194	1.202	1.211	1.217	1.224	1.225	1.226	1.228	1.235	1.240	1.243	1.242	1.244	1.244	1.244	1.244
61	1.167	1.170	1.176	1.182	1.188	1.196	1.203	1.212	1.218	1.222	1.224	1.229	1.235	1.237	1.238	1.238	1.242	1.248	1.251	1.251
62	1.167	1.169	1.176	1.182	1.189	1.195	1.203	1.208	1.214	1.214	1.216	1.220	1.227	1.232	1.238	1.240	1.243	1.242	1.243	1.246
63	1.171	1.175	1.179	1.184	1.189	1.195	1.202	1.209	1.214	1.215	1.215	1.220	1.224	1.227	1.229	1.232	1.235	1.239	1.241	1.244

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 13

IR SCAN TIME 27.44 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	1.052	1.054	1.056	1.054	1.056	1.054	1.059	1.059	1.059	1.056	1.053	1.051	1.051	1.049	1.047	1.044	1.044	1.038	1.036	1.029
30	1.060	1.065	1.060	1.061	1.058	1.060	1.057	1.058	1.053	1.051	1.042	1.042	1.036	1.036	1.032	1.030	1.028	1.026	1.023	1.020
31	1.063	1.059	1.057	1.052	1.049	1.042	1.044	1.037	1.035	1.023	1.020	1.014	1.013	1.008	1.006	0.999	1.004	0.997	0.999	0.992
32	1.041	1.035	1.030	1.023	1.017	1.008	1.004	0.997	0.999	0.996	0.997	0.996	0.997	0.996	0.997	0.996	0.996	0.996	0.996	0.996
33	1.004	0.999	1.001	0.999	0.999	0.997	0.997	0.996	0.996	0.994	0.997	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.992
34	0.997	0.997	0.996	0.996	0.997	0.992	0.994	0.994	0.994	0.996	0.992	0.996	0.996	0.994	0.996	0.996	0.999	0.992	0.999	0.992
35	0.999	0.999	0.999	0.999	1.001	0.999	0.997	0.996	0.997	0.997	1.001	0.997	0.999	0.996	0.997	0.996	0.996	0.996	0.996	0.997
36	1.001	1.001	1.001	1.001	1.003	0.999	0.999	0.999	0.999	1.001	1.001	0.999	0.999	0.999	0.999	0.997	1.001	0.999	0.999	0.997
37	1.003	0.992	1.004	0.996	1.006	0.996	1.004	0.994	1.003	0.994	1.004	1.003	1.004	1.001	1.001	1.001	1.001	1.001	1.001	1.001
38	1.006	1.008	1.008	1.008	1.006	1.008	1.006	1.006	1.008	1.008	1.006	1.006	1.004	1.006	1.001	1.006	0.999	1.004	0.999	1.004
39	1.011	1.008	1.011	1.008	1.011	1.008	1.011	1.008	1.011	1.008	1.011	1.006	1.008	1.008	1.011	1.008	1.009	1.006	1.008	1.006
40	1.016	1.013	1.014	1.011	1.014	1.011	1.014	1.013	1.013	1.009	1.013	1.011	1.014	1.009	1.011	1.008	1.013	1.009	1.009	1.008
41	1.016	1.013	1.016	1.014	1.016	1.013	1.016	1.014	1.016	1.014	1.016	1.011	1.014	1.011	1.016	1.013	1.014	1.009	1.014	1.011
42	1.017	1.020	1.019	1.020	1.014	1.017	1.016	1.019	1.016	1.019	1.014	1.016	1.014	1.016	1.013	1.017	1.013	1.016	1.013	1.014
43	1.019	1.022	1.017	1.020	1.019	1.020	1.020	1.022	1.020	1.019	1.014	1.019	1.016	1.020	1.014	1.019	1.014	1.016	1.011	1.016
44	1.014	1.022	1.019	1.020	1.019	1.023	1.017	1.022	1.014	1.022	1.019	1.020	1.019	1.020	1.019	1.020	1.019	1.019	1.014	1.017
45	1.029	1.026	1.029	1.026	1.028	1.025	1.026	1.022	1.025	1.023	1.026	1.020	1.026	1.019	1.025	1.019	1.022	1.016	1.022	1.022
46	1.036	1.033	1.035	1.030	1.035	1.030	1.035	1.030	1.033	1.029	1.030	1.029	1.032	1.029	1.030	1.030	1.030	1.029	1.030	1.029
47	1.044	1.045	1.042	1.042	1.037	1.041	1.037	1.041	1.038	1.040	1.040	1.040	1.037	1.037	1.036	1.038	1.036	1.038	1.037	1.038
48	1.050	1.050	1.047	1.049	1.046	1.045	1.044	1.044	1.044	1.044	1.044	1.044	1.042	1.042	1.041	1.038	1.040	1.042	1.041	1.042
49	1.067	1.059	1.054	1.053	1.047	1.049	1.046	1.049	1.046	1.047	1.046	1.046	1.044	1.045	1.042	1.045	1.045	1.045	1.044	1.045
50	1.103	1.078	1.068	1.059	1.056	1.051	1.051	1.049	1.051	1.049	1.049	1.049	1.049	1.046	1.046	1.046	1.047	1.046	1.047	1.045
51	1.153	1.100	1.082	1.075	1.071	1.060	1.058	1.052	1.050	1.049	1.051	1.049	1.051	1.049	1.050	1.046	1.049	1.049	1.049	1.046
52	1.249	1.173	1.110	1.074	1.070	1.071	1.067	1.058	1.054	1.047	1.049	1.045	1.047	1.044	1.047	1.042	1.046	1.044	1.046	1.044
53	1.318	1.281	1.211	1.137	1.084	1.062	1.065	1.062	1.053	1.045	1.044	1.038	1.040	1.036	1.037	1.036	1.037	1.036	1.038	1.036
54	1.341	1.326	1.297	1.229	1.149	1.089	1.063	1.059	1.059	1.044	1.035	1.023	1.023	1.020	1.019	1.014	1.020	1.017	1.023	1.023
55	1.409	1.384	1.353	1.318	1.258	1.178	1.107	1.068	1.054	1.058	1.045	1.029	1.013	1.008	1.006	1.008	1.003	1.008	1.008	1.017
56	1.388	1.396	1.395	1.382	1.354	1.305	1.227	1.145	1.085	1.058	1.054	1.050	1.029	1.017	1.006	1.004	1.001	1.009	1.009	1.014
57	1.330	1.339	1.348	1.360	1.369	1.370	1.351	1.294	1.207	1.125	1.072	1.057	1.054	1.044	1.023	1.013	1.006	1.008	1.008	1.014
58	1.287	1.297	1.304	1.309	1.318	1.329	1.345	1.355	1.334	1.264	1.175	1.102	1.066	1.057	1.050	1.028	1.016	1.009	1.011	1.009
59	1.263	1.272	1.282	1.289	1.296	1.301	1.307	1.315	1.333	1.341	1.303	1.212	1.127	1.071	1.057	1.049	1.036	1.013	1.006	0.999
60	1.249	1.257	1.264	1.272	1.282	1.292	1.301	1.306	1.310	1.319	1.325	1.295	1.217	1.132	1.077	1.052	1.050	1.033	1.016	1.003
61	1.250	1.250	1.254	1.260	1.268	1.275	1.287	1.297	1.310	1.318	1.325	1.330	1.312	1.246	1.156	1.089	1.054	1.044	1.037	1.016
62	1.252	1.256	1.260	1.261	1.263	1.266	1.272	1.280	1.292	1.305	1.321	1.335	1.344	1.334	1.282	1.192	1.110	1.061	1.046	1.033
63	1.248	1.251	1.254	1.259	1.264	1.270	1.274	1.276	1.280	1.289	1.300	1.311	1.325	1.343	1.352	1.326	1.247	1.153	1.083	1.051

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 13

IR SCAN TIME 27.44 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	1.023	1.019	1.020	1.022	1.029	1.029	1.033	1.030	1.032	1.029	1.033	1.033	1.036	1.035	1.036	1.033	1.032	1.030	1.033	1.030
30	1.013	1.013	1.008	1.011	1.008	1.013	1.009	1.013	1.008	1.009	1.008	1.009	1.008	1.009	1.009	1.011	1.009	1.008	1.008	1.008
31	0.997	0.992	0.999	0.996	0.999	0.996	0.999	0.996	0.997	0.994	0.999	0.997	0.999	0.999	1.001	1.001	1.001	0.999	0.999	0.997
32	0.997	0.997	0.997	0.996	0.996	0.996	0.994	0.994	0.996	0.994	0.996	0.996	0.997	0.988	0.996	0.988	0.996	0.990	0.996	0.992
33	0.994	0.992	0.996	0.996	0.996	0.994	0.994	0.990	0.994	0.992	0.992	0.994	0.996	0.992	0.996	0.994	0.994	0.994	0.994	0.994
34	0.997	0.994	0.992	0.992	0.994	0.994	0.992	0.992	0.992	0.988	0.994	0.988	0.994	0.992	0.992	0.990	0.994	0.994	0.992	0.988
35	0.997	0.997	0.997	0.994	0.996	0.994	0.996	0.992	0.996	0.994	0.997	0.992	0.990	0.992	0.994	0.992	0.994	0.992	0.996	0.992
36	0.999	0.996	0.997	0.997	0.997	0.997	0.999	0.997	0.996	0.994	0.996	0.996	0.997	0.996	0.996	0.996	0.996	0.992	0.994	0.992
37	0.999	0.996	1.001	1.001	0.999	0.997	1.001	0.997	0.999	0.997	1.001	0.997	0.999	0.996	0.999	0.997	0.999	0.997	0.997	0.996
38	0.999	1.003	0.997	1.001	0.999	1.003	0.999	0.999	0.994	1.003	1.001	1.001	0.999	0.999	0.999	1.001	0.999	0.999	0.996	0.997
39	1.009	1.008	1.008	1.004	1.008	1.004	1.008	1.004	1.003	1.003	1.004	1.001	1.006	0.999	1.003	0.999	1.003	0.997	1.003	0.997
40	1.011	1.008	1.011	1.008	1.011	1.006	1.008	1.008	1.011	1.008	1.009	1.006	1.008	1.006	1.009	1.008	1.006	1.004	1.006	1.004
41	1.014	1.011	1.014	1.008	1.013	1.008	1.014	1.008	1.011	1.006	1.011	1.008	1.011	1.008	1.009	1.006	1.011	1.008	1.011	1.006
42	1.011	1.014	1.013	1.014	1.011	1.013	1.009	1.013	1.011	1.013	1.011	1.011	1.009	1.011	1.008	1.011	1.009	1.013	1.009	1.011
43	1.013	1.016	1.014	1.017	1.013	1.014	1.011	1.014	1.011	1.013	1.011	1.014	1.011	1.014	1.009	1.013	1.008	1.011	1.009	1.014
44	1.016	1.017	1.014	1.019	1.016	1.017	1.014	1.016	1.013	1.016	1.014	1.017	1.014	1.016	1.013	1.014	1.013	1.013	1.011	1.013
45	1.023	1.019	1.020	1.017	1.022	1.016	1.022	1.020	1.020	1.020	1.023	1.020	1.020	1.016	1.020	1.016	1.020	1.016	1.020	1.016
46	1.029	1.028	1.030	1.028	1.029	1.026	1.030	1.026	1.030	1.016	1.026	1.017	1.028	1.019	1.028	1.019	1.028	1.016	1.026	1.016
47	1.036	1.037	1.036	1.036	1.035	1.036	1.035	1.036	1.035	1.036	1.033	1.036	1.033	1.035	1.030	1.035	1.033	1.033	1.035	1.036
48	1.041	1.042	1.038	1.044	1.038	1.040	1.038	1.041	1.038	1.041	1.038	1.038	1.037	1.038	1.037	1.040	1.038	1.041	1.038	1.040
49	1.042	1.044	1.041	1.044	1.042	1.044	1.044	1.044	1.041	1.040	1.041	1.041	1.040	1.042	1.041	1.042	1.040	1.041	1.041	1.042
50	1.047	1.044	1.046	1.044	1.046	1.044	1.045	1.042	1.045	1.042	1.045	1.042	1.045	1.041	1.044	1.042	1.044	1.044	1.046	1.044
51	1.047	1.046	1.049	1.046	1.047	1.045	1.046	1.045	1.047	1.046	1.047	1.045	1.045	1.044	1.046	1.045	1.046	1.044	1.045	1.044
52	1.045	1.041	1.045	1.044	1.047	1.045	1.046	1.042	1.046	1.045	1.047	1.044	1.045	1.044	1.046	1.044	1.046	1.042	1.045	1.044
53	1.040	1.038	1.042	1.040	1.042	1.041	1.044	1.038	1.044	1.038	1.042	1.040	1.044	1.038	1.044	1.038	1.041	1.038	1.042	1.038
54	1.029	1.029	1.035	1.033	1.038	1.036	1.037	1.036	1.040	1.037	1.040	1.037	1.037	1.037	1.038	1.037	1.040	1.036	1.037	1.036
55	1.020	1.028	1.026	1.032	1.030	1.035	1.033	1.036	1.035	1.037	1.035	1.035	1.035	1.036	1.035	1.037	1.035	1.035	1.030	1.033
56	1.019	1.025	1.028	1.032	1.032	1.033	1.033	1.035	1.032	1.035	1.033	1.036	1.035	1.036	1.033	1.035	1.032	1.033	1.030	1.030
57	1.020	1.023	1.023	1.029	1.028	1.029	1.026	1.029	1.029	1.030	1.029	1.032	1.029	1.030	1.028	1.029	1.026	1.028	1.026	1.028
58	1.016	1.014	1.016	1.016	1.020	1.017	1.020	1.019	1.020	1.020	1.020	1.016	1.019	1.016	1.020	1.016	1.020	1.014	1.016	1.013
59	1.003	1.001	1.008	1.004	1.009	1.004	1.008	1.003	1.006	1.003	1.008	1.004	1.006	1.003	1.006	1.003	1.008	0.999	1.001	0.999
60	0.999	0.992	0.996	0.996	0.996	0.990	0.992	0.986	0.992	0.986	0.992	0.990	0.994	0.988	0.992	0.986	0.990	0.984	0.990	0.982
61	1.003	0.994	0.990	0.994	0.994	0.996	0.992	0.986	0.988	0.990	0.988	0.988	0.988	0.986	0.988	0.986	0.986	0.984	0.984	0.982
62	1.022	1.004	0.997	0.990	0.992	0.988	0.992	0.990	0.992	0.990	0.988	0.986	0.986	0.984	0.988	0.984	0.990	0.986	0.988	0.984
63	1.036	1.026	1.008	0.997	0.996	0.992	0.990	0.990	0.986	0.986	0.986	0.988	0.986	0.988	0.984	0.984	0.984	0.986	0.984	0.986

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 13

IR SCAN TIME 27.44 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	1.033	1.029	1.030	1.028	1.029	1.028	1.029	1.028	1.029	1.026	1.028	1.025	1.028	1.025	1.029	1.025	1.029	1.026	1.028	1.025
30	1.006	1.009	1.008	1.009	1.008	1.009	1.006	1.004	1.003	1.003	1.003	1.003	1.001	1.001	0.999	0.999	0.996	0.997	0.996	0.997
31	1.001	1.001	1.003	1.001	1.003	0.999	1.001	0.999	0.997	0.999	0.999	0.997	1.001	0.999	0.997	0.996	0.996	0.992	0.994	0.992
32	0.997	0.992	0.997	0.992	0.997	0.992	0.997	0.992	0.997	0.999	0.997	0.994	0.996	0.996	0.994	0.992	0.994	0.992	0.994	0.992
33	0.996	0.996	0.997	0.996	0.996	0.992	0.992	0.992	0.996	0.994	0.996	0.990	0.996	0.992	0.992	0.986	0.990	0.988	0.990	0.988
34	0.994	0.996	0.994	0.994	0.992	0.990	0.992	0.994	0.992	0.992	0.994	0.992	0.992	0.990	0.990	0.988	0.990	0.986	0.990	0.988
35	0.992	0.990	0.992	0.990	0.996	0.992	0.994	0.992	0.992	0.988	0.992	0.990	0.992	0.990	0.994	0.990	0.990	0.986	0.988	0.988
36	0.992	0.994	0.996	0.992	0.992	0.992	0.992	0.992	0.994	0.992	0.992	0.990	0.994	0.990	0.992	0.990	0.996	0.992	0.992	0.988
37	0.996	0.996	0.997	0.996	0.996	0.992	0.994	0.992	0.996	0.996	0.996	0.992	0.992	0.992	0.994	0.994	0.994	0.990	0.992	0.992
38	0.997	0.999	0.997	0.997	0.996	0.996	0.996	0.997	0.997	0.996	0.996	0.996	0.996	0.997	0.996	0.994	0.996	0.996	0.997	0.997
39	0.999	0.996	1.003	0.997	1.001	0.994	1.001	0.999	1.001	0.997	0.999	0.996	1.001	0.999	0.999	0.997	0.999	0.996	0.999	0.997
40	1.008	1.003	1.006	1.001	1.004	1.001	1.004	0.999	1.001	0.996	1.001	0.997	1.004	0.996	1.001	0.994	1.001	1.001	1.001	0.997
41	1.008	1.004	1.008	1.006	1.008	1.006	1.006	1.003	1.006	1.003	1.008	1.003	1.004	1.003	1.004	1.001	1.006	1.001	1.004	0.999
42	1.008	1.008	1.006	1.009	1.008	1.009	1.006	1.008	1.008	1.008	1.006	1.008	1.006	1.008	1.004	1.006	1.004	1.006	1.006	1.008
43	1.009	1.011	1.008	1.009	1.008	1.011	1.008	1.011	1.008	1.009	1.008	1.008	1.006	1.008	1.008	1.008	1.004	1.008	1.006	1.008
44	1.013	1.014	1.011	1.011	1.009	1.011	1.008	1.011	1.009	1.013	1.009	1.011	1.009	1.011	1.008	1.011	1.008	1.011	1.009	1.013
45	1.020	1.016	1.020	1.016	1.017	1.014	1.017	1.016	1.017	1.016	1.019	1.016	1.016	1.013	1.017	1.014	1.017	1.014	1.019	1.014
46	1.026	1.020	1.028	1.020	1.028	1.026	1.026	1.023	1.025	1.023	1.026	1.025	1.028	1.026	1.026	1.025	1.026	1.023	1.025	1.023
47	1.033	1.035	1.033	1.035	1.036	1.036	1.033	1.036	1.032	1.035	1.029	1.033	1.029	1.033	1.029	1.033	1.030	1.033	1.030	1.033
48	1.038	1.041	1.041	1.042	1.040	1.041	1.040	1.040	1.037	1.038	1.036	1.038	1.038	1.038	1.038	1.040	1.037	1.038	1.036	1.037
49	1.042	1.045	1.045	1.045	1.042	1.044	1.041	1.044	1.041	1.044	1.041	1.044	1.041	1.042	1.040	1.042	1.042	1.042	1.041	1.041
50	1.045	1.044	1.046	1.045	1.046	1.045	1.045	1.042	1.042	1.042	1.045	1.044	1.046	1.041	1.044	1.042	1.044	1.042	1.044	1.041
51	1.046	1.045	1.046	1.044	1.046	1.044	1.046	1.045	1.045	1.042	1.045	1.044	1.046	1.044	1.044	1.042	1.044	1.044	1.044	1.041
52	1.047	1.046	1.045	1.042	1.045	1.042	1.045	1.041	1.041	1.038	1.042	1.041	1.041	1.038	1.040	1.038	1.040	1.038	1.040	1.036
53	1.042	1.037	1.041	1.037	1.040	1.036	1.036	1.032	1.035	1.030	1.035	1.030	1.030	1.029	1.030	1.029	1.032	1.028	1.030	1.028
54	1.037	1.035	1.035	1.029	1.030	1.023	1.026	1.019	1.020	1.014	1.019	1.013	1.019	1.014	1.016	1.011	1.016	1.011	1.017	1.011
55	1.033	1.033	1.029	1.028	1.022	1.020	1.014	1.014	1.009	1.009	1.006	1.008	1.006	1.008	1.006	1.004	1.001	1.003	1.001	1.001
56	1.029	1.030	1.026	1.026	1.020	1.019	1.011	1.013	1.008	1.006	0.999	0.999	0.997	0.997	0.997	0.996	0.996	0.997	0.992	0.992
57	1.025	1.025	1.022	1.022	1.016	1.014	1.008	1.008	1.001	1.001	0.997	0.997	0.992	0.994	0.992	0.992	0.992	0.992	0.990	0.992
58	1.014	1.009	1.014	1.009	1.011	1.008	1.004	0.997	0.997	0.992	0.994	0.990	0.994	0.992	0.992	0.990	0.992	0.988	0.990	0.984
59	1.001	0.999	1.001	1.001	1.001	0.997	0.997	0.992	0.992	0.990	0.990	0.988	0.992	0.988	0.992	0.986	0.986	0.984	0.988	0.984
60	0.992	0.988	0.992	0.990	0.992	0.986	0.986	0.984	0.986	0.984	0.986	0.984	0.986	0.982	0.984	0.978	0.984	0.984	0.982	0.982
61	0.986	0.984	0.986	0.982	0.986	0.980	0.984	0.978	0.982	0.978	0.982	0.980	0.984	0.980	0.982	0.973	0.980	0.976	0.980	0.980
62	0.986	0.984	0.986	0.984	0.986	0.984	0.986	0.984	0.984	0.980	0.984	0.980	0.984	0.980	0.986	0.982	0.984	0.978	0.982	0.978
63	0.984	0.986	0.984	0.984	0.984	0.986	0.984	0.986	0.984	0.984	0.980	0.982	0.982	0.984	0.984	0.982	0.980	0.980	0.980	0.982

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 27.44 SEC
INITIAL TEMP 536.7 DEG. R

GROUP 13

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	1.028	1.023	1.026	1.025	1.028	1.026	1.026	1.025	1.026	1.023
30	0.996	0.997	0.997	0.996	0.992	0.992	0.992	0.994	0.992	0.996
31	0.994	0.994	0.994	0.992	0.994	0.992	0.992	0.990	0.994	0.992
32	0.994	0.990	0.996	0.988	0.990	0.988	0.988	0.986	0.990	0.990
33	0.990	0.986	0.990	0.986	0.988	0.980	0.986	0.988	0.988	0.986
34	0.990	0.988	0.988	0.984	0.986	0.984	0.986	0.984	0.986	0.982
35	0.990	0.988	0.992	0.988	0.990	0.986	0.988	0.986	0.988	0.986
36	0.992	0.990	0.992	0.990	0.992	0.986	0.988	0.988	0.990	0.988
37	0.994	0.992	0.992	0.990	0.992	0.992	0.992	0.992	0.992	0.990
38	0.996	0.994	0.996	0.996	0.992	0.996	0.996	0.996	0.996	0.994
39	1.001	0.996	0.997	0.999	0.999	0.999	0.999	0.996	0.999	0.997
40	1.001	0.996	1.003	0.997	1.003	0.999	1.001	0.999	1.003	1.001
41	1.003	1.001	1.004	1.003	1.004	0.999	1.004	0.996	1.004	0.999
42	1.004	1.006	1.004	1.006	1.006	1.006	1.006	1.008	1.004	1.006
43	1.004	1.008	1.006	1.009	1.008	1.009	1.008	1.009	1.006	1.008
44	1.011	1.011	1.008	1.011	1.006	1.011	1.009	1.009	1.009	1.013
45	1.019	1.014	1.017	1.013	1.017	1.014	1.017	1.016	1.019	1.016
46	1.026	1.025	1.026	1.025	1.025	1.025	1.023	1.022	1.025	1.022
47	1.029	1.035	1.029	1.033	1.032	1.033	1.032	1.032	1.029	1.032
48	1.036	1.038	1.036	1.037	1.035	1.036	1.033	1.035	1.030	1.036
49	1.040	1.041	1.040	1.040	1.041	1.040	1.038	1.040	1.036	1.040
50	1.044	1.040	1.042	1.040	1.044	1.041	1.042	1.038	1.041	1.038
51	1.042	1.042	1.044	1.041	1.042	1.038	1.041	1.037	1.042	1.038
52	1.038	1.037	1.040	1.036	1.037	1.035	1.037	1.035	1.036	1.032
53	1.030	1.029	1.030	1.026	1.029	1.026	1.028	1.026	1.026	1.023
54	1.014	1.013	1.016	1.013	1.014	1.011	1.013	1.009	1.014	1.009
55	1.001	1.001	0.999	0.999	0.992	0.999	0.992	0.999	0.992	0.997
56	0.992	0.992	0.992	0.992	0.990	0.994	0.986	0.988	0.986	0.988
57	0.988	0.990	0.984	0.986	0.984	0.984	0.984	0.986	0.984	0.984
58	0.986	0.986	0.986	0.986	0.986	0.984	0.986	0.980	0.984	0.982
59	0.990	0.984	0.988	0.988	0.986	0.982	0.980	0.980	0.984	0.980
60	0.986	0.984	0.984	0.982	0.982	0.980	0.980	0.980	0.984	0.982
61	0.982	0.980	0.984	0.980	0.982	0.978	0.982	0.980	0.982	0.980
62	0.984	0.978	0.984	0.976	0.982	0.973	0.982	0.976	0.982	0.978
63	0.982	0.982	0.982	0.980	0.978	0.980	0.978	0.982	0.978	0.982

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 13

IR SCAN TIME 27.44 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	1.001	0.997	0.999	0.996	0.996	0.992	0.992	0.990	0.996	0.990	0.996	0.988	0.996	1.009	1.071	1.120	1.144	1.152	1.160	1.164
65	1.001	0.999	0.997	0.992	0.994	0.990	0.994	0.990	0.992	0.988	0.992	0.992	0.996	1.016	1.079	1.123	1.144	1.153	1.163	1.167
66	0.996	0.990	0.990	0.986	0.988	0.986	0.986	0.982	0.984	0.984	0.986	0.988	0.990	1.026	1.089	1.125	1.141	1.148	1.155	1.161
67	0.994	0.986	0.984	0.982	0.978	0.980	0.980	0.980	0.976	0.980	0.978	0.984	0.994	1.046	1.103	1.130	1.142	1.149	1.156	1.160
68	0.984	0.978	0.976	0.973	0.976	0.976	0.973	0.973	0.969	0.973	0.976	0.980	0.996	1.061	1.110	1.131	1.142	1.148	1.154	1.159
69	0.982	0.978	0.971	0.969	0.967	0.967	0.967	0.969	0.969	0.971	0.969	0.976	1.009	1.080	1.118	1.134	1.142	1.148	1.154	1.160
70	0.976	0.976	0.973	0.962	0.971	0.967	0.967	0.962	0.964	0.964	0.971	0.980	1.035	1.099	1.129	1.141	1.150	1.156	1.161	1.167
71	0.978	0.973	0.969	0.969	0.964	0.964	0.962	0.964	0.959	0.964	0.962	0.980	1.038	1.108	1.133	1.148	1.155	1.162	1.166	1.171
72	0.978	0.978	0.969	0.969	0.962	0.964	0.962	0.964	0.964	0.969	0.969	0.986	1.050	1.107	1.130	1.141	1.148	1.156	1.160	1.165
73	0.978	0.973	0.969	0.969	0.967	0.969	0.969	0.969	0.964	0.967	0.964	0.988	1.052	1.099	1.119	1.129	1.135	1.141	1.145	1.148
74	0.978	0.973	0.971	0.971	0.971	0.964	0.971	0.967	0.973	0.964	0.971	0.997	1.061	1.097	1.111	1.119	1.125	1.129	1.135	1.137
75	0.978	0.976	0.973	0.969	0.969	0.959	0.964	0.962	0.964	0.964	0.978	1.016	1.070	1.093	1.103	1.109	1.115	1.118	1.123	1.126
76	0.980	0.973	0.971	0.967	0.962	0.962	0.959	0.964	0.964	0.967	0.978	1.030	1.074	1.091	1.101	1.105	1.110	1.112	1.117	1.119
77	0.978	0.973	0.964	0.969	0.964	0.964	0.962	0.964	0.962	0.967	0.988	1.047	1.082	1.095	1.101	1.106	1.109	1.113	1.116	1.119
78	0.982	0.982	0.978	0.973	0.971	0.973	0.967	0.969	0.957	0.967	0.999	1.062	1.088	1.101	1.106	1.111	1.112	1.118	1.119	1.124
79	0.994	1.004	1.009	1.004	1.006	0.997	0.994	0.988	0.982	0.980	1.019	1.069	1.094	1.103	1.110	1.114	1.118	1.120	1.125	1.128
80	1.014	1.030	1.028	1.011	1.020	1.014	1.004	0.988	0.990	0.992	1.030	1.072	1.094	1.100	1.106	1.110	1.116	1.118	1.123	1.125
81	1.035	1.052	1.046	1.028	1.030	1.029	1.029	1.016	1.008	1.003	1.038	1.072	1.090	1.096	1.103	1.106	1.110	1.113	1.118	1.121
82	1.086	1.101	1.077	1.061	1.050	1.038	1.030	1.035	1.029	1.026	1.051	1.078	1.089	1.098	1.101	1.106	1.108	1.114	1.117	1.123
83	1.153	1.161	1.118	1.128	1.114	1.061	1.029	1.020	1.026	1.040	1.061	1.082	1.090	1.096	1.100	1.105	1.107	1.113	1.117	1.123
84	1.151	1.154	1.120	1.154	1.141	1.073	1.023	0.996	1.004	1.056	1.098	1.112	1.110	1.108	1.104	1.104	1.104	1.106	1.110	1.116
85	1.101	1.095	1.084	1.107	1.092	1.053	1.016	1.009	1.017	1.078	1.132	1.154	1.156	1.151	1.144	1.139	1.133	1.130	1.123	1.124
86	1.065	1.063	1.065	1.066	1.060	1.047	1.042	1.037	1.037	1.036	1.052	1.059	1.065	1.066	1.070	1.073	1.081	1.085	1.093	1.099
87	1.040	1.040	1.045	1.049	1.042	1.044	1.042	1.045	1.038	1.030	1.023	1.026	1.025	1.026	1.023	1.025	1.023	1.026	1.026	1.029
95	1.028	1.023	1.020	1.022	1.019	1.019	1.017	1.029	1.038	1.042	1.042	1.046	1.047	1.050	1.049	1.049	1.044	1.035	1.022	1.019
96	1.054	1.054	1.052	1.047	1.046	1.037	1.037	1.040	1.053	1.053	1.051	1.050	1.056	1.059	1.062	1.059	1.056	1.045	1.032	1.020
97	1.072	1.072	1.073	1.069	1.065	1.057	1.051	1.049	1.059	1.059	1.060	1.060	1.067	1.068	1.071	1.068	1.065	1.052	1.038	1.023
98	1.079	1.077	1.075	1.075	1.070	1.062	1.053	1.054	1.057	1.057	1.057	1.063	1.069	1.075	1.075	1.074	1.068	1.057	1.040	1.035

NASA/RI OH90 TRANSITION TEST
V416-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 13

IR SCAN TIME 27.44 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	1.171	1.174	1.182	1.187	1.194	1.200	1.207	1.213	1.219	1.219	1.220	1.223	1.229	1.230	1.231	1.233	1.235	1.236	1.238	1.238
65	1.172	1.176	1.182	1.186	1.192	1.198	1.205	1.208	1.220	1.222	1.228	1.234	1.244	1.240	1.238	1.233	1.236	1.235	1.238	1.238
66	1.165	1.172	1.178	1.184	1.191	1.200	1.207	1.214	1.222	1.226	1.228	1.231	1.237	1.237	1.235	1.237	1.238	1.240	1.239	1.238
67	1.164	1.169	1.174	1.181	1.186	1.192	1.198	1.204	1.211	1.218	1.223	1.225	1.229	1.235	1.237	1.239	1.241	1.241	1.239	1.240
68	1.164	1.170	1.176	1.182	1.187	1.195	1.200	1.208	1.214	1.220	1.224	1.228	1.229	1.231	1.236	1.242	1.246	1.251	1.257	1.264
69	1.165	1.172	1.177	1.184	1.191	1.199	1.205	1.214	1.222	1.230	1.238	1.243	1.246	1.248	1.250	1.255	1.258	1.261	1.261	1.265
70	1.173	1.177	1.184	1.189	1.197	1.202	1.208	1.213	1.221	1.227	1.234	1.239	1.242	1.245	1.248	1.249	1.251	1.254	1.258	1.259
71	1.174	1.181	1.185	1.191	1.195	1.202	1.206	1.210	1.213	1.219	1.223	1.228	1.230	1.231	1.231	1.233	1.235	1.238	1.241	1.245
72	1.169	1.174	1.180	1.185	1.190	1.197	1.201	1.207	1.209	1.216	1.218	1.222	1.223	1.224	1.222	1.223	1.224	1.227	1.227	1.229
73	1.153	1.157	1.161	1.167	1.171	1.177	1.182	1.188	1.192	1.197	1.201	1.204	1.207	1.210	1.211	1.211	1.213	1.215	1.217	1.218
74	1.142	1.144	1.149	1.153	1.158	1.162	1.167	1.170	1.174	1.174	1.178	1.181	1.184	1.185	1.185	1.184	1.186	1.188	1.192	1.196
75	1.130	1.133	1.137	1.140	1.145	1.148	1.154	1.157	1.161	1.163	1.167	1.169	1.175	1.176	1.175	1.174	1.174	1.174	1.176	1.177
76	1.122	1.125	1.130	1.133	1.138	1.141	1.145	1.147	1.151	1.153	1.157	1.158	1.161	1.161	1.163	1.164	1.167	1.167	1.168	1.168
77	1.122	1.125	1.128	1.132	1.134	1.139	1.142	1.144	1.146	1.149	1.151	1.153	1.153	1.154	1.156	1.158	1.158	1.160	1.159	1.161
78	1.125	1.130	1.132	1.136	1.139	1.142	1.144	1.146	1.148	1.148	1.150	1.153	1.151	1.154	1.154	1.156	1.155	1.156	1.156	1.157
79	1.132	1.135	1.139	1.139	1.145	1.145	1.151	1.151	1.155	1.154	1.157	1.154	1.156	1.154	1.156	1.153	1.155	1.153	1.154	1.154
80	1.130	1.134	1.139	1.142	1.146	1.149	1.153	1.156	1.161	1.162	1.164	1.163	1.164	1.163	1.163	1.161	1.161	1.159	1.159	1.157
81	1.126	1.129	1.134	1.137	1.141	1.143	1.148	1.152	1.155	1.158	1.161	1.163	1.164	1.163	1.164	1.163	1.164	1.163	1.164	1.163
82	1.125	1.129	1.132	1.137	1.141	1.144	1.147	1.150	1.151	1.155	1.157	1.159	1.159	1.160	1.159	1.160	1.161	1.163	1.163	1.163
83	1.128	1.133	1.137	1.142	1.146	1.150	1.152	1.158	1.160	1.163	1.164	1.166	1.167	1.169	1.169	1.170	1.170	1.173	1.173	1.174
84	1.121	1.127	1.131	1.137	1.142	1.146	1.150	1.154	1.156	1.160	1.161	1.165	1.168	1.171	1.173	1.173	1.175	1.178	1.181	1.184
85	1.122	1.124	1.126	1.132	1.136	1.141	1.144	1.148	1.151	1.154	1.155	1.158	1.159	1.162	1.162	1.164	1.166	1.168	1.169	1.171
86	1.101	1.101	1.107	1.114	1.124	1.125	1.128	1.127	1.132	1.135	1.144	1.150	1.157	1.155	1.155	1.153	1.154	1.154	1.156	1.157
87	1.029	1.035	1.033	1.037	1.037	1.040	1.037	1.037	1.036	1.037	1.037	1.041	1.041	1.042	1.041	1.042	1.040	1.044	1.041	1.042
88	1.026	1.029	1.030	1.026	1.030	1.032	1.030	1.030	1.028	1.026	1.028	1.028	1.028	1.028	1.022	1.022	1.023	1.020	1.028	1.023
89	1.020	1.022	1.025	1.028	1.026	1.029	1.029	1.029	1.023	1.025	1.022	1.023	1.022	1.023	1.019	1.020	1.017	1.019	1.017	1.019
90	1.019	1.017	1.022	1.020	1.023	1.020	1.025	1.020	1.026	1.023	1.025	1.022	1.023	1.019	1.020	1.019	1.020	1.016	1.019	1.014
91	1.014	1.019	1.019	1.020	1.020	1.022	1.022	1.023	1.022	1.023	1.020	1.026	1.023	1.023	1.019	1.017	1.014	1.017	1.016	1.019
92	1.011	1.016	1.014	1.020	1.016	1.020	1.019	1.023	1.020	1.025	1.030	1.054	1.069	1.057	1.036	1.022	1.016	1.017	1.016	1.019
93	1.014	1.006	1.016	1.008	1.017	1.011	1.020	1.016	1.023	1.019	1.033	1.050	1.069	1.054	1.037	1.020	1.020	1.014	1.019	1.016
94	1.014	1.011	1.016	1.014	1.019	1.019	1.025	1.026	1.032	1.030	1.030	1.029	1.030	1.023	1.023	1.016	1.017	1.011	1.016	1.013
95	1.011	1.014	1.016	1.025	1.025	1.030	1.033	1.038	1.038	1.041	1.038	1.037	1.030	1.028	1.020	1.019	1.014	1.016	1.013	1.016
96	1.017	1.016	1.023	1.025	1.033	1.032	1.041	1.042	1.049	1.049	1.050	1.044	1.041	1.032	1.030	1.023	1.023	1.016	1.017	1.013
97	1.023	1.020	1.029	1.032	1.038	1.041	1.049	1.051	1.054	1.053	1.056	1.053	1.050	1.042	1.038	1.029	1.029	1.020	1.022	1.016
98	1.029	1.030	1.033	1.041	1.045	1.050	1.050	1.052	1.052	1.054	1.054	1.058	1.053	1.051	1.046	1.038	1.030	1.026	1.019	1.017

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NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 13

IR SCAN TIME 27.44 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	1.242	1.246	1.251	1.255	1.259	1.261	1.265	1.273	1.283	1.291	1.292	1.289	1.294	1.305	1.323	1.343	1.345	1.294	1.202	1.116
65	1.241	1.239	1.240	1.242	1.246	1.251	1.256	1.260	1.266	1.271	1.275	1.278	1.281	1.284	1.289	1.298	1.315	1.329	1.308	1.232
66	1.238	1.239	1.240	1.240	1.239	1.239	1.239	1.243	1.248	1.255	1.256	1.258	1.258	1.263	1.270	1.279	1.285	1.296	1.306	1.297
67	1.242	1.245	1.245	1.246	1.245	1.246	1.246	1.250	1.254	1.255	1.252	1.252	1.252	1.255	1.260	1.266	1.275	1.285	1.296	1.305
68	1.268	1.269	1.266	1.263	1.265	1.272	1.275	1.279	1.282	1.281	1.278	1.277	1.275	1.274	1.273	1.275	1.280	1.288	1.296	1.305
69	1.269	1.276	1.284	1.287	1.287	1.288	1.287	1.287	1.290	1.290	1.287	1.287	1.286	1.285	1.287	1.290	1.292	1.296	1.298	1.301
70	1.261	1.262	1.265	1.268	1.272	1.277	1.286	1.295	1.300	1.295	1.288	1.285	1.285	1.287	1.290	1.294	1.299	1.302	1.305	1.305
71	1.249	1.253	1.258	1.261	1.264	1.269	1.272	1.277	1.281	1.281	1.281	1.286	1.291	1.294	1.295	1.293	1.295	1.299	1.304	1.310
72	1.231	1.235	1.238	1.242	1.244	1.246	1.250	1.259	1.266	1.269	1.270	1.274	1.277	1.282	1.286	1.291	1.296	1.302	1.302	1.302
73	1.220	1.221	1.222	1.224	1.223	1.225	1.228	1.236	1.242	1.246	1.247	1.253	1.255	1.260	1.261	1.264	1.265	1.266	1.268	1.274
74	1.201	1.204	1.206	1.206	1.208	1.211	1.216	1.222	1.231	1.233	1.229	1.227	1.227	1.227	1.228	1.231	1.233	1.234	1.239	1.243
75	1.180	1.181	1.183	1.182	1.182	1.184	1.192	1.200	1.211	1.214	1.208	1.203	1.204	1.204	1.207	1.208	1.212	1.214	1.218	1.220
76	1.170	1.171	1.175	1.175	1.174	1.173	1.175	1.177	1.182	1.181	1.178	1.176	1.177	1.178	1.181	1.183	1.187	1.190	1.194	1.195
77	1.161	1.163	1.165	1.167	1.167	1.168	1.168	1.170	1.173	1.174	1.172	1.171	1.170	1.170	1.171	1.172	1.173	1.175	1.176	1.177
78	1.157	1.158	1.158	1.159	1.159	1.160	1.160	1.162	1.164	1.166	1.164	1.164	1.164	1.166	1.167	1.169	1.172	1.174	1.175	1.178
79	1.155	1.154	1.155	1.154	1.156	1.156	1.158	1.158	1.161	1.163	1.163	1.160	1.160	1.159	1.161	1.161	1.163	1.164	1.166	1.167
80	1.157	1.154	1.155	1.153	1.154	1.152	1.153	1.152	1.156	1.158	1.160	1.157	1.159	1.156	1.159	1.158	1.161	1.161	1.163	1.165
81	1.164	1.163	1.164	1.163	1.161	1.159	1.159	1.157	1.159	1.160	1.160	1.158	1.158	1.156	1.158	1.157	1.159	1.159	1.162	1.162
82	1.163	1.165	1.165	1.167	1.167	1.168	1.167	1.168	1.169	1.171	1.172	1.170	1.166	1.164	1.162	1.161	1.160	1.160	1.159	1.159
83	1.173	1.175	1.174	1.175	1.175	1.176	1.176	1.178	1.179	1.182	1.184	1.183	1.181	1.181	1.180	1.179	1.177	1.176	1.174	1.173
84	1.186	1.190	1.191	1.195	1.196	1.198	1.199	1.201	1.201	1.204	1.206	1.204	1.201	1.198	1.197	1.196	1.195	1.195	1.195	1.195
85	1.173	1.175	1.178	1.182	1.185	1.190	1.194	1.200	1.204	1.211	1.218	1.222	1.222	1.225	1.225	1.226	1.226	1.226	1.225	1.225
86	1.161	1.164	1.170	1.173	1.177	1.179	1.183	1.185	1.190	1.194	1.199	1.199	1.200	1.200	1.202	1.206	1.210	1.215	1.222	1.228
87	1.041	1.047	1.047	1.053	1.057	1.061	1.065	1.071	1.075	1.083	1.088	1.094	1.092	1.094	1.091	1.095	1.095	1.099	1.101	1.108
88	1.023	1.023	1.025	1.023	1.023	1.019	1.022	1.019	1.022	1.022	1.020	1.020	1.019	1.016	1.017	1.013	1.014	1.013	1.013	1.013
89	1.016	1.020	1.017	1.020	1.016	1.017	1.014	1.016	1.013	1.016	1.013	1.013	1.008	1.008	1.008	1.008	1.006	1.008	1.006	1.006
90	1.019	1.014	1.016	1.016	1.020	1.016	1.016	1.013	1.011	1.008	1.011	1.008	1.013	1.008	1.008	1.003	1.004	1.001	1.001	0.999
91	1.016	1.016	1.013	1.016	1.014	1.016	1.013	1.014	1.009	1.009	1.009	1.009	1.008	1.009	1.004	1.003	0.999	0.999	0.999	0.999
92	1.014	1.017	1.014	1.019	1.017	1.017	1.013	1.016	1.013	1.014	1.016	1.032	1.037	1.029	1.014	1.009	1.001	1.001	0.997	1.001
93	1.017	1.014	1.019	1.017	1.020	1.016	1.019	1.014	1.016	1.013	1.029	1.054	1.066	1.050	1.029	1.013	1.008	1.001	1.003	1.001
94	1.017	1.011	1.017	1.013	1.020	1.017	1.020	1.014	1.016	1.011	1.014	1.014	1.022	1.014	1.013	1.008	1.009	1.001	1.004	0.999
95	1.013	1.016	1.014	1.017	1.016	1.020	1.016	1.019	1.014	1.016	1.013	1.013	1.008	1.008	1.006	1.006	0.999	1.003	0.997	1.001
96	1.016	1.014	1.017	1.014	1.020	1.016	1.022	1.019	1.022	1.016	1.016	1.013	1.013	1.008	1.008	1.006	1.008	1.003	1.004	0.999
97	1.017	1.013	1.019	1.014	1.020	1.019	1.023	1.019	1.022	1.014	1.019	1.013	1.014	1.009	1.013	1.008	1.008	1.003	1.003	0.999
98	1.014	1.017	1.016	1.017	1.014	1.020	1.019	1.020	1.019	1.020	1.016	1.017	1.013	1.013	1.008	1.008	1.004	1.006	1.006	1.004

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NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 13

IR SCAN TIME 27.44 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	1.063	1.041	1.030	1.009	0.999	0.990	0.992	0.988	0.992	0.986	0.986	0.982	0.986	0.986	0.986	0.984	0.986	0.982	0.986	0.984
65	1.138	1.074	1.046	1.033	1.019	1.004	0.996	0.990	0.988	0.984	0.986	0.982	0.986	0.984	0.982	0.982	0.982	0.982	0.984	0.982
66	1.238	1.153	1.082	1.046	1.035	1.025	1.006	0.990	0.984	0.982	0.980	0.980	0.980	0.978	0.978	0.978	0.978	0.978	0.978	0.978
67	1.301	1.259	1.178	1.101	1.050	1.036	1.019	1.008	0.984	0.982	0.971	0.976	0.969	0.973	0.971	0.976	0.969	0.973	0.969	0.978
68	1.314	1.319	1.295	1.222	1.130	1.067	1.037	1.028	1.008	0.988	0.976	0.973	0.969	0.973	0.971	0.971	0.967	0.969	0.967	0.969
69	1.308	1.318	1.326	1.311	1.246	1.153	1.080	1.044	1.026	1.011	0.986	0.976	0.964	0.967	0.962	0.964	0.964	0.967	0.959	0.962
70	1.307	1.311	1.321	1.333	1.330	1.283	1.195	1.108	1.054	1.030	1.011	0.988	0.976	0.964	0.964	0.959	0.964	0.962	0.962	0.957
71	1.316	1.321	1.328	1.336	1.346	1.349	1.316	1.231	1.134	1.067	1.033	1.019	0.996	0.976	0.964	0.959	0.957	0.957	0.954	0.957
72	1.302	1.307	1.314	1.321	1.328	1.334	1.337	1.321	1.258	1.164	1.086	1.041	1.022	1.006	0.980	0.969	0.959	0.957	0.954	0.954
73	1.276	1.281	1.285	1.290	1.294	1.300	1.308	1.318	1.319	1.287	1.208	1.120	1.059	1.030	1.009	0.988	0.969	0.964	0.959	0.957
74	1.249	1.253	1.261	1.263	1.270	1.276	1.288	1.298	1.309	1.314	1.300	1.238	1.152	1.075	1.038	1.009	0.997	0.976	0.967	0.959
75	1.224	1.228	1.235	1.239	1.247	1.257	1.265	1.274	1.283	1.292	1.300	1.293	1.247	1.168	1.094	1.041	1.019	0.999	0.982	0.962
76	1.200	1.203	1.210	1.216	1.223	1.230	1.237	1.242	1.249	1.257	1.267	1.275	1.275	1.245	1.178	1.101	1.049	1.016	1.004	0.986
77	1.180	1.183	1.185	1.191	1.196	1.202	1.207	1.214	1.221	1.229	1.236	1.245	1.252	1.254	1.235	1.182	1.110	1.054	1.020	1.008
78	1.181	1.183	1.185	1.186	1.187	1.190	1.192	1.196	1.199	1.203	1.208	1.216	1.224	1.233	1.237	1.227	1.186	1.119	1.060	1.026
79	1.170	1.174	1.178	1.182	1.186	1.191	1.196	1.199	1.202	1.205	1.208	1.211	1.215	1.220	1.226	1.229	1.227	1.201	1.145	1.082
80	1.169	1.170	1.173	1.173	1.175	1.176	1.182	1.186	1.192	1.195	1.200	1.203	1.211	1.217	1.224	1.231	1.238	1.241	1.229	1.187
81	1.166	1.165	1.169	1.169	1.172	1.170	1.174	1.175	1.182	1.184	1.189	1.190	1.193	1.195	1.202	1.208	1.215	1.222	1.231	1.234
82	1.159	1.161	1.160	1.163	1.164	1.166	1.167	1.169	1.171	1.176	1.181	1.185	1.187	1.189	1.191	1.195	1.199	1.202	1.203	1.208
83	1.169	1.167	1.162	1.160	1.158	1.159	1.159	1.162	1.163	1.166	1.168	1.172	1.175	1.179	1.181	1.187	1.192	1.194	1.192	1.193
84	1.193	1.191	1.189	1.187	1.183	1.181	1.179	1.178	1.175	1.173	1.170	1.170	1.169	1.170	1.170	1.173	1.175	1.177	1.178	1.181
85	1.224	1.223	1.221	1.220	1.217	1.214	1.212	1.211	1.209	1.209	1.209	1.210	1.209	1.209	1.207	1.205	1.202	1.198	1.195	1.194
86	1.236	1.241	1.248	1.253	1.260	1.263	1.267	1.269	1.272	1.274	1.280	1.285	1.291	1.295	1.298	1.298	1.297	1.294	1.291	1.288
87	1.114	1.123	1.132	1.144	1.155	1.169	1.181	1.197	1.214	1.239	1.270	1.305	1.336	1.361	1.379	1.388	1.389	1.384	1.375	1.366
88	1.013	1.013	1.009	1.016	1.019	1.020	1.022	1.026	1.029	1.036	1.044	1.058	1.071	1.090	1.106	1.120	1.130	1.137	1.139	1.139
89	1.003	1.008	1.004	1.008	1.006	1.009	1.009	1.013	1.011	1.013	1.011	1.016	1.016	1.020	1.022	1.028	1.026	1.032	1.029	1.030
90	1.003	1.001	1.001	1.001	1.004	1.003	1.008	1.006	1.009	1.008	1.009	1.008	1.013	1.011	1.017	1.016	1.022	1.019	1.020	1.016
91	0.997	0.999	0.996	0.999	0.999	1.003	1.001	1.001	0.999	1.001	1.001	1.004	1.001	1.001	1.003	1.014	1.009	1.013	1.008	1.009
92	0.999	1.001	0.999	0.997	0.999	1.004	1.003	1.003	1.004	1.014	1.020	1.020	1.009	1.004	1.001	1.006	1.006	1.006	1.001	1.003
93	1.001	0.999	1.001	0.999	1.003	1.003	1.006	1.001	1.009	1.030	1.054	1.050	1.032	1.009	1.003	0.999	1.001	0.999	1.001	0.997
94	1.003	1.001	1.004	0.999	1.003	1.001	1.004	1.003	1.008	1.011	1.020	1.019	1.014	1.006	1.003	0.997	1.001	1.001	1.001	1.001
95	0.997	1.003	0.997	1.004	0.999	1.001	0.999	1.001	0.999	1.004	0.999	1.001	0.999	1.001	0.997	1.001	0.997	1.001	0.999	1.003
96	1.001	0.999	1.003	1.001	1.004	1.001	1.001	0.997	1.001	0.999	1.001	0.999	1.001	0.994	0.997	0.992	0.999	0.996	1.003	1.001
97	1.001	0.999	1.006	1.001	1.004	0.999	1.003	1.001	1.003	1.001	1.003	0.999	1.001	0.999	0.999	0.999	1.003	1.003	1.008	1.004
98	1.003	1.003	1.001	1.003	0.999	1.004	1.001	1.003	0.999	1.006	0.999	1.001	0.997	0.997	0.992	1.001	1.003	1.008	1.008	1.009

NASA/RI OH90 TRANSITION TEST
V416-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 13

IR SCAN TIME 27.44 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.986	0.984	0.984	0.982	0.986	0.984	0.986	0.984	0.986	0.980	0.982	0.980	0.984	0.982	0.984	0.978	0.982	0.978	0.982	0.978
65	0.982	0.980	0.984	0.984	0.982	0.980	0.982	0.982	0.982	0.978	0.980	0.978	0.980	0.978	0.980	0.978	0.978	0.978	0.980	0.976
66	0.978	0.980	0.978	0.978	0.976	0.976	0.976	0.978	0.978	0.976	0.973	0.976	0.973	0.976	0.976	0.973	0.973	0.973	0.973	0.976
67	0.976	0.976	0.973	0.973	0.973	0.976	0.973	0.973	0.971	0.973	0.969	0.973	0.969	0.971	0.967	0.971	0.969	0.971	0.969	0.969
68	0.969	0.969	0.959	0.964	0.959	0.967	0.959	0.967	0.957	0.962	0.959	0.964	0.959	0.964	0.957	0.962	0.957	0.962	0.964	0.964
69	0.959	0.959	0.959	0.964	0.959	0.959	0.957	0.959	0.957	0.957	0.957	0.959	0.957	0.957	0.954	0.954	0.952	0.957	0.954	0.959
70	0.959	0.954	0.959	0.949	0.962	0.954	0.959	0.954	0.957	0.949	0.952	0.952	0.957	0.952	0.957	0.952	0.954	0.952	0.952	0.949
71	0.954	0.959	0.952	0.952	0.949	0.952	0.949	0.954	0.952	0.959	0.952	0.952	0.946	0.949	0.946	0.949	0.949	0.952	0.946	0.949
72	0.952	0.957	0.952	0.957	0.952	0.952	0.949	0.952	0.949	0.952	0.949	0.952	0.949	0.952	0.946	0.949	0.943	0.946	0.943	0.949
73	0.952	0.959	0.954	0.954	0.954	0.952	0.949	0.949	0.949	0.952	0.946	0.949	0.949	0.949	0.946	0.946	0.943	0.949	0.943	0.949
74	0.962	0.957	0.957	0.954	0.954	0.952	0.954	0.949	0.954	0.954	0.954	0.949	0.957	0.949	0.949	0.949	0.946	0.949	0.952	0.949
75	0.959	0.949	0.954	0.943	0.952	0.943	0.949	0.946	0.954	0.943	0.952	0.940	0.946	0.940	0.949	0.949	0.949	0.946	0.952	0.949
76	0.976	0.962	0.959	0.952	0.954	0.949	0.952	0.949	0.954	0.949	0.952	0.946	0.952	0.946	0.949	0.946	0.952	0.943	0.949	0.937
77	0.992	0.980	0.969	0.959	0.954	0.957	0.952	0.949	0.949	0.949	0.949	0.952	0.946	0.949	0.943	0.949	0.946	0.949	0.946	0.946
78	1.008	1.001	0.992	0.982	0.969	0.962	0.952	0.954	0.949	0.954	0.949	0.952	0.946	0.949	0.949	0.952	0.946	0.949	0.946	0.946
79	1.038	1.013	1.006	1.001	0.999	0.984	0.973	0.964	0.959	0.954	0.957	0.946	0.952	0.949	0.954	0.946	0.949	0.946	0.949	0.949
80	1.123	1.067	1.029	1.009	1.006	0.999	0.999	0.992	0.984	0.973	0.967	0.952	0.954	0.946	0.952	0.949	0.949	0.943	0.949	0.946
81	1.217	1.161	1.092	1.041	1.017	1.003	1.001	0.999	0.999	0.996	0.994	0.986	0.980	0.973	0.973	0.964	0.962	0.957	0.957	0.954
82	1.207	1.192	1.145	1.087	1.037	1.013	0.996	0.997	0.992	0.997	0.992	0.994	0.990	0.996	0.990	0.992	0.984	0.982	0.976	0.971
83	1.194	1.193	1.180	1.145	1.092	1.046	1.014	1.003	0.996	0.999	0.997	0.999	0.997	0.999	0.996	0.999	0.990	0.999	0.992	0.997
84	1.182	1.184	1.182	1.173	1.144	1.098	1.050	1.022	1.006	1.003	1.001	0.999	0.996	0.996	0.996	0.994	0.996	0.997	0.996	0.999
85	1.191	1.190	1.188	1.185	1.174	1.150	1.110	1.066	1.030	1.011	1.001	0.996	0.992	0.994	0.992	0.992	0.988	0.994	0.992	0.994
86	1.287	1.286	1.287	1.286	1.280	1.265	1.240	1.200	1.146	1.086	1.040	1.006	0.996	0.992	0.992	0.992	0.994	0.992	0.992	0.990
87	1.359	1.354	1.350	1.346	1.340	1.333	1.323	1.302	1.255	1.180	1.097	1.041	1.008	0.999	0.996	0.996	0.992	0.994	0.992	0.992
88	1.139	1.139	1.138	1.139	1.140	1.142	1.143	1.142	1.128	1.095	1.051	1.020	1.001	0.996	0.992	0.994	0.996	0.992	0.992	0.990
89	1.023	1.025	1.014	1.019	1.014	1.017	1.013	1.016	1.011	1.011	1.003	1.001	0.994	0.994	0.988	0.988	0.986	0.988	0.986	0.988
90	1.017	1.014	1.013	1.008	1.009	1.004	1.008	1.004	1.006	1.001	0.999	0.992	0.992	0.984	0.990	0.984	0.990	0.984	0.986	0.980
91	1.008	1.011	1.003	0.999	0.997	0.996	0.992	0.992	0.992	0.992	0.992	0.988	0.986	0.986	0.984	0.986	0.988	0.988	0.984	0.984
92	1.004	1.006	0.999	0.994	0.990	0.992	0.988	0.990	0.984	0.988	0.986	0.990	0.986	0.986	0.984	0.986	0.986	0.986	0.982	0.982
93	1.001	0.997	0.996	0.994	0.992	0.990	0.992	0.988	0.990	0.986	0.988	0.984	0.988	0.986	0.986	0.982	0.984	0.982	0.986	0.984
94	1.001	0.997	0.996	0.992	0.992	0.988	0.990	0.984	0.988	0.986	0.990	0.986	0.986	0.984	0.986	0.984	0.988	0.984	0.984	0.982
95	0.999	1.001	0.992	0.990	0.990	0.990	0.988	0.990	0.988	0.986	0.986	0.988	0.986	0.988	0.984	0.986	0.984	0.986	0.986	0.988
96	1.003	0.996	0.996	0.990	0.992	0.986	0.992	0.986	0.988	0.986	0.988	0.984	0.988	0.986	0.988	0.984	0.986	0.982	0.988	0.982
97	1.008	0.999	0.999	0.992	0.992	0.988	0.992	0.986	0.992	0.988	0.988	0.978	0.984	0.978	0.988	0.980	0.988	0.978	0.986	0.978
98	1.006	1.006	0.996	0.996	0.990	0.992	0.988	0.990	0.988	0.988	0.986	0.986	0.984	0.986	0.982	0.986	0.982	0.986	0.980	0.982

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 13

IR SCAN TIME 27.44 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.984	0.976	0.980	0.978	0.982	0.978	0.980	0.976	0.978	0.976
65	0.976	0.976	0.978	0.976	0.978	0.973	0.978	0.976	0.978	0.976
66	0.973	0.973	0.971	0.973	0.973	0.973	0.969	0.971	0.969	0.973
67	0.967	0.969	0.969	0.971	0.967	0.967	0.964	0.969	0.967	0.969
68	0.959	0.959	0.959	0.962	0.959	0.964	0.959	0.962	0.957	0.962
69	0.946	0.954	0.943	0.959	0.943	0.957	0.949	0.957	0.946	0.952
70	0.954	0.952	0.954	0.952	0.954	0.946	0.949	0.946	0.952	0.949
71	0.946	0.946	0.943	0.949	0.946	0.946	0.946	0.946	0.946	0.946
72	0.949	0.949	0.946	0.946	0.943	0.949	0.943	0.946	0.937	0.946
73	0.946	0.946	0.943	0.946	0.937	0.943	0.940	0.946	0.937	0.946
74	0.952	0.946	0.946	0.940	0.949	0.943	0.946	0.943	0.949	0.946
75	0.952	0.940	0.946	0.943	0.949	0.943	0.949	0.943	0.943	0.940
76	0.946	0.937	0.946	0.940	0.946	0.940	0.946	0.934	0.943	0.937
77	0.943	0.946	0.943	0.946	0.946	0.946	0.943	0.943	0.940	0.943
78	0.946	0.949	0.943	0.946	0.943	0.946	0.946	0.946	0.940	0.946
79	0.949	0.946	0.949	0.946	0.949	0.943	0.949	0.943	0.946	0.940
80	0.952	0.946	0.946	0.940	0.949	0.946	0.949	0.943	0.946	0.943
81	0.959	0.949	0.952	0.949	0.954	0.949	0.954	0.946	0.954	0.946
82	0.967	0.967	0.959	0.959	0.954	0.952	0.946	0.949	0.946	0.949
83	0.988	0.992	0.980	0.962	0.969	0.976	0.962	0.969	0.957	0.962
84	0.999	0.999	0.992	0.996	0.992	0.988	0.988	0.986	0.982	0.982
85	0.996	0.996	0.996	0.997	0.992	0.994	0.994	0.992	0.992	0.992
86	0.994	0.992	0.992	0.994	0.996	0.992	0.996	0.992	0.994	0.992
87	0.992	0.997	0.996	0.996	0.992	0.992	0.990	0.992	0.992	0.996
88	0.990	0.990	0.990	0.990	0.990	0.992	0.988	0.988	0.988	0.990
89	0.988	0.988	0.986	0.988	0.986	0.988	0.984	0.988	0.988	0.990
90	0.986	0.984	0.986	0.984	0.988	0.982	0.988	0.982	0.990	0.986
91	0.984	0.984	0.982	0.984	0.982	0.984	0.984	0.984	0.984	0.984
92	0.982	0.986	0.984	0.982	0.982	0.984	0.984	0.984	0.980	0.982
93	0.984	0.980	0.982	0.982	0.984	0.982	0.984	0.982	0.984	0.980
94	0.986	0.984	0.986	0.982	0.986	0.982	0.986	0.982	0.986	0.980
95	0.984	0.984	0.984	0.984	0.984	0.986	0.982	0.984	0.980	0.984
96	0.988	0.984	0.986	0.982	0.986	0.984	0.986	0.984	0.988	0.986
97	0.984	0.978	0.986	0.978	0.986	0.980	0.986	0.984	0.986	0.984
98	0.980	0.980	0.980	0.982	0.982	0.984	0.984	0.982	0.984	0.984

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 27.44 SEC
HRFR = 0.204E-01

GROUP 13

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	0.031	0.030	0.030	0.028	0.027	0.027	0.027	0.026	0.026	0.026	0.026	0.024	0.025	0.026	0.024	0.023	0.024	0.024	0.024	0.023
30	0.030	0.028	0.028	0.028	0.027	0.027	0.026	0.026	0.026	0.025	0.024	0.024	0.024	0.024	0.024	0.024	0.023	0.024	0.023	0.023
31	0.029	0.029	0.029	0.027	0.027	0.026	0.026	0.025	0.025	0.025	0.025	0.025	0.025	0.023	0.024	0.023	0.024	0.023	0.023	0.023
32	0.028	0.028	0.027	0.027	0.027	0.026	0.026	0.025	0.025	0.025	0.025	0.024	0.024	0.023	0.024	0.023	0.023	0.022	0.022	0.021
33	0.027	0.027	0.027	0.027	0.027	0.026	0.026	0.025	0.025	0.024	0.024	0.023	0.023	0.023	0.022	0.022	0.022	0.022	0.023	0.022
34	0.027	0.027	0.027	0.026	0.024	0.025	0.024	0.024	0.024	0.022	0.022	0.021	0.021	0.022	0.022	0.022	0.023	0.024	0.024	0.025
35	0.027	0.027	0.026	0.023	0.024	0.022	0.024	0.022	0.022	0.021	0.022	0.021	0.022	0.022	0.024	0.025	0.026	0.026	0.026	0.026
36	0.026	0.024	0.024	0.024	0.023	0.023	0.022	0.022	0.022	0.022	0.024	0.024	0.026	0.025	0.025	0.024	0.025	0.024	0.026	0.024
37	0.024	0.022	0.023	0.022	0.022	0.022	0.022	0.023	0.024	0.024	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.022	0.020	0.016
38	0.022	0.022	0.022	0.023	0.024	0.025	0.024	0.024	0.025	0.025	0.025	0.025	0.025	0.024	0.022	0.020	0.016	0.012	0.007	0.005
39	0.023	0.024	0.025	0.025	0.025	0.025	0.025	0.024	0.024	0.024	0.025	0.023	0.021	0.017	0.013	0.008	0.007	0.004	0.005	0.003
40	0.025	0.026	0.026	0.025	0.025	0.025	0.025	0.025	0.025	0.022	0.019	0.015	0.011	0.007	0.007	0.004	0.005	0.005	0.006	0.005
41	0.026	0.026	0.026	0.025	0.026	0.024	0.024	0.021	0.019	0.012	0.009	0.006	0.007	0.005	0.007	0.005	0.006	0.005	0.006	0.005
42	0.026	0.026	0.024	0.026	0.023	0.021	0.015	0.012	0.007	0.008	0.005	0.007	0.005	0.007	0.007	0.007	0.007	0.007	0.005	0.007
43	0.026	0.025	0.023	0.020	0.015	0.011	0.009	0.008	0.007	0.008	0.006	0.007	0.006	0.008	0.007	0.007	0.005	0.007	0.005	0.008
44	0.024	0.020	0.015	0.012	0.009	0.009	0.008	0.008	0.008	0.009	0.008	0.009	0.007	0.008	0.007	0.008	0.008	0.009	0.008	0.010
45	0.017	0.013	0.012	0.011	0.011	0.010	0.011	0.010	0.010	0.009	0.010	0.009	0.010	0.009	0.010	0.010	0.011	0.010	0.011	0.011
46	0.015	0.014	0.013	0.012	0.013	0.012	0.012	0.012	0.012	0.011	0.012	0.011	0.013	0.012	0.012	0.012	0.014	0.017	0.025	0.032
47	0.016	0.016	0.016	0.016	0.015	0.015	0.013	0.015	0.013	0.014	0.014	0.015	0.015	0.016	0.015	0.016	0.018	0.030	0.059	0.086
48	0.018	0.018	0.017	0.017	0.016	0.017	0.016	0.017	0.016	0.017	0.016	0.016	0.016	0.017	0.017	0.019	0.021	0.038	0.075	0.109
49	0.019	0.019	0.017	0.019	0.017	0.017	0.016	0.018	0.017	0.017	0.016	0.018	0.017	0.018	0.018	0.019	0.022	0.044	0.084	0.118
50	0.020	0.019	0.019	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.019	0.017	0.019	0.019	0.026	0.053	0.096	0.128
51	0.019	0.019	0.019	0.019	0.019	0.018	0.018	0.018	0.019	0.018	0.019	0.018	0.019	0.019	0.020	0.021	0.030	0.061	0.102	0.130
52	0.017	0.017	0.017	0.017	0.016	0.016	0.016	0.016	0.017	0.016	0.017	0.016	0.018	0.017	0.018	0.019	0.030	0.059	0.090	0.112
53	0.015	0.014	0.013	0.013	0.012	0.012	0.012	0.012	0.013	0.012	0.013	0.013	0.013	0.013	0.015	0.016	0.030	0.055	0.076	0.089
54	0.009	0.008	0.008	0.008	0.007	0.006	0.007	0.006	0.008	0.006	0.007	0.007	0.008	0.007	0.009	0.012	0.031	0.055	0.070	0.078
55	0.005	0.004	0.003	0.003	0.002	0.004	0.003	0.003	0.001	0.002	0.002	0.003	0.003	0.004	0.003	0.010	0.032	0.055	0.068	0.074
56	0.002	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.011	0.035	0.057	0.066	0.071
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.012	0.037	0.057	0.065	0.071
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.017	0.043	0.058	0.065	0.069
59	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.024	0.049	0.061	0.067	0.071
60	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.030	0.052	0.060	0.065	0.068
61	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.012	0.037	0.054	0.063	0.066	0.069
62	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.020	0.044	0.058	0.064	0.068	0.070
63	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.024	0.049	0.060	0.066	0.069	0.072

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 27.44 SEC
GROUP 13 HREF = 0.204E-01

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	0.024	0.022	0.023	0.022	0.023	0.022	0.023	0.022	0.022	0.019	0.020	0.018	0.020	0.018	0.020	0.020	0.020	0.020	0.020	0.020
30	0.022	0.023	0.023	0.023	0.022	0.022	0.021	0.021	0.020	0.021	0.021	0.021	0.021	0.022	0.021	0.022	0.022	0.023	0.022	0.024
31	0.023	0.022	0.022	0.021	0.022	0.021	0.021	0.022	0.022	0.023	0.024	0.024	0.025	0.025	0.026	0.026	0.027	0.026	0.027	0.026
32	0.022	0.021	0.022	0.022	0.024	0.024	0.025	0.025	0.025	0.025	0.026	0.027	0.027	0.027	0.027	0.025	0.024	0.022	0.020	0.017
33	0.023	0.023	0.025	0.025	0.026	0.026	0.027	0.026	0.026	0.026	0.027	0.024	0.022	0.020	0.019	0.016	0.013	0.010	0.007	0.002
34	0.026	0.025	0.026	0.026	0.026	0.027	0.027	0.023	0.022	0.020	0.016	0.012	0.010	0.006	0.002	0.001	0.001	0.001	0.001	0.001
35	0.026	0.026	0.026	0.024	0.022	0.019	0.016	0.012	0.008	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
36	0.023	0.019	0.017	0.011	0.008	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000
37	0.012	0.005	0.004	0.002	0.003	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.002	0.002
38	0.003	0.004	0.003	0.003	0.002	0.003	0.002	0.002	0.003	0.002	0.001	0.002	0.002	0.003	0.002	0.002	0.002	0.003	0.003	0.004
39	0.004	0.003	0.005	0.004	0.004	0.003	0.005	0.004	0.004	0.003	0.004	0.003	0.004	0.004	0.004	0.003	0.004	0.003	0.005	0.004
40	0.005	0.004	0.005	0.004	0.006	0.005	0.005	0.004	0.005	0.005	0.006	0.004	0.005	0.004	0.006	0.005	0.006	0.004	0.005	0.004
41	0.007	0.005	0.006	0.005	0.007	0.006	0.008	0.005	0.006	0.005	0.006	0.005	0.007	0.005	0.006	0.005	0.007	0.005	0.007	0.005
42	0.005	0.007	0.007	0.007	0.007	0.008	0.007	0.008	0.007	0.008	0.007	0.007	0.007	0.007	0.007	0.008	0.007	0.007	0.006	0.008
43	0.005	0.007	0.005	0.008	0.006	0.008	0.006	0.008	0.008	0.008	0.007	0.009	0.008	0.008	0.007	0.009	0.008	0.009	0.008	0.008
44	0.008	0.010	0.008	0.009	0.008	0.010	0.009	0.010	0.009	0.010	0.008	0.010	0.008	0.009	0.007	0.009	0.008	0.009	0.007	0.009
45	0.013	0.011	0.012	0.012	0.012	0.011	0.012	0.011	0.012	0.011	0.012	0.011	0.012	0.011	0.012	0.011	0.011	0.010	0.011	0.010
46	0.037	0.037	0.036	0.033	0.031	0.027	0.025	0.022	0.021	0.018	0.017	0.015	0.015	0.015	0.015	0.014	0.015	0.014	0.015	0.013
47	0.101	0.108	0.109	0.107	0.102	0.097	0.090	0.083	0.075	0.065	0.055	0.045	0.036	0.029	0.023	0.020	0.018	0.018	0.017	0.018
48	0.129	0.141	0.147	0.152	0.153	0.152	0.150	0.148	0.147	0.146	0.139	0.128	0.114	0.099	0.081	0.063	0.045	0.032	0.024	0.022
49	0.138	0.151	0.160	0.169	0.176	0.181	0.181	0.176	0.167	0.159	0.155	0.153	0.152	0.157	0.162	0.153	0.122	0.085	0.055	0.036
50	0.149	0.162	0.173	0.183	0.194	0.204	0.213	0.215	0.210	0.195	0.178	0.163	0.154	0.151	0.156	0.162	0.159	0.133	0.095	0.063
51	0.149	0.164	0.178	0.191	0.204	0.218	0.231	0.241	0.245	0.243	0.234	0.216	0.194	0.174	0.164	0.161	0.162	0.158	0.138	0.100
52	0.128	0.143	0.159	0.177	0.194	0.212	0.231	0.248	0.262	0.270	0.270	0.263	0.248	0.225	0.199	0.177	0.164	0.162	0.162	0.148
53	0.099	0.110	0.122	0.138	0.156	0.176	0.197	0.220	0.241	0.256	0.263	0.267	0.267	0.263	0.252	0.232	0.205	0.180	0.165	0.160
54	0.084	0.089	0.095	0.103	0.114	0.126	0.143	0.161	0.182	0.202	0.218	0.230	0.238	0.244	0.248	0.250	0.248	0.235	0.212	0.188
55	0.078	0.082	0.085	0.090	0.096	0.103	0.110	0.119	0.129	0.141	0.155	0.169	0.182	0.196	0.207	0.214	0.220	0.227	0.232	0.231
56	0.075	0.078	0.081	0.085	0.089	0.095	0.100	0.105	0.109	0.114	0.119	0.125	0.132	0.142	0.153	0.164	0.174	0.183	0.190	0.196
57	0.074	0.077	0.079	0.083	0.086	0.091	0.094	0.099	0.103	0.105	0.107	0.109	0.110	0.113	0.117	0.123	0.131	0.141	0.149	0.157
58	0.073	0.076	0.079	0.082	0.087	0.091	0.095	0.099	0.102	0.103	0.104	0.103	0.105	0.107	0.110	0.111	0.114	0.118	0.123	0.130
59	0.074	0.075	0.079	0.081	0.086	0.089	0.094	0.098	0.101	0.104	0.105	0.106	0.108	0.108	0.108	0.107	0.110	0.112	0.115	0.118
60	0.072	0.074	0.077	0.081	0.085	0.089	0.094	0.097	0.101	0.101	0.102	0.103	0.107	0.110	0.111	0.111	0.112	0.112	0.112	0.112
61	0.072	0.073	0.076	0.079	0.082	0.086	0.090	0.095	0.098	0.100	0.101	0.104	0.107	0.108	0.109	0.109	0.111	0.114	0.116	0.116
62	0.072	0.073	0.076	0.079	0.083	0.086	0.090	0.093	0.095	0.096	0.097	0.099	0.103	0.105	0.108	0.110	0.111	0.111	0.111	0.113
63	0.074	0.076	0.078	0.080	0.083	0.086	0.089	0.093	0.095	0.096	0.096	0.099	0.101	0.103	0.104	0.105	0.107	0.109	0.110	0.112

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 27.44 SEC
HREF = 0.204E-01

GROUP 13

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	0.021	0.022	0.022	0.022	0.022	0.022	0.023	0.023	0.023	0.022	0.021	0.020	0.020	0.019	0.019	0.017	0.017	0.015	0.014	0.011
30	0.024	0.026	0.024	0.024	0.023	0.024	0.022	0.023	0.021	0.020	0.017	0.017	0.014	0.014	0.012	0.012	0.011	0.010	0.009	0.008
31	0.025	0.023	0.022	0.021	0.019	0.017	0.017	0.015	0.013	0.009	0.008	0.005	0.005	0.003	0.002	0.002	0.002	0.002	0.002	0.002
32	0.016	0.013	0.012	0.009	0.007	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
33	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.002	0.002	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.002	0.003	0.003	0.003	0.002	0.003	0.002	0.002	0.003	0.003	0.002	0.002	0.002	0.002	0.000	0.002	0.002	0.002	0.002	0.002
39	0.004	0.003	0.004	0.003	0.004	0.003	0.004	0.003	0.004	0.003	0.004	0.002	0.003	0.003	0.004	0.003	0.004	0.002	0.003	0.002
40	0.006	0.005	0.005	0.004	0.005	0.004	0.005	0.005	0.005	0.004	0.005	0.004	0.005	0.004	0.004	0.003	0.005	0.004	0.004	0.003
41	0.006	0.005	0.006	0.005	0.006	0.005	0.006	0.005	0.006	0.005	0.006	0.004	0.005	0.004	0.006	0.005	0.005	0.004	0.005	0.004
42	0.007	0.008	0.007	0.008	0.005	0.007	0.006	0.007	0.006	0.007	0.005	0.006	0.005	0.006	0.005	0.007	0.005	0.006	0.005	0.005
43	0.007	0.008	0.007	0.008	0.007	0.008	0.008	0.008	0.008	0.007	0.005	0.007	0.006	0.008	0.005	0.007	0.005	0.006	0.004	0.006
44	0.005	0.008	0.007	0.008	0.007	0.009	0.007	0.008	0.005	0.008	0.007	0.008	0.007	0.008	0.007	0.008	0.007	0.007	0.005	0.007
45	0.011	0.010	0.011	0.010	0.011	0.010	0.010	0.008	0.010	0.009	0.010	0.008	0.010	0.007	0.010	0.007	0.008	0.006	0.008	0.008
46	0.014	0.013	0.013	0.012	0.013	0.012	0.013	0.012	0.013	0.011	0.012	0.011	0.012	0.011	0.012	0.012	0.012	0.011	0.012	0.011
47	0.017	0.018	0.017	0.017	0.015	0.016	0.015	0.016	0.015	0.016	0.016	0.016	0.015	0.015	0.014	0.015	0.014	0.015	0.015	0.015
48	0.020	0.020	0.019	0.019	0.018	0.018	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.016	0.015	0.016	0.017	0.016	0.017
49	0.027	0.023	0.022	0.021	0.019	0.019	0.018	0.019	0.018	0.019	0.018	0.018	0.017	0.018	0.017	0.018	0.018	0.018	0.017	0.018
50	0.042	0.031	0.027	0.023	0.022	0.020	0.020	0.019	0.020	0.019	0.019	0.019	0.019	0.018	0.018	0.018	0.019	0.018	0.019	0.018
51	0.065	0.041	0.033	0.030	0.028	0.024	0.023	0.021	0.020	0.019	0.020	0.019	0.020	0.019	0.020	0.018	0.019	0.019	0.019	0.018
52	0.115	0.075	0.045	0.030	0.028	0.028	0.027	0.023	0.022	0.019	0.019	0.018	0.019	0.017	0.019	0.017	0.018	0.017	0.018	0.017
53	0.156	0.133	0.094	0.057	0.034	0.025	0.026	0.025	0.021	0.018	0.017	0.015	0.016	0.014	0.015	0.014	0.015	0.014	0.015	0.014
54	0.171	0.161	0.143	0.103	0.063	0.036	0.025	0.023	0.023	0.017	0.013	0.009	0.009	0.008	0.007	0.005	0.008	0.007	0.009	0.009
55	0.220	0.201	0.179	0.156	0.120	0.077	0.044	0.027	0.022	0.023	0.018	0.011	0.005	0.003	0.002	0.003	0.001	0.003	0.003	0.007
56	0.204	0.210	0.209	0.199	0.180	0.148	0.103	0.061	0.034	0.023	0.022	0.020	0.011	0.007	0.002	0.002	0.000	0.004	0.004	0.005
57	0.163	0.169	0.176	0.184	0.190	0.191	0.177	0.141	0.092	0.052	0.029	0.022	0.022	0.017	0.009	0.005	0.002	0.003	0.003	0.005
58	0.137	0.143	0.147	0.150	0.156	0.163	0.173	0.180	0.166	0.123	0.076	0.042	0.026	0.022	0.020	0.011	0.006	0.004	0.004	0.004
59	0.122	0.128	0.134	0.138	0.142	0.145	0.149	0.154	0.165	0.171	0.146	0.095	0.053	0.028	0.022	0.019	0.014	0.005	0.002	0.002
60	0.115	0.119	0.123	0.128	0.134	0.140	0.145	0.148	0.151	0.157	0.161	0.141	0.097	0.055	0.031	0.021	0.020	0.013	0.006	0.001
61	0.115	0.115	0.118	0.121	0.125	0.129	0.137	0.143	0.151	0.156	0.160	0.164	0.152	0.113	0.067	0.036	0.022	0.017	0.015	0.006
62	0.117	0.118	0.121	0.121	0.122	0.124	0.128	0.132	0.140	0.148	0.158	0.167	0.173	0.166	0.134	0.084	0.045	0.024	0.018	0.013
63	0.114	0.116	0.117	0.120	0.123	0.127	0.129	0.130	0.132	0.138	0.144	0.151	0.160	0.172	0.178	0.161	0.113	0.065	0.033	0.020

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREFR
IR SCAN TIME 27.44 SEC
HREFR = 0.204E-01

GROUP 13

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.009	0.007	0.008	0.008	0.011	0.011	0.013	0.012	0.012	0.011	0.013	0.013	0.014	0.013	0.014	0.013	0.012	0.012	0.013	0.012
30	0.005	0.005	0.003	0.004	0.003	0.005	0.004	0.005	0.003	0.004	0.003	0.004	0.003	0.004	0.004	0.004	0.004	0.003	0.003	0.003
31	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000
32	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.002	0.001	0.001	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	0.004	0.003	0.003	0.002	0.003	0.002	0.003	0.002	0.001	0.001	0.002	0.000	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001
40	0.004	0.003	0.004	0.003	0.004	0.002	0.003	0.003	0.004	0.003	0.004	0.002	0.003	0.002	0.004	0.003	0.002	0.002	0.002	0.002
41	0.005	0.004	0.005	0.003	0.005	0.003	0.005	0.003	0.004	0.002	0.004	0.003	0.004	0.003	0.004	0.002	0.004	0.003	0.004	0.002
42	0.004	0.005	0.005	0.005	0.004	0.005	0.004	0.005	0.004	0.005	0.004	0.004	0.004	0.004	0.003	0.004	0.004	0.005	0.004	0.004
43	0.005	0.006	0.005	0.007	0.005	0.005	0.004	0.005	0.004	0.005	0.004	0.005	0.004	0.005	0.004	0.005	0.003	0.004	0.004	0.005
44	0.006	0.007	0.005	0.007	0.006	0.007	0.005	0.006	0.005	0.006	0.005	0.007	0.005	0.006	0.005	0.005	0.005	0.005	0.004	0.005
45	0.009	0.007	0.008	0.007	0.008	0.006	0.008	0.008	0.008	0.008	0.009	0.008	0.008	0.006	0.008	0.006	0.008	0.006	0.008	0.006
46	0.011	0.011	0.012	0.011	0.011	0.010	0.012	0.010	0.012	0.006	0.010	0.007	0.011	0.007	0.011	0.007	0.011	0.006	0.010	0.006
47	0.014	0.015	0.014	0.014	0.013	0.014	0.013	0.014	0.013	0.014	0.013	0.014	0.013	0.013	0.012	0.013	0.013	0.013	0.013	0.014
48	0.016	0.017	0.015	0.017	0.015	0.016	0.015	0.016	0.015	0.016	0.015	0.015	0.015	0.015	0.015	0.016	0.015	0.016	0.015	0.016
49	0.017	0.017	0.016	0.017	0.017	0.017	0.017	0.017	0.016	0.016	0.016	0.016	0.016	0.017	0.016	0.017	0.016	0.016	0.016	0.017
50	0.019	0.017	0.018	0.017	0.018	0.017	0.018	0.017	0.018	0.017	0.018	0.017	0.018	0.016	0.017	0.017	0.017	0.017	0.018	0.017
51	0.019	0.018	0.019	0.018	0.019	0.018	0.018	0.018	0.019	0.018	0.019	0.018	0.018	0.017	0.018	0.018	0.018	0.017	0.018	0.017
52	0.018	0.016	0.018	0.017	0.019	0.018	0.018	0.017	0.018	0.018	0.019	0.017	0.018	0.017	0.018	0.017	0.018	0.017	0.018	0.017
53	0.016	0.015	0.017	0.016	0.017	0.016	0.017	0.015	0.017	0.015	0.017	0.016	0.017	0.015	0.017	0.015	0.016	0.015	0.017	0.015
54	0.011	0.011	0.013	0.013	0.015	0.014	0.015	0.014	0.016	0.015	0.016	0.015	0.015	0.015	0.015	0.015	0.016	0.014	0.015	0.014
55	0.008	0.011	0.010	0.012	0.012	0.013	0.013	0.014	0.013	0.015	0.013	0.013	0.013	0.014	0.013	0.015	0.013	0.013	0.012	0.013
56	0.007	0.010	0.011	0.012	0.012	0.013	0.013	0.013	0.012	0.013	0.013	0.014	0.013	0.014	0.013	0.013	0.012	0.013	0.012	0.012
57	0.008	0.009	0.009	0.011	0.011	0.011	0.010	0.011	0.011	0.012	0.011	0.012	0.011	0.012	0.011	0.011	0.010	0.011	0.010	0.011
58	0.006	0.005	0.006	0.006	0.008	0.007	0.008	0.007	0.008	0.008	0.008	0.006	0.007	0.006	0.008	0.006	0.008	0.005	0.006	0.005
59	0.001	0.000	0.003	0.002	0.004	0.002	0.003	0.001	0.002	0.001	0.003	0.002	0.002	0.001	0.002	0.001	0.003	0.003	0.000	0.000
60	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
61	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
62	0.008	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
63	0.014	0.010	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 27.44 SEC
GROUP 13 HRFR = 0.204E-01

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.013	0.011	0.012	0.011	0.011	0.011	0.011	0.011	0.011	0.010	0.011	0.010	0.011	0.010	0.011	0.010	0.011	0.010	0.011	0.010
30	0.002	0.004	0.003	0.004	0.003	0.004	0.002	0.002	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	0.000	0.000	0.001	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.003	0.001	0.002	0.000	0.002	0.000	0.002	0.002	0.000	0.000	0.000	0.000	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000
41	0.003	0.002	0.003	0.002	0.003	0.002	0.002	0.001	0.002	0.001	0.003	0.001	0.002	0.001	0.002	0.000	0.002	0.000	0.002	0.002
42	0.003	0.003	0.002	0.004	0.003	0.004	0.002	0.003	0.003	0.003	0.002	0.003	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.003
43	0.004	0.004	0.003	0.004	0.003	0.004	0.003	0.004	0.004	0.003	0.004	0.003	0.003	0.002	0.003	0.003	0.002	0.003	0.002	0.003
44	0.005	0.005	0.004	0.004	0.004	0.004	0.003	0.004	0.004	0.005	0.004	0.004	0.004	0.004	0.003	0.004	0.003	0.004	0.004	0.005
45	0.008	0.006	0.008	0.006	0.007	0.005	0.007	0.006	0.007	0.006	0.007	0.006	0.006	0.005	0.007	0.005	0.007	0.005	0.007	0.005
46	0.010	0.008	0.011	0.008	0.011	0.010	0.010	0.009	0.010	0.009	0.010	0.010	0.011	0.010	0.010	0.010	0.010	0.009	0.010	0.009
47	0.013	0.013	0.013	0.013	0.014	0.014	0.013	0.014	0.012	0.013	0.011	0.013	0.011	0.013	0.011	0.013	0.012	0.013	0.012	0.013
48	0.018	0.018	0.018	0.017	0.018	0.018	0.018	0.016	0.018	0.018	0.014	0.015	0.015	0.015	0.015	0.016	0.015	0.015	0.014	0.015
49	0.017	0.018	0.018	0.018	0.017	0.017	0.016	0.017	0.016	0.017	0.016	0.017	0.016	0.017	0.016	0.017	0.017	0.017	0.016	0.016
50	0.018	0.017	0.018	0.018	0.018	0.018	0.018	0.017	0.017	0.017	0.018	0.017	0.018	0.016	0.017	0.017	0.017	0.017	0.017	0.016
51	0.018	0.018	0.018	0.017	0.018	0.017	0.018	0.018	0.018	0.017	0.018	0.017	0.018	0.017	0.017	0.017	0.017	0.017	0.017	0.016
52	0.019	0.018	0.018	0.017	0.018	0.017	0.018	0.016	0.016	0.015	0.017	0.016	0.016	0.015	0.016	0.015	0.016	0.015	0.016	0.014
53	0.017	0.015	0.016	0.015	0.016	0.014	0.014	0.012	0.013	0.012	0.013	0.012	0.012	0.011	0.012	0.011	0.012	0.011	0.012	0.011
54	0.015	0.013	0.013	0.011	0.012	0.009	0.010	0.007	0.008	0.005	0.007	0.005	0.007	0.005	0.006	0.004	0.006	0.004	0.007	0.004
55	0.013	0.013	0.011	0.011	0.008	0.008	0.005	0.005	0.004	0.004	0.002	0.003	0.002	0.003	0.002	0.002	0.000	0.001	0.000	0.000
56	0.011	0.012	0.010	0.010	0.008	0.007	0.004	0.005	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
57	0.010	0.010	0.008	0.008	0.006	0.005	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	0.005	0.004	0.005	0.004	0.004	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
59	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
61	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
62	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
63	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 27.44 SEC
HREF = 0.204E-01

GROUP 13

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.011	0.009	0.010	0.010	0.011	0.010	0.010	0.010	0.010	0.009
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.001	0.000
41	0.001	0.000	0.002	0.001	0.002	0.002	0.002	0.002	0.002	0.002
42	0.002	0.002	0.002	0.002	0.002	0.003	0.002	0.003	0.002	0.002
43	0.002	0.003	0.002	0.004	0.003	0.004	0.003	0.004	0.002	0.003
44	0.004	0.004	0.003	0.004	0.002	0.004	0.004	0.004	0.004	0.005
45	0.007	0.005	0.007	0.005	0.007	0.005	0.007	0.006	0.007	0.006
46	0.010	0.010	0.010	0.010	0.010	0.010	0.009	0.008	0.010	0.008
47	0.011	0.013	0.011	0.013	0.012	0.013	0.012	0.012	0.011	0.012
48	0.014	0.015	0.014	0.015	0.013	0.014	0.013	0.013	0.012	0.014
49	0.016	0.016	0.016	0.016	0.016	0.016	0.015	0.016	0.014	0.016
50	0.017	0.016	0.017	0.016	0.017	0.016	0.017	0.015	0.016	0.015
51	0.017	0.017	0.017	0.016	0.017	0.015	0.016	0.015	0.017	0.015
52	0.015	0.015	0.016	0.014	0.015	0.013	0.015	0.013	0.014	0.012
53	0.012	0.011	0.012	0.010	0.011	0.010	0.011	0.010	0.010	0.009
54	0.005	0.005	0.006	0.005	0.005	0.004	0.005	0.004	0.005	0.004
55	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
59	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
61	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
62	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
63	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 27.44 SEC
HRFR = 0.204E-01

GROUP 13

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.028	0.050	0.061	0.065	0.069	0.071
65	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.032	0.051	0.061	0.065	0.070	0.072
66	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.010	0.036	0.052	0.059	0.063	0.066	0.069
67	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.018	0.042	0.054	0.060	0.063	0.067	0.069
68	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.024	0.045	0.055	0.060	0.063	0.065	0.068
69	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.032	0.049	0.056	0.060	0.063	0.065	0.069
70	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.013	0.040	0.054	0.060	0.064	0.067	0.069	0.072
71	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.015	0.044	0.056	0.063	0.066	0.069	0.071	0.074
72	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.020	0.044	0.054	0.060	0.063	0.067	0.069	0.071
73	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.021	0.040	0.049	0.054	0.056	0.059	0.061	0.063
74	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.024	0.040	0.046	0.049	0.052	0.054	0.056	0.057
75	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.006	0.028	0.038	0.042	0.045	0.048	0.049	0.051	0.053
76	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.012	0.030	0.037	0.041	0.043	0.045	0.046	0.048	0.049
77	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.019	0.033	0.039	0.041	0.044	0.045	0.047	0.048	0.049
78	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.025	0.036	0.041	0.043	0.046	0.046	0.049	0.049	0.052
79	0.000	0.002	0.004	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.007	0.027	0.038	0.042	0.045	0.047	0.049	0.050	0.052	0.054
80	0.005	0.012	0.011	0.004	0.008	0.005	0.002	0.002	0.002	0.002	0.012	0.029	0.038	0.041	0.044	0.045	0.048	0.049	0.051	0.052
81	0.013	0.021	0.018	0.011	0.012	0.011	0.011	0.006	0.003	0.001	0.015	0.029	0.037	0.039	0.042	0.044	0.045	0.047	0.049	0.050
82	0.035	0.041	0.031	0.024	0.020	0.015	0.012	0.013	0.011	0.010	0.020	0.031	0.036	0.040	0.041	0.043	0.044	0.047	0.049	0.051
83	0.065	0.069	0.049	0.054	0.047	0.024	0.011	0.008	0.010	0.016	0.024	0.033	0.037	0.039	0.041	0.043	0.044	0.047	0.048	0.051
84	0.064	0.065	0.050	0.066	0.059	0.029	0.009	0.009	0.002	0.022	0.040	0.046	0.045	0.044	0.043	0.043	0.043	0.044	0.045	0.048
85	0.041	0.038	0.034	0.044	0.037	0.021	0.006	0.004	0.007	0.031	0.055	0.065	0.067	0.064	0.061	0.059	0.056	0.054	0.051	0.052
86	0.026	0.025	0.026	0.026	0.024	0.019	0.017	0.015	0.015	0.014	0.021	0.023	0.026	0.026	0.028	0.029	0.033	0.034	0.038	0.040
87	0.016	0.016	0.018	0.019	0.017	0.017	0.017	0.018	0.015	0.012	0.009	0.010	0.010	0.010	0.009	0.010	0.009	0.010	0.010	0.011
88	0.007	0.007	0.007	0.008	0.012	0.008	0.012	0.016	0.017	0.011	0.011	0.010	0.008	0.010	0.010	0.009	0.010	0.008	0.009	0.010
89	0.003	0.000	0.000	0.000	0.001	0.004	0.005	0.012	0.015	0.013	0.010	0.010	0.008	0.009	0.008	0.008	0.006	0.007	0.006	0.007
90	0.000	0.000	0.000	0.000	0.000	0.001	0.005	0.009	0.015	0.013	0.012	0.011	0.011	0.009	0.009	0.007	0.007	0.005	0.007	0.005
91	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.012	0.014	0.012	0.012	0.011	0.010	0.008	0.008	0.005	0.005	0.005	0.006
92	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.005	0.010	0.013	0.012	0.013	0.011	0.011	0.008	0.009	0.008	0.008	0.005	0.006
93	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.005	0.014	0.013	0.014	0.012	0.013	0.011	0.012	0.010	0.011	0.008	0.008	0.003
94	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.007	0.014	0.015	0.016	0.015	0.016	0.015	0.015	0.014	0.013	0.010	0.008	0.005
95	0.011	0.009	0.008	0.008	0.007	0.007	0.007	0.011	0.015	0.017	0.017	0.018	0.019	0.020	0.019	0.019	0.017	0.013	0.008	0.007
96	0.022	0.022	0.021	0.019	0.018	0.015	0.015	0.016	0.021	0.021	0.020	0.020	0.022	0.023	0.025	0.023	0.022	0.018	0.012	0.008
97	0.029	0.029	0.029	0.027	0.026	0.022	0.020	0.019	0.023	0.023	0.024	0.024	0.027	0.027	0.028	0.027	0.026	0.021	0.015	0.009
98	0.032	0.031	0.030	0.030	0.028	0.025	0.021	0.022	0.022	0.022	0.022	0.025	0.027	0.030	0.030	0.030	0.027	0.022	0.016	0.013

NASA/RI OH90 TRANSITION TEST
V41B-P4A
AKO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREFR
IR SCAN TIME 27.44 SEC
HREFR = 0.204E-01

GROUP 13

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	0.074	0.075	0.079	0.082	0.085	0.088	0.092	0.095	0.098	0.098	0.099	0.101	0.103	0.104	0.105	0.106	0.107	0.108	0.109	0.109
65	0.074	0.076	0.079	0.081	0.084	0.087	0.091	0.092	0.099	0.100	0.103	0.106	0.112	0.110	0.109	0.106	0.107	0.107	0.109	0.108
66	0.071	0.074	0.077	0.080	0.084	0.088	0.092	0.096	0.100	0.102	0.103	0.105	0.108	0.108	0.107	0.108	0.109	0.110	0.109	0.109
67	0.071	0.073	0.075	0.079	0.081	0.084	0.087	0.091	0.094	0.098	0.100	0.102	0.104	0.107	0.108	0.109	0.110	0.110	0.109	0.110
68	0.070	0.073	0.076	0.079	0.082	0.086	0.088	0.092	0.095	0.099	0.101	0.103	0.103	0.105	0.107	0.111	0.113	0.116	0.119	0.123
69	0.071	0.074	0.077	0.080	0.084	0.088	0.091	0.096	0.100	0.104	0.108	0.111	0.113	0.114	0.115	0.118	0.120	0.121	0.122	0.124
70	0.075	0.077	0.080	0.083	0.087	0.089	0.092	0.095	0.099	0.103	0.106	0.109	0.111	0.112	0.114	0.115	0.116	0.117	0.119	0.120
71	0.075	0.079	0.081	0.084	0.086	0.089	0.092	0.093	0.095	0.098	0.101	0.103	0.104	0.104	0.105	0.106	0.107	0.109	0.110	0.113
72	0.073	0.075	0.078	0.081	0.083	0.087	0.089	0.092	0.093	0.097	0.098	0.100	0.100	0.101	0.100	0.101	0.101	0.103	0.103	0.104
73	0.065	0.067	0.069	0.072	0.074	0.077	0.079	0.082	0.084	0.087	0.089	0.091	0.092	0.093	0.094	0.094	0.095	0.096	0.097	0.098
74	0.060	0.061	0.063	0.065	0.067	0.069	0.072	0.073	0.075	0.075	0.077	0.079	0.080	0.081	0.081	0.080	0.081	0.082	0.084	0.086
75	0.054	0.056	0.058	0.059	0.061	0.063	0.065	0.067	0.069	0.070	0.072	0.073	0.076	0.076	0.076	0.075	0.075	0.075	0.076	0.077
76	0.051	0.052	0.054	0.056	0.058	0.060	0.061	0.062	0.064	0.065	0.067	0.067	0.069	0.069	0.070	0.071	0.072	0.072	0.072	0.072
77	0.051	0.052	0.053	0.055	0.056	0.058	0.060	0.061	0.062	0.063	0.064	0.065	0.065	0.065	0.067	0.067	0.067	0.069	0.068	0.069
78	0.052	0.054	0.055	0.057	0.058	0.060	0.061	0.062	0.063	0.063	0.064	0.065	0.064	0.065	0.065	0.066	0.066	0.067	0.067	0.067
79	0.055	0.056	0.058	0.059	0.061	0.061	0.064	0.064	0.066	0.066	0.067	0.066	0.067	0.065	0.066	0.065	0.066	0.065	0.066	0.066
80	0.054	0.056	0.059	0.060	0.062	0.063	0.065	0.067	0.069	0.069	0.071	0.070	0.071	0.070	0.070	0.069	0.069	0.068	0.068	0.067
81	0.053	0.054	0.056	0.057	0.059	0.060	0.063	0.065	0.066	0.067	0.069	0.070	0.071	0.070	0.070	0.070	0.071	0.070	0.071	0.070
82	0.052	0.054	0.055	0.058	0.059	0.061	0.062	0.064	0.064	0.066	0.067	0.068	0.068	0.068	0.068	0.069	0.069	0.070	0.070	0.070
83	0.053	0.056	0.058	0.060	0.062	0.064	0.065	0.067	0.068	0.070	0.071	0.071	0.072	0.073	0.073	0.074	0.074	0.075	0.075	0.075
84	0.050	0.053	0.055	0.058	0.060	0.062	0.064	0.065	0.067	0.068	0.069	0.071	0.072	0.074	0.075	0.075	0.076	0.077	0.079	0.080
85	0.051	0.052	0.053	0.055	0.057	0.060	0.061	0.063	0.064	0.066	0.066	0.067	0.068	0.069	0.069	0.071	0.071	0.072	0.073	0.074
86	0.041	0.041	0.044	0.047	0.052	0.052	0.053	0.053	0.055	0.057	0.061	0.064	0.067	0.066	0.066	0.065	0.065	0.065	0.066	0.067
87	0.011	0.013	0.013	0.015	0.015	0.016	0.015	0.015	0.014	0.015	0.015	0.016	0.016	0.017	0.016	0.017	0.016	0.017	0.016	0.017
88	0.010	0.011	0.012	0.010	0.012	0.012	0.012	0.012	0.011	0.010	0.011	0.011	0.011	0.011	0.008	0.008	0.009	0.008	0.011	0.009
89	0.008	0.008	0.010	0.011	0.010	0.011	0.011	0.011	0.009	0.010	0.008	0.009	0.008	0.009	0.007	0.008	0.007	0.007	0.007	0.007
90	0.007	0.007	0.008	0.008	0.009	0.008	0.010	0.008	0.010	0.009	0.010	0.008	0.009	0.007	0.008	0.007	0.008	0.006	0.007	0.005
91	0.005	0.007	0.007	0.008	0.008	0.008	0.008	0.009	0.008	0.009	0.008	0.010	0.009	0.009	0.007	0.007	0.005	0.007	0.006	0.007
92	0.004	0.006	0.005	0.008	0.006	0.008	0.007	0.009	0.008	0.010	0.012	0.022	0.027	0.022	0.014	0.008	0.006	0.007	0.006	0.007
93	0.005	0.002	0.006	0.003	0.007	0.004	0.008	0.006	0.009	0.007	0.013	0.020	0.027	0.022	0.015	0.008	0.008	0.005	0.007	0.006
94	0.005	0.004	0.006	0.005	0.007	0.007	0.010	0.010	0.012	0.012	0.012	0.011	0.012	0.009	0.009	0.006	0.007	0.004	0.006	0.005
95	0.004	0.005	0.006	0.010	0.010	0.012	0.013	0.015	0.015	0.016	0.015	0.015	0.012	0.011	0.008	0.007	0.005	0.006	0.005	0.006
96	0.007	0.006	0.009	0.010	0.013	0.012	0.016	0.017	0.019	0.019	0.020	0.017	0.016	0.012	0.012	0.009	0.009	0.006	0.007	0.005
97	0.009	0.008	0.011	0.012	0.015	0.016	0.019	0.020	0.022	0.021	0.022	0.021	0.020	0.017	0.015	0.011	0.011	0.008	0.008	0.006
98	0.011	0.012	0.013	0.016	0.018	0.020	0.020	0.021	0.021	0.022	0.022	0.023	0.021	0.020	0.018	0.015	0.012	0.010	0.007	0.007

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 27.44 SEC
HRFR = 0.204E-01

GROUP 13

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	0.111	0.113	0.116	0.118	0.120	0.121	0.124	0.129	0.134	0.139	0.140	0.138	0.141	0.148	0.159	0.172	0.174	0.141	0.089	0.048
65	0.110	0.109	0.110	0.111	0.113	0.116	0.118	0.121	0.124	0.127	0.130	0.132	0.133	0.135	0.138	0.143	0.154	0.163	0.150	0.105
66	0.109	0.109	0.110	0.110	0.109	0.109	0.109	0.111	0.114	0.118	0.119	0.119	0.120	0.122	0.127	0.132	0.136	0.142	0.148	0.143
67	0.111	0.112	0.112	0.113	0.113	0.113	0.113	0.115	0.117	0.118	0.117	0.116	0.117	0.118	0.121	0.125	0.130	0.136	0.142	0.148
68	0.125	0.126	0.124	0.123	0.124	0.126	0.130	0.132	0.134	0.133	0.131	0.131	0.129	0.129	0.129	0.130	0.132	0.137	0.142	0.147
69	0.126	0.130	0.135	0.137	0.137	0.137	0.137	0.137	0.138	0.136	0.137	0.137	0.136	0.136	0.136	0.138	0.140	0.142	0.143	0.145
70	0.121	0.122	0.124	0.126	0.128	0.131	0.136	0.141	0.145	0.141	0.137	0.135	0.136	0.136	0.139	0.141	0.144	0.146	0.147	0.148
71	0.115	0.117	0.119	0.121	0.123	0.126	0.128	0.131	0.133	0.133	0.133	0.136	0.139	0.141	0.141	0.141	0.142	0.144	0.147	0.151
72	0.104	0.107	0.109	0.111	0.112	0.113	0.115	0.120	0.124	0.126	0.127	0.129	0.131	0.134	0.136	0.139	0.142	0.146	0.146	0.146
73	0.099	0.099	0.100	0.101	0.101	0.102	0.103	0.107	0.111	0.113	0.114	0.117	0.118	0.121	0.122	0.123	0.124	0.125	0.126	0.129
74	0.089	0.090	0.092	0.092	0.093	0.094	0.097	0.100	0.104	0.106	0.104	0.102	0.103	0.102	0.103	0.104	0.106	0.106	0.109	0.111
75	0.078	0.079	0.080	0.079	0.079	0.080	0.084	0.088	0.094	0.096	0.092	0.090	0.090	0.090	0.092	0.093	0.095	0.095	0.098	0.099
76	0.073	0.074	0.076	0.076	0.075	0.075	0.076	0.077	0.079	0.079	0.077	0.076	0.077	0.077	0.079	0.080	0.082	0.083	0.085	0.086
77	0.069	0.070	0.071	0.072	0.072	0.072	0.072	0.073	0.075	0.075	0.074	0.074	0.074	0.074	0.074	0.074	0.075	0.076	0.076	0.077
78	0.067	0.067	0.067	0.068	0.068	0.068	0.069	0.069	0.071	0.071	0.071	0.071	0.071	0.071	0.072	0.073	0.074	0.075	0.076	0.077
79	0.066	0.066	0.066	0.065	0.066	0.066	0.067	0.067	0.069	0.070	0.070	0.069	0.069	0.068	0.069	0.069	0.070	0.070	0.071	0.072
80	0.067	0.065	0.066	0.065	0.065	0.065	0.065	0.065	0.067	0.067	0.069	0.067	0.068	0.067	0.068	0.067	0.069	0.069	0.070	0.071
81	0.071	0.070	0.071	0.070	0.069	0.068	0.068	0.067	0.068	0.068	0.069	0.067	0.067	0.066	0.067	0.067	0.068	0.068	0.069	0.069
82	0.070	0.071	0.071	0.072	0.072	0.072	0.072	0.072	0.073	0.074	0.074	0.073	0.071	0.071	0.069	0.069	0.068	0.069	0.068	0.068
83	0.075	0.076	0.075	0.076	0.076	0.076	0.076	0.077	0.078	0.079	0.080	0.080	0.079	0.079	0.078	0.078	0.077	0.076	0.075	0.075
84	0.081	0.083	0.084	0.086	0.086	0.087	0.088	0.089	0.089	0.090	0.091	0.090	0.089	0.087	0.087	0.087	0.086	0.086	0.086	0.086
85	0.075	0.076	0.077	0.079	0.081	0.083	0.085	0.088	0.090	0.094	0.098	0.100	0.100	0.101	0.101	0.102	0.102	0.102	0.101	0.101
86	0.069	0.071	0.073	0.075	0.077	0.078	0.080	0.081	0.083	0.085	0.088	0.088	0.088	0.088	0.089	0.091	0.094	0.096	0.100	0.103
87	0.016	0.019	0.019	0.021	0.022	0.024	0.026	0.028	0.030	0.033	0.036	0.038	0.037	0.038	0.037	0.038	0.039	0.040	0.041	0.044
88	0.009	0.009	0.010	0.009	0.009	0.007	0.008	0.007	0.008	0.008	0.008	0.008	0.007	0.006	0.007	0.005	0.005	0.005	0.005	0.005
89	0.006	0.008	0.007	0.008	0.006	0.007	0.005	0.006	0.005	0.006	0.005	0.005	0.003	0.003	0.003	0.003	0.002	0.003	0.002	0.002
90	0.007	0.005	0.006	0.006	0.008	0.006	0.006	0.005	0.004	0.003	0.004	0.003	0.005	0.003	0.003	0.001	0.002	0.000	0.000	0.000
91	0.006	0.006	0.005	0.006	0.005	0.006	0.005	0.005	0.004	0.004	0.004	0.004	0.003	0.004	0.002	0.001	0.001	0.001	0.001	0.001
92	0.005	0.007	0.005	0.007	0.007	0.007	0.005	0.006	0.005	0.005	0.006	0.012	0.015	0.011	0.005	0.004	0.000	0.000	0.000	0.000
93	0.007	0.005	0.007	0.007	0.008	0.006	0.007	0.005	0.006	0.005	0.011	0.022	0.026	0.020	0.011	0.005	0.003	0.000	0.001	0.000
94	0.007	0.004	0.007	0.005	0.008	0.007	0.008	0.005	0.006	0.004	0.005	0.005	0.008	0.005	0.005	0.003	0.004	0.000	0.002	0.002
95	0.005	0.006	0.005	0.007	0.006	0.008	0.006	0.007	0.005	0.006	0.005	0.005	0.003	0.003	0.002	0.002	0.002	0.001	0.001	0.000
96	0.006	0.005	0.007	0.005	0.008	0.006	0.008	0.007	0.008	0.006	0.006	0.005	0.005	0.003	0.003	0.002	0.003	0.001	0.002	0.002
97	0.007	0.005	0.007	0.005	0.008	0.007	0.009	0.007	0.008	0.005	0.007	0.005	0.005	0.004	0.005	0.003	0.003	0.001	0.001	0.001
98	0.005	0.007	0.006	0.007	0.005	0.008	0.007	0.008	0.007	0.008	0.006	0.007	0.005	0.005	0.003	0.003	0.002	0.002	0.002	0.002

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREFR
IR SCAN TIME 27.44 SEC
GROUP 13 HREFR = 0.204E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.025	0.016	0.012	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
65	0.058	0.030	0.018	0.013	0.007	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
66	0.109	0.065	0.033	0.018	0.013	0.010	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
67	0.145	0.120	0.077	0.041	0.020	0.014	0.007	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
68	0.153	0.157	0.141	0.100	0.054	0.027	0.015	0.011	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
69	0.149	0.156	0.161	0.151	0.113	0.065	0.032	0.017	0.010	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
70	0.149	0.151	0.158	0.165	0.164	0.134	0.086	0.044	0.022	0.012	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
71	0.154	0.158	0.162	0.168	0.174	0.176	0.155	0.105	0.056	0.027	0.013	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
72	0.146	0.149	0.154	0.158	0.162	0.166	0.168	0.158	0.120	0.071	0.035	0.016	0.008	0.002	0.002	0.002	0.002	0.002	0.002	0.002
73	0.130	0.133	0.136	0.139	0.141	0.144	0.149	0.156	0.157	0.137	0.093	0.050	0.023	0.012	0.004	0.004	0.004	0.004	0.004	0.004
74	0.115	0.117	0.121	0.123	0.127	0.130	0.137	0.143	0.150	0.153	0.144	0.109	0.065	0.030	0.015	0.004	0.004	0.004	0.004	0.004
75	0.101	0.103	0.107	0.109	0.113	0.119	0.124	0.129	0.134	0.140	0.145	0.141	0.114	0.072	0.038	0.016	0.007	0.007	0.007	0.007
76	0.088	0.090	0.094	0.097	0.101	0.104	0.108	0.111	0.115	0.119	0.125	0.130	0.129	0.112	0.077	0.041	0.019	0.006	0.002	0.002
77	0.078	0.080	0.081	0.084	0.087	0.089	0.092	0.096	0.099	0.103	0.108	0.112	0.116	0.118	0.107	0.079	0.045	0.022	0.008	0.003
78	0.079	0.080	0.081	0.081	0.082	0.083	0.084	0.087	0.088	0.090	0.092	0.097	0.101	0.106	0.108	0.103	0.081	0.049	0.024	0.010
79	0.074	0.075	0.077	0.079	0.081	0.084	0.086	0.088	0.090	0.091	0.093	0.094	0.096	0.099	0.102	0.104	0.103	0.089	0.061	0.033
80	0.073	0.074	0.075	0.075	0.076	0.076	0.079	0.081	0.084	0.086	0.088	0.090	0.094	0.097	0.101	0.104	0.109	0.110	0.104	0.082
81	0.071	0.071	0.073	0.073	0.074	0.074	0.075	0.076	0.079	0.080	0.083	0.083	0.085	0.086	0.089	0.093	0.096	0.100	0.104	0.106
82	0.068	0.069	0.069	0.070	0.071	0.071	0.072	0.073	0.074	0.076	0.079	0.081	0.082	0.083	0.084	0.086	0.088	0.089	0.090	0.093
83	0.073	0.072	0.069	0.069	0.067	0.068	0.068	0.069	0.070	0.071	0.072	0.074	0.076	0.078	0.079	0.082	0.084	0.085	0.084	0.085
84	0.085	0.084	0.083	0.082	0.080	0.079	0.078	0.077	0.076	0.075	0.074	0.073	0.073	0.073	0.073	0.075	0.076	0.077	0.077	0.079
85	0.101	0.100	0.099	0.099	0.097	0.096	0.095	0.094	0.093	0.093	0.093	0.093	0.093	0.093	0.092	0.091	0.089	0.087	0.086	0.085
86	0.107	0.110	0.114	0.117	0.121	0.123	0.125	0.126	0.128	0.129	0.132	0.136	0.139	0.141	0.143	0.143	0.143	0.141	0.139	0.137
87	0.047	0.051	0.055	0.061	0.066	0.073	0.079	0.087	0.096	0.109	0.127	0.148	0.167	0.185	0.197	0.204	0.204	0.201	0.195	0.188
88	0.005	0.005	0.004	0.006	0.007	0.008	0.008	0.010	0.011	0.014	0.017	0.023	0.028	0.037	0.043	0.050	0.054	0.057	0.058	0.059
89	0.001	0.003	0.002	0.003	0.002	0.004	0.004	0.005	0.004	0.005	0.004	0.006	0.006	0.008	0.008	0.011	0.010	0.012	0.011	0.012
90	0.001	0.000	0.000	0.000	0.002	0.001	0.003	0.002	0.004	0.003	0.004	0.003	0.005	0.004	0.007	0.006	0.008	0.007	0.008	0.006
91	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.001	0.005	0.004	0.005	0.003	0.004
92	0.000	0.000	0.000	0.000	0.000	0.002	0.001	0.001	0.002	0.005	0.008	0.008	0.004	0.002	0.000	0.002	0.002	0.002	0.000	0.001
93	0.000	0.000	0.000	0.000	0.001	0.001	0.002	0.000	0.004	0.012	0.022	0.020	0.012	0.004	0.001	0.001	0.000	0.000	0.000	0.000
94	0.001	0.000	0.002	0.002	0.001	0.000	0.002	0.001	0.003	0.004	0.008	0.007	0.005	0.002	0.001	0.001	0.000	0.000	0.000	0.000
95	0.000	0.001	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
96	0.000	0.000	0.001	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000
97	0.000	0.000	0.002	0.000	0.002	0.002	0.001	0.000	0.001	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.001	0.003	0.002
98	0.001	0.001	0.000	0.001	0.001	0.002	0.000	0.001	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.001	0.003	0.003	0.004

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 27.44 SEC
GROUP 13 HREF = 0.204E-01

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
65	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
66	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
67	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
68	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
69	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
70	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
71	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
72	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
73	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
74	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
75	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
76	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
77	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
78	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
79	0.015	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80	0.051	0.027	0.011	0.004	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
81	0.097	0.069	0.037	0.016	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
82	0.092	0.084	0.061	0.035	0.015	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
83	0.085	0.085	0.078	0.061	0.037	0.018	0.005	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
84	0.079	0.080	0.079	0.075	0.061	0.040	0.020	0.008	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
85	0.084	0.083	0.082	0.081	0.075	0.064	0.045	0.026	0.012	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
86	0.137	0.136	0.137	0.136	0.132	0.124	0.110	0.088	0.062	0.035	0.016	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
87	0.183	0.180	0.177	0.174	0.170	0.165	0.159	0.146	0.118	0.078	0.040	0.016	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
88	0.058	0.058	0.058	0.059	0.059	0.060	0.060	0.060	0.053	0.038	0.020	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
89	0.009	0.010	0.005	0.007	0.005	0.007	0.005	0.006	0.004	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.007	0.005	0.005	0.003	0.004	0.002	0.003	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91	0.003	0.004	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
92	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
93	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
94	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
96	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
97	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
98	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 27.44 SEC
GROUP 13 HREF = 0.204E-01

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
65	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
66	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
67	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
68	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
69	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
70	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
71	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
72	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
73	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
74	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
75	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
76	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
77	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
78	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
79	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
81	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
82	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
83	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
84	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
85	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
86	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
87	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
88	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
89	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
92	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
93	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
94	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
96	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
97	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
98	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

GROUP 15

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
255 59	593.936	593.936	593.936	593.936	0.000	591.671
256 0	594.023	594.110	593.936	594.023	0.000	591.671
256 1	594.153	594.241	593.936	594.153	0.000	591.671
256 3	594.284	594.328	593.936	594.241	0.000	591.671
256 4	594.328	594.458	593.936	594.328	0.000	591.671
256 4	594.371	594.458	593.936	594.371	0.000	591.671
256 5	594.415	594.502	593.936	594.371	0.000	591.671
256 6	594.502	594.545	593.936	594.415	0.000	591.671
256 7	594.545	594.589	593.936	594.458	0.000	591.671
256 8	594.589	594.676	593.936	594.502	0.000	591.671
256 9	594.632	594.676	593.936	594.545	0.000	591.671
256 10	594.676	594.719	593.936	594.589	0.000	591.671
256 11	594.719	594.763	593.936	594.589	0.000	591.671
256 11	594.763	594.806	593.936	594.589	0.000	591.671
256 12	594.763	594.806	593.936	594.632	0.000	591.671
256 13	594.806	594.850	593.936	594.632	0.000	591.671
256 14	594.806	594.850	593.936	594.676	0.000	591.671
256 15	594.850	594.894	593.936	594.676	0.000	591.671
256 16	594.850	594.894	593.936	594.676	0.000	591.671
256 17	594.894	594.937	593.936	594.719	0.000	591.671
256 18	594.894	594.937	593.936	594.719	0.000	591.671
256 19	594.937	594.937	593.936	594.719	0.000	591.671
256 20	594.937	594.981	593.936	594.719	0.000	591.671
256 20	594.937	594.981	593.936	594.719	0.000	591.671
256 21	594.937	594.981	593.936	594.763	0.000	591.671
256 22	594.981	594.981	593.936	594.763	0.000	591.671
256 23	594.981	594.981	593.936	594.763	0.000	591.671
256 24	594.981	595.024	593.936	594.763	0.000	591.671

NASA/RI OH90 TRANSITION TEST
Y418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

GROUP	* * * * TITLE TYPE	MODEL DESCRIPTION * * * * GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
15	RSI FORWARD	0.01	0.000	-10.11	40.11	0.053	2	55	28

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/F FT-1	HRFR BTU/FT2-SEC-R	INITIAL TEMP DEG R
7.94	208.82	1280.67	94.11	0.0225	3776.	0.200E-04	0.758E-07	0.998E+06	0.205E-01	536.7

IR CAMERA INFORMATION

MOUNTING LOCATION	260
F STOP	1.8
LENS-DEG	15
SENSITIVITY	500.
BLACK LEVEL VOLTAGE	1.3423
LINE SCAN PHI	90
MODEL EMISSIVITY	0.96
REF EMISSIVITY	0.94
WINDOW FACTOR	0.860

TIME RECORDS

LIFT OFF	0.00
CENTER LINE	1.00
IR SCAN TIME	20.75
DELTA TIME,SEC	20.19
PHOTO 1 TIME	256
PHOTO 2 TIME	0
PHOTO 3 TIME	0
PHOTO 4 TIME	0

REFERENCE TARGET INFORMATION

TCR5	500.57
TCR6	-228.49
POINT	0
LINE	-633

DIGITAL DATA AREA PRINTOUT LOCATION

LINE 29 THROUGH 98
POINT 1 THROUGH 110

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 15

IR SCAN TIME 20.19 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	1.049	1.052	1.052	1.051	1.051	1.046	1.052	1.049	1.052	1.046	1.050	1.047	1.041	1.042	1.044	1.046	1.049	1.049	1.049	1.046
30	1.054	1.054	1.051	1.052	1.051	1.046	1.047	1.049	1.049	1.049	1.050	1.049	1.044	1.045	1.046	1.047	1.047	1.049	1.047	1.045
31	1.058	1.054	1.047	1.049	1.050	1.051	1.046	1.051	1.050	1.049	1.046	1.049	1.051	1.047	1.047	1.045	1.042	1.044	1.044	1.041
32	1.050	1.052	1.046	1.051	1.052	1.052	1.049	1.050	1.049	1.045	1.047	1.046	1.042	1.046	1.045	1.042	1.040	1.041	1.037	1.037
33	1.046	1.052	1.049	1.051	1.050	1.049	1.047	1.046	1.047	1.047	1.046	1.041	1.041	1.040	1.041	1.036	1.040	1.038	1.042	1.044
34	1.047	1.052	1.049	1.050	1.049	1.044	1.045	1.042	1.040	1.042	1.040	1.040	1.035	1.037	1.040	1.042	1.044	1.042	1.044	1.044
35	1.054	1.052	1.046	1.042	1.045	1.037	1.041	1.033	1.036	1.033	1.037	1.037	1.041	1.038	1.041	1.045	1.044	1.044	1.046	1.045
36	1.051	1.044	1.044	1.040	1.037	1.037	1.036	1.037	1.038	1.041	1.040	1.041	1.041	1.042	1.042	1.044	1.044	1.042	1.033	1.032
37	1.041	1.040	1.038	1.037	1.037	1.040	1.040	1.042	1.042	1.042	1.042	1.042	1.040	1.044	1.044	1.040	1.033	1.025	1.011	1.004
38	1.037	1.036	1.037	1.040	1.040	1.041	1.042	1.042	1.040	1.042	1.042	1.042	1.040	1.036	1.026	1.016	1.003	0.999	0.992	0.996
39	1.040	1.037	1.041	1.041	1.041	1.044	1.044	1.042	1.042	1.041	1.036	1.029	1.019	1.008	1.003	0.997	0.999	0.996	1.001	0.994
40	1.045	1.045	1.044	1.041	1.042	1.041	1.042	1.038	1.035	1.020	1.013	1.003	1.003	0.997	0.999	0.997	1.001	0.999	1.001	0.997
41	1.046	1.042	1.042	1.044	1.041	1.037	1.028	1.017	1.003	1.001	0.997	1.001	0.999	1.001	0.999	1.001	0.999	0.999	0.997	1.001
42	1.042	1.047	1.044	1.032	1.025	1.008	1.006	0.996	1.003	0.997	1.003	0.994	1.003	0.999	1.003	1.001	1.003	1.001	1.004	0.999
43	1.046	1.037	1.026	1.014	1.004	1.004	1.003	1.001	1.001	1.003	0.999	1.001	0.999	1.001	0.999	1.003	0.997	1.001	0.996	1.001
44	1.029	1.017	1.014	1.008	1.008	1.003	1.006	1.003	1.006	1.004	1.004	1.003	1.004	1.001	1.008	1.004	1.009	1.004	1.008	1.006
45	1.014	1.014	1.011	1.013	1.008	1.008	1.006	1.009	1.006	1.009	1.004	1.008	1.006	1.008	1.008	1.009	1.008	1.014	1.028	1.047
46	1.016	1.017	1.014	1.016	1.014	1.013	1.011	1.014	1.011	1.013	1.009	1.014	1.013	1.016	1.013	1.014	1.014	1.028	1.076	1.142
47	1.019	1.017	1.017	1.019	1.016	1.017	1.014	1.014	1.014	1.017	1.014	1.016	1.013	1.016	1.014	1.019	1.019	1.037	1.092	1.160
48	1.022	1.020	1.019	1.020	1.019	1.020	1.014	1.017	1.016	1.019	1.019	1.019	1.017	1.019	1.019	1.023	1.025	1.047	1.113	1.173
49	1.022	1.023	1.023	1.019	1.022	1.016	1.020	1.016	1.020	1.016	1.020	1.017	1.020	1.017	1.022	1.020	1.028	1.057	1.126	1.177
50	1.022	1.020	1.019	1.022	1.017	1.022	1.019	1.019	1.016	1.017	1.016	1.019	1.019	1.020	1.019	1.022	1.028	1.073	1.139	1.185
51	1.019	1.019	1.020	1.019	1.019	1.016	1.017	1.014	1.017	1.016	1.020	1.016	1.019	1.016	1.019	1.019	1.036	1.086	1.152	1.187
52	1.014	1.013	1.013	1.011	1.008	1.009	1.006	1.011	1.008	1.013	1.011	1.014	1.011	1.011	1.009	1.014	1.032	1.089	1.149	1.182
53	1.004	1.004	1.003	1.001	0.999	0.999	0.997	0.999	0.996	1.001	0.999	1.001	1.001	1.003	0.999	1.004	1.028	1.095	1.153	1.182
54	0.997	0.996	0.994	0.992	0.990	0.990	0.988	0.990	0.988	0.992	0.988	0.990	0.988	0.990	0.988	0.996	1.026	1.101	1.155	1.180
55	0.990	0.994	0.988	0.990	0.990	0.984	0.990	0.988	0.980	0.986	0.990	0.988	0.990	0.990	0.992	0.994	1.038	1.111	1.160	1.181
56	0.988	0.988	0.976	0.984	0.973	0.982	0.976	0.984	0.980	0.988	0.984	0.984	0.984	0.986	0.986	1.003	1.057	1.130	1.165	1.181
57	0.990	0.988	0.990	0.986	0.988	0.984	0.984	0.980	0.986	0.984	0.988	0.986	0.990	0.982	0.990	1.004	1.076	1.138	1.170	1.181
58	0.990	0.992	0.990	0.990	0.986	0.986	0.984	0.986	0.986	0.988	0.988	0.988	0.988	0.990	0.992	1.025	1.095	1.151	1.172	1.183
59	0.992	0.988	0.992	0.988	0.992	0.988	0.990	0.986	0.990	0.990	0.992	0.990	0.992	0.992	1.003	1.038	1.110	1.154	1.173	1.181
60	0.994	0.992	0.992	0.992	0.990	0.992	0.990	0.992	0.992	0.992	0.990	0.996	0.996	0.999	1.003	1.047	1.117	1.159	1.174	1.183
61	0.992	0.990	0.988	0.984	0.984	0.986	0.988	0.990	0.986	0.990	0.990	0.996	0.994	0.999	1.004	1.054	1.125	1.160	1.174	1.183
62	0.988	0.984	0.984	0.986	0.984	0.988	0.986	0.986	0.988	0.992	0.992	0.996	0.996	0.999	1.008	1.058	1.125	1.159	1.172	1.181
63	0.980	0.980	0.971	0.978	0.973	0.980	0.976	0.982	0.978	0.986	0.984	0.992	0.992	0.999	1.009	1.071	1.130	1.157	1.168	1.176

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 15

IR SCAN TIME 20.19 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	1.042	1.046	1.042	1.045	1.041	1.042	1.037	1.038	1.035	1.036	1.033	1.035	1.030	1.036	1.032	1.037	1.037	1.038	1.040	1.041
30	1.042	1.044	1.042	1.042	1.040	1.041	1.037	1.036	1.036	1.038	1.041	1.041	1.042	1.042	1.041	1.045	1.047	1.045	1.041	1.049
31	1.040	1.040	1.037	1.038	1.038	1.040	1.040	1.041	1.045	1.046	1.049	1.050	1.047	1.047	1.047	1.047	1.045	1.041	1.037	1.033
32	1.037	1.040	1.041	1.044	1.044	1.046	1.049	1.049	1.046	1.047	1.049	1.047	1.044	1.040	1.035	1.030	1.023	1.019	1.008	1.003
33	1.044	1.044	1.045	1.046	1.047	1.049	1.046	1.044	1.040	1.037	1.032	1.023	1.017	1.008	1.001	0.992	0.990	0.984	0.988	0.984
34	1.044	1.046	1.047	1.045	1.040	1.038	1.030	1.022	1.013	1.003	0.994	0.990	0.986	0.986	0.984	0.986	0.984	0.988	0.986	0.986
35	1.042	1.037	1.033	1.025	1.016	1.003	0.997	0.990	0.990	0.986	0.988	0.984	0.988	0.986	0.990	0.986	0.986	0.986	0.988	0.988
36	1.019	1.013	0.999	0.996	0.986	0.988	0.984	0.990	0.984	0.990	0.982	0.988	0.980	0.990	0.986	0.990	0.988	0.990	0.986	0.990
37	0.992	0.996	0.992	0.996	0.992	0.994	0.990	0.992	0.988	0.992	0.990	0.992	0.992	0.990	0.990	0.992	0.984	0.994	0.984	0.990
38	0.992	0.996	0.992	0.994	0.992	0.996	0.992	0.994	0.992	0.994	0.992	0.994	0.992	0.994	0.992	0.992	0.992	0.994	0.992	0.996
39	0.997	0.996	0.999	0.996	0.999	0.996	0.999	0.994	0.997	0.996	0.997	0.996	0.999	0.997	0.999	0.997	0.999	0.996	0.999	0.996
40	0.999	0.996	0.999	0.997	1.001	0.999	1.001	0.999	1.001	0.999	1.001	0.999	1.003	0.999	1.003	0.999	1.003	0.999	1.001	0.996
41	0.997	1.001	1.001	1.001	0.999	1.001	0.997	0.999	0.999	1.001	0.999	1.003	0.999	1.001	0.999	1.001	0.997	1.001	0.997	1.001
42	1.003	0.999	1.004	1.001	1.003	1.001	1.004	1.001	1.006	1.001	1.003	1.003	1.004	1.003	1.004	1.003	1.003	1.001	1.004	1.001
43	0.994	1.003	0.997	1.004	1.001	1.004	0.999	1.003	0.999	1.003	0.999	1.006	1.003	1.006	1.001	1.004	1.003	1.004	1.003	1.006
44	1.011	1.008	1.011	1.008	1.009	1.008	1.009	1.006	1.009	1.006	1.011	1.006	1.009	1.001	1.008	1.003	1.008	1.003	1.008	0.999
45	1.065	1.071	1.068	1.063	1.054	1.046	1.038	1.032	1.023	1.017	1.013	1.014	1.013	1.014	1.011	1.013	1.008	1.013	1.009	1.011
46	1.183	1.205	1.215	1.220	1.219	1.211	1.195	1.170	1.142	1.115	1.087	1.065	1.041	1.030	1.025	1.022	1.017	1.020	1.016	1.019
47	1.201	1.225	1.240	1.255	1.271	1.285	1.296	1.299	1.295	1.285	1.263	1.229	1.186	1.142	1.102	1.070	1.038	1.033	1.025	1.023
48	1.206	1.223	1.235	1.248	1.261	1.275	1.288	1.300	1.306	1.310	1.312	1.314	1.313	1.306	1.277	1.219	1.150	1.092	1.051	1.035
49	1.206	1.221	1.235	1.245	1.256	1.267	1.279	1.289	1.296	1.301	1.302	1.304	1.311	1.326	1.344	1.335	1.278	1.199	1.129	1.076
50	1.204	1.218	1.227	1.239	1.248	1.261	1.269	1.277	1.283	1.293	1.302	1.308	1.310	1.317	1.329	1.347	1.346	1.296	1.217	1.148
51	1.204	1.214	1.222	1.231	1.241	1.249	1.259	1.268	1.275	1.279	1.284	1.291	1.300	1.305	1.312	1.321	1.342	1.355	1.321	1.239
52	1.196	1.207	1.215	1.224	1.233	1.242	1.248	1.256	1.261	1.265	1.267	1.271	1.277	1.287	1.297	1.305	1.314	1.330	1.356	1.352
53	1.194	1.203	1.210	1.217	1.225	1.235	1.244	1.253	1.260	1.263	1.263	1.264	1.268	1.276	1.285	1.298	1.310	1.320	1.330	1.351
54	1.191	1.200	1.205	1.213	1.221	1.231	1.239	1.247	1.253	1.259	1.262	1.265	1.266	1.269	1.275	1.283	1.294	1.308	1.326	1.341
55	1.192	1.198	1.204	1.211	1.217	1.226	1.233	1.241	1.248	1.251	1.254	1.257	1.262	1.266	1.271	1.274	1.280	1.288	1.299	1.312
56	1.189	1.196	1.201	1.208	1.215	1.224	1.232	1.239	1.243	1.245	1.245	1.248	1.249	1.253	1.258	1.266	1.274	1.290	1.285	1.294
57	1.189	1.193	1.199	1.204	1.213	1.219	1.229	1.234	1.240	1.242	1.244	1.243	1.246	1.249	1.253	1.255	1.261	1.268	1.278	1.286
58	1.189	1.194	1.198	1.205	1.212	1.220	1.227	1.234	1.238	1.240	1.239	1.242	1.247	1.251	1.251	1.253	1.255	1.261	1.267	1.276
59	1.188	1.192	1.197	1.203	1.212	1.219	1.228	1.233	1.239	1.240	1.241	1.242	1.246	1.249	1.251	1.253	1.259	1.260	1.263	1.268
60	1.188	1.193	1.197	1.203	1.208	1.216	1.223	1.231	1.237	1.240	1.240	1.243	1.248	1.251	1.250	1.253	1.255	1.260	1.262	1.266
61	1.187	1.192	1.196	1.204	1.209	1.216	1.223	1.230	1.235	1.236	1.236	1.240	1.245	1.249	1.251	1.254	1.254	1.255	1.258	1.263
62	1.186	1.191	1.194	1.201	1.205	1.212	1.218	1.227	1.233	1.236	1.235	1.237	1.241	1.245	1.248	1.252	1.254	1.255	1.257	1.262
63	1.180	1.185	1.189	1.196	1.202	1.209	1.215	1.224	1.231	1.233	1.234	1.238	1.244	1.248	1.250	1.252	1.253	1.256	1.257	1.261

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 15

IR SCAN TIME 20.19 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	1.044	1.046	1.044	1.044	1.044	1.042	1.044	1.044	1.041	1.037	1.033	1.032	1.029	1.028	1.023	1.022	1.017	1.017	1.014	1.009
30	1.045	1.047	1.037	1.040	1.035	1.036	1.029	1.030	1.020	1.017	1.009	1.009	1.003	1.003	0.999	0.997	0.992	0.994	0.992	0.992
31	1.029	1.028	1.022	1.017	1.009	1.003	0.996	0.994	0.990	0.990	0.986	0.986	0.984	0.986	0.986	0.988	0.982	0.986	0.978	0.986
32	0.994	0.992	0.988	0.988	0.984	0.986	0.986	0.988	0.986	0.986	0.982	0.986	0.982	0.984	0.984	0.984	0.982	0.986	0.984	0.984
33	0.990	0.984	0.986	0.986	0.986	0.984	0.988	0.984	0.984	0.982	0.986	0.984	0.986	0.980	0.984	0.980	0.986	0.982	0.984	0.980
34	0.984	0.986	0.984	0.988	0.984	0.986	0.982	0.986	0.986	0.986	0.984	0.984	0.982	0.984	0.984	0.984	0.982	0.982	0.980	0.984
35	0.990	0.986	0.988	0.984	0.988	0.986	0.990	0.984	0.988	0.982	0.988	0.984	0.988	0.982	0.986	0.982	0.984	0.984	0.986	0.982
36	0.986	0.992	0.990	0.990	0.986	0.990	0.986	0.992	0.988	0.990	0.988	0.990	0.986	0.986	0.986	0.988	0.988	0.990	0.982	0.986
37	0.986	0.994	0.982	0.992	0.984	0.992	0.984	0.994	0.986	0.992	0.984	0.992	0.990	0.992	0.990	0.994	0.992	0.992	0.990	0.990
38	0.992	0.996	0.992	0.992	0.990	0.994	0.992	0.992	0.992	0.994	0.992	0.992	0.988	0.990	0.984	0.992	0.986	0.994	0.986	0.992
39	0.999	0.996	0.999	0.994	0.997	0.992	0.997	0.992	0.997	0.994	0.997	0.994	0.996	0.992	0.996	0.992	0.996	0.992	0.997	0.994
40	1.001	0.997	0.999	0.997	1.001	0.999	1.001	0.996	0.999	0.996	0.996	0.996	0.999	0.996	1.001	0.996	0.997	0.992	0.997	0.992
41	0.999	1.001	0.999	1.001	0.997	0.999	0.997	0.999	0.997	1.001	0.999	1.001	0.996	0.997	0.996	0.997	0.996	0.999	0.997	0.999
42	1.004	1.003	1.003	1.001	1.003	0.999	1.001	0.999	1.003	0.999	1.003	0.999	1.001	0.997	1.001	0.996	1.001	0.996	1.001	0.997
43	1.003	1.006	0.999	1.003	1.001	1.003	1.001	1.006	1.001	1.003	0.999	1.001	0.999	1.003	1.001	1.001	0.999	1.001	0.997	1.001
44	1.006	1.001	1.006	1.003	1.006	0.999	1.006	1.001	1.006	1.003	1.006	1.003	1.004	1.001	1.004	0.999	1.004	1.001	1.003	0.999
45	1.008	1.009	1.008	1.009	1.006	1.008	1.004	1.008	1.006	1.009	1.006	1.006	1.001	1.006	1.003	1.006	1.001	1.004	0.999	1.006
46	1.014	1.016	1.014	1.016	1.014	1.017	1.013	1.013	1.011	1.014	1.013	1.014	1.011	1.014	1.011	1.014	1.011	1.013	1.011	1.013
47	1.022	1.022	1.020	1.020	1.017	1.019	1.016	1.019	1.017	1.017	1.014	1.017	1.016	1.017	1.016	1.016	1.014	1.016	1.014	1.017
48	1.028	1.026	1.028	1.026	1.023	1.022	1.019	1.020	1.019	1.020	1.016	1.019	1.017	1.019	1.017	1.019	1.016	1.019	1.016	1.019
49	1.047	1.032	1.032	1.025	1.025	1.023	1.025	1.019	1.022	1.019	1.020	1.019	1.020	1.017	1.020	1.016	1.020	1.016	1.019	1.017
50	1.096	1.067	1.044	1.036	1.029	1.028	1.025	1.023	1.022	1.023	1.022	1.023	1.020	1.020	1.019	1.020	1.019	1.020	1.019	1.020
51	1.162	1.103	1.073	1.044	1.037	1.025	1.026	1.020	1.023	1.020	1.022	1.019	1.022	1.019	1.022	1.019	1.020	1.016	1.019	1.016
52	1.288	1.196	1.117	1.067	1.038	1.030	1.023	1.019	1.016	1.014	1.011	1.014	1.009	1.014	1.011	1.013	1.009	1.014	1.009	1.013
53	1.364	1.311	1.211	1.121	1.063	1.035	1.022	1.014	1.006	1.006	1.003	1.003	0.999	1.001	0.999	1.001	0.999	1.003	1.003	1.004
54	1.350	1.348	1.298	1.208	1.122	1.066	1.035	1.019	1.003	0.999	0.992	0.992	0.990	0.990	0.986	0.992	0.990	0.994	0.992	0.997
55	1.333	1.352	1.357	1.321	1.236	1.144	1.077	1.040	1.022	1.004	0.996	0.994	0.990	0.992	0.990	0.992	0.990	0.996	0.996	1.001
56	1.306	1.324	1.350	1.370	1.346	1.264	1.166	1.090	1.044	1.025	1.006	0.999	0.988	0.990	0.988	0.990	0.988	0.992	0.996	0.999
57	1.292	1.300	1.314	1.339	1.374	1.377	1.313	1.210	1.121	1.061	1.030	1.009	1.001	0.992	0.994	0.990	0.992	0.992	0.996	0.996
58	1.285	1.293	1.300	1.310	1.328	1.365	1.395	1.360	1.259	1.156	1.079	1.037	1.013	1.003	0.994	0.994	0.992	0.996	0.996	0.999
59	1.275	1.283	1.294	1.305	1.314	1.326	1.354	1.390	1.362	1.255	1.147	1.072	1.036	1.011	1.004	0.996	0.999	0.996	0.999	0.992
60	1.271	1.277	1.283	1.291	1.304	1.318	1.329	1.344	1.364	1.342	1.252	1.148	1.072	1.036	1.016	1.008	0.999	0.999	0.992	0.992
61	1.267	1.274	1.280	1.285	1.291	1.300	1.312	1.330	1.346	1.360	1.341	1.263	1.158	1.080	1.036	1.020	1.006	1.003	0.996	0.996
62	1.264	1.267	1.272	1.280	1.287	1.294	1.301	1.312	1.326	1.343	1.358	1.353	1.292	1.192	1.102	1.051	1.026	1.014	1.003	0.999
63	1.265	1.270	1.273	1.276	1.281	1.290	1.299	1.312	1.320	1.326	1.336	1.354	1.368	1.333	1.240	1.142	1.070	1.032	1.013	1.004

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 15

IR SCAN TIME 20.19 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	1.003	1.003	0.997	1.001	0.999	1.003	1.003	1.004	1.001	1.001	0.997	1.001	1.001	1.001	0.999	1.003	0.999	0.999	0.996	0.997
30	0.988	0.992	0.988	0.988	0.990	0.988	0.986	0.990	0.988	0.986	0.986	0.988	0.986	0.988	0.988	0.990	0.988	0.988	0.988	0.990
31	0.980	0.996	0.980	0.986	0.980	0.986	0.980	0.986	0.980	0.984	0.978	0.988	0.986	0.990	0.986	0.988	0.984	0.988	0.986	0.990
32	0.982	0.982	0.980	0.984	0.982	0.984	0.980	0.982	0.980	0.984	0.980	0.980	0.980	0.984	0.976	0.984	0.973	0.982	0.978	0.984
33	0.982	0.978	0.984	0.980	0.982	0.980	0.982	0.980	0.982	0.978	0.980	0.978	0.984	0.980	0.980	0.978	0.982	0.980	0.982	0.980
34	0.982	0.986	0.980	0.984	0.980	0.984	0.982	0.982	0.978	0.984	0.980	0.982	0.980	0.980	0.978	0.982	0.980	0.982	0.978	0.978
35	0.984	0.982	0.986	0.984	0.986	0.980	0.982	0.980	0.984	0.982	0.984	0.978	0.982	0.980	0.984	0.982	0.984	0.978	0.982	0.980
36	0.984	0.988	0.984	0.988	0.984	0.986	0.982	0.986	0.982	0.986	0.984	0.988	0.984	0.984	0.982	0.984	0.982	0.984	0.982	0.984
37	0.988	0.990	0.988	0.990	0.990	0.990	0.988	0.988	0.984	0.988	0.986	0.990	0.986	0.990	0.986	0.988	0.984	0.986	0.984	0.986
38	0.984	0.990	0.984	0.992	0.986	0.990	0.986	0.990	0.984	0.990	0.988	0.990	0.990	0.990	0.988	0.990	0.988	0.990	0.986	0.986
39	0.996	0.996	0.994	0.990	0.994	0.992	0.994	0.992	0.996	0.994	0.992	0.986	0.990	0.984	0.992	0.986	0.992	0.986	0.992	0.986
40	0.996	0.994	0.997	0.994	0.996	0.992	0.996	0.992	0.994	0.992	0.996	0.992	0.997	0.994	0.994	0.990	0.994	0.992	0.994	0.990
41	0.996	0.999	0.994	0.994	0.992	0.996	0.994	0.997	0.994	0.994	0.992	0.996	0.992	0.994	0.992	0.996	0.992	0.994	0.992	0.994
42	0.999	0.996	0.999	0.996	0.997	0.996	0.996	0.996	0.997	0.996	0.999	0.992	0.997	0.994	0.997	0.996	0.999	0.994	0.994	0.992
43	0.997	1.001	0.997	0.999	0.996	0.999	0.996	0.999	0.997	0.999	0.997	0.999	0.994	0.996	0.996	0.997	0.996	0.997	0.996	0.996
44	1.003	1.001	1.004	0.999	1.004	1.001	1.001	0.999	1.003	1.001	1.003	0.999	1.001	0.999	0.999	0.999	1.003	0.999	0.999	0.997
45	1.001	1.006	1.001	1.006	0.999	1.006	0.999	1.006	1.001	1.004	1.003	1.004	1.003	1.003	1.001	1.003	1.003	1.004	1.001	1.003
46	1.011	1.013	1.008	1.011	1.009	1.013	1.009	1.011	1.008	1.013	1.001	1.013	1.003	1.009	1.001	1.011	1.003	1.011	1.001	1.009
47	1.014	1.014	1.014	1.016	1.014	1.016	1.013	1.014	1.013	1.016	1.013	1.014	1.011	1.014	1.013	1.014	1.011	1.013	1.011	1.014
48	1.016	1.017	1.014	1.017	1.016	1.019	1.014	1.016	1.014	1.016	1.013	1.017	1.014	1.014	1.013	1.016	1.014	1.014	1.013	1.016
49	1.019	1.016	1.019	1.016	1.019	1.017	1.019	1.014	1.017	1.014	1.017	1.016	1.019	1.014	1.016	1.014	1.016	1.014	1.017	1.014
50	1.019	1.020	1.017	1.019	1.016	1.019	1.019	1.019	1.019	1.017	1.014	1.017	1.014	1.019	1.016	1.019	1.016	1.017	1.014	1.017
51	1.020	1.017	1.022	1.019	1.019	1.016	1.019	1.017	1.019	1.017	1.020	1.019	1.019	1.016	1.019	1.014	1.019	1.016	1.019	1.016
52	1.011	1.016	1.013	1.016	1.013	1.019	1.016	1.017	1.014	1.019	1.014	1.017	1.014	1.019	1.016	1.017	1.013	1.016	1.014	1.017
53	1.006	1.008	1.008	1.013	1.011	1.014	1.013	1.016	1.009	1.014	1.008	1.013	1.011	1.014	1.009	1.016	1.009	1.013	1.008	1.013
54	0.999	1.003	1.004	1.009	1.009	1.013	1.009	1.013	1.009	1.013	1.011	1.011	1.011	1.014	1.013	1.013	1.009	1.011	1.009	1.009
55	0.999	1.004	1.006	1.009	1.009	1.013	1.013	1.014	1.011	1.013	1.011	1.016	1.011	1.017	1.013	1.013	1.009	1.011	1.008	1.011
56	0.999	1.004	1.004	1.008	1.009	1.011	1.009	1.013	1.008	1.011	1.011	1.011	1.011	1.013	1.009	1.011	1.008	1.008	1.006	1.008
57	1.003	1.003	1.008	1.004	1.006	1.006	1.008	1.004	1.009	1.008	1.008	1.004	1.008	1.003	1.008	1.006	1.008	1.003	1.004	0.999
58	0.997	1.001	0.999	1.003	1.001	1.003	1.001	1.003	1.001	1.004	1.003	1.003	0.999	1.003	1.001	1.003	1.003	1.001	0.999	1.001
59	0.997	0.994	1.001	0.999	1.001	0.996	1.001	0.997	1.001	0.996	1.001	0.996	1.001	0.996	0.997	0.992	0.999	0.994	0.997	0.996
60	0.992	0.996	0.992	0.992	0.992	0.992	0.988	0.994	0.986	0.990	0.986	0.990	0.988	0.992	0.986	0.990	0.986	0.992	0.986	0.990
61	0.992	0.996	0.992	0.994	0.990	0.992	0.990	0.992	0.990	0.990	0.986	0.990	0.988	0.990	0.988	0.990	0.986	0.990	0.986	0.990
62	0.996	0.996	0.994	0.996	0.992	0.992	0.990	0.992	0.990	0.994	0.990	0.992	0.988	0.992	0.988	0.992	0.988	0.990	0.986	0.992
63	0.997	0.997	0.992	0.994	0.990	0.992	0.990	0.992	0.990	0.990	0.986	0.990	0.986	0.990	0.986	0.990	0.988	0.988	0.984	0.990

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
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VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 15

IR SCAN TIME 20.19 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.997	0.997	0.996	1.001	0.996	0.996	0.994	0.994	0.992	0.996	0.994	0.996	0.992	0.992	0.990	0.992	0.988	0.990	0.988	0.990
30	0.988	0.992	0.990	0.990	0.986	0.990	0.988	0.990	0.988	0.990	0.988	0.986	0.986	0.988	0.986	0.986	0.984	0.986	0.982	0.984
31	0.986	0.988	0.986	0.988	0.986	0.990	0.984	0.988	0.984	0.988	0.988	0.990	0.986	0.986	0.984	0.984	0.984	0.986	0.982	0.984
32	0.980	0.984	0.976	0.984	0.980	0.984	0.978	0.984	0.978	0.986	0.982	0.984	0.982	0.984	0.982	0.982	0.980	0.982	0.980	0.982
33	0.982	0.978	0.982	0.982	0.982	0.980	0.982	0.980	0.982	0.980	0.984	0.976	0.980	0.973	0.982	0.976	0.980	0.971	0.978	0.976
34	0.978	0.982	0.980	0.980	0.978	0.980	0.978	0.980	0.980	0.980	0.976	0.978	0.978	0.980	0.978	0.978	0.976	0.980	0.978	0.978
35	0.982	0.980	0.982	0.978	0.980	0.978	0.982	0.978	0.982	0.978	0.980	0.978	0.982	0.978	0.982	0.978	0.978	0.978	0.980	0.978
36	0.980	0.982	0.980	0.984	0.982	0.984	0.982	0.982	0.980	0.982	0.980	0.982	0.980	0.980	0.976	0.980	0.978	0.982	0.980	0.982
37	0.984	0.986	0.984	0.986	0.982	0.986	0.982	0.984	0.984	0.986	0.982	0.986	0.982	0.984	0.982	0.984	0.982	0.986	0.982	0.986
38	0.984	0.986	0.982	0.988	0.986	0.988	0.984	0.986	0.978	0.986	0.984	0.986	0.986	0.988	0.984	0.986	0.982	0.984	0.984	0.986
39	0.990	0.984	0.990	0.984	0.988	0.986	0.990	0.990	0.990	0.988	0.990	0.986	0.990	0.986	0.990	0.988	0.990	0.988	0.988	0.988
40	0.997	0.992	0.992	0.988	0.992	0.988	0.992	0.988	0.992	0.986	0.992	0.986	0.990	0.982	0.990	0.984	0.988	0.986	0.990	0.988
41	0.990	0.992	0.990	0.994	0.990	0.990	0.990	0.992	0.990	0.990	0.988	0.990	0.988	0.992	0.990	0.992	0.990	0.990	0.988	0.992
42	0.994	0.992	0.996	0.992	0.996	0.992	0.994	0.990	0.996	0.992	0.994	0.992	0.996	0.996	0.994	0.990	0.994	0.990	0.992	0.990
43	0.994	0.994	0.994	0.996	0.994	0.997	0.992	0.996	0.992	0.994	0.992	0.996	0.992	0.996	0.992	0.992	0.992	0.996	0.992	0.994
44	1.001	0.997	1.003	0.997	0.999	0.996	0.999	0.996	0.999	0.996	0.999	0.996	0.997	0.996	0.999	0.996	0.999	0.996	0.997	0.996
45	1.001	1.004	1.001	1.004	1.001	1.003	1.001	1.003	1.001	1.003	0.999	1.001	1.001	1.003	0.999	1.001	0.999	1.001	1.001	1.003
46	1.003	1.009	1.003	1.011	1.003	1.009	1.008	1.011	1.008	1.009	1.005	1.009	1.006	1.011	1.006	1.008	1.006	1.008	1.008	1.008
47	1.013	1.014	1.013	1.014	1.013	1.016	1.013	1.013	1.008	1.013	1.008	1.013	1.008	1.011	1.008	1.013	1.008	1.013	1.006	1.011
48	1.014	1.017	1.016	1.017	1.014	1.017	1.014	1.016	1.014	1.016	1.013	1.014	1.014	1.016	1.013	1.014	1.011	1.014	1.013	1.014
49	1.017	1.016	1.019	1.016	1.019	1.016	1.019	1.014	1.016	1.013	1.017	1.014	1.017	1.013	1.016	1.013	1.016	1.014	1.016	1.014
50	1.016	1.017	1.017	1.019	1.016	1.017	1.014	1.017	1.014	1.016	1.016	1.019	1.014	1.017	1.013	1.016	1.013	1.016	1.014	1.017
51	1.019	1.016	1.019	1.014	1.017	1.014	1.016	1.013	1.016	1.011	1.014	1.011	1.014	1.011	1.014	1.013	1.016	1.013	1.016	1.009
52	1.013	1.016	1.017	1.016	1.013	1.011	1.008	1.009	1.008	1.009	1.008	1.008	1.006	1.011	1.004	1.008	1.004	1.008	1.004	1.008
53	1.008	1.011	1.006	1.011	1.006	1.008	1.003	1.001	0.997	0.999	0.994	0.999	0.996	1.001	0.997	0.999	0.996	0.997	0.994	0.996
54	1.006	1.008	1.004	1.006	1.001	0.999	0.990	0.992	0.986	0.990	0.984	0.990	0.984	0.988	0.984	0.986	0.982	0.988	0.982	0.986
55	1.008	1.009	1.006	1.008	1.003	0.999	0.994	0.992	0.988	0.990	0.986	0.988	0.984	0.986	0.982	0.984	0.982	0.982	0.982	0.984
56	1.004	1.008	1.003	1.003	0.996	0.997	0.990	0.992	0.986	0.988	0.984	0.984	0.980	0.984	0.982	0.982	0.980	0.982	0.980	0.980
57	1.003	1.001	1.003	0.997	0.999	0.992	0.992	0.988	0.990	0.986	0.988	0.984	0.986	0.980	0.984	0.980	0.984	0.980	0.984	0.980
58	0.997	1.001	0.997	0.999	0.996	0.997	0.992	0.994	0.992	0.992	0.988	0.988	0.986	0.992	0.988	0.990	0.986	0.988	0.988	0.990
59	0.996	0.994	0.997	0.994	0.996	0.992	0.994	0.990	0.994	0.988	0.990	0.986	0.990	0.988	0.990	0.984	0.988	0.984	0.990	0.986
60	0.986	0.992	0.992	0.994	0.990	0.990	0.988	0.992	0.988	0.992	0.986	0.988	0.986	0.988	0.986	0.988	0.984	0.986	0.986	0.988
61	0.986	0.988	0.986	0.990	0.984	0.990	0.982	0.986	0.984	0.990	0.984	0.986	0.982	0.986	0.982	0.988	0.982	0.986	0.980	0.988
62	0.990	0.992	0.990	0.990	0.988	0.992	0.990	0.992	0.988	0.988	0.986	0.990	0.988	0.990	0.988	0.986	0.986	0.988	0.986	0.988
63	0.986	0.990	0.988	0.992	0.986	0.988	0.986	0.988	0.986	0.990	0.986	0.990	0.984	0.986	0.984	0.986	0.984	0.988	0.984	0.986

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 15

IR SCAN TIME 20.19 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.986	0.988	0.986	0.986	0.986	0.988	0.984	0.988	0.984	0.986
30	0.984	0.984	0.982	0.984	0.980	0.982	0.978	0.982	0.982	0.984
31	0.980	0.984	0.980	0.984	0.980	0.982	0.978	0.984	0.980	0.984
32	0.978	0.980	0.978	0.980	0.980	0.980	0.976	0.980	0.978	0.980
33	0.980	0.973	0.978	0.971	0.978	0.973	0.980	0.976	0.978	0.976
34	0.976	0.976	0.976	0.978	0.978	0.978	0.973	0.976	0.976	0.980
35	0.980	0.976	0.978	0.976	0.978	0.976	0.980	0.976	0.978	0.976
36	0.980	0.982	0.978	0.982	0.978	0.980	0.980	0.982	0.978	0.980
37	0.980	0.984	0.980	0.984	0.982	0.984	0.982	0.984	0.980	0.982
38	0.984	0.986	0.984	0.984	0.984	0.984	0.980	0.986	0.982	0.986
39	0.988	0.986	0.990	0.990	0.990	0.988	0.990	0.986	0.988	0.986
40	0.992	0.986	0.990	0.984	0.990	0.988	0.992	0.992	0.992	0.990
41	0.988	0.992	0.990	0.992	0.990	0.992	0.988	0.990	0.984	0.990
42	0.994	0.992	0.990	0.990	0.992	0.990	0.994	0.990	0.994	0.992
43	0.992	0.992	0.990	0.994	0.992	0.994	0.992	0.996	0.992	0.994
44	0.999	0.996	0.999	0.996	0.997	0.994	0.997	0.996	1.001	0.996
45	0.997	1.001	0.999	1.003	0.999	1.001	0.999	1.001	0.999	1.001
46	1.006	1.006	1.006	1.008	1.006	1.006	1.006	1.008	1.006	1.008
47	1.008	1.013	1.008	1.013	1.009	1.013	1.009	1.011	1.011	1.009
48	1.011	1.014	1.011	1.014	1.011	1.014	1.008	1.013	1.008	1.014
49	1.016	1.013	1.014	1.013	1.016	1.014	1.016	1.011	1.014	1.013
50	1.014	1.016	1.011	1.014	1.013	1.016	1.014	1.016	1.013	1.013
51	1.013	1.011	1.013	1.011	1.014	1.009	1.013	1.008	1.011	1.008
52	1.004	1.008	1.003	1.006	1.003	1.004	1.001	1.004	1.001	1.006
53	0.996	0.997	0.997	0.997	0.996	0.996	0.992	0.996	0.992	0.996
54	0.982	0.990	0.984	0.986	0.986	0.984	0.986	0.984	0.988	0.982
55	0.980	0.982	0.980	0.980	0.971	0.980	0.971	0.980	0.971	0.982
56	0.976	0.978	0.978	0.978	0.978	0.980	0.976	0.978	0.971	0.976
57	0.982	0.978	0.982	0.980	0.982	0.976	0.980	0.978	0.980	0.978
58	0.988	0.986	0.984	0.986	0.982	0.984	0.982	0.984	0.984	0.988
59	0.988	0.984	0.990	0.986	0.988	0.982	0.988	0.984	0.990	0.984
60	0.988	0.988	0.984	0.986	0.986	0.988	0.984	0.986	0.984	0.988
61	0.984	0.988	0.984	0.986	0.982	0.986	0.984	0.988	0.982	0.986
62	0.984	0.988	0.982	0.988	0.982	0.988	0.982	0.986	0.980	0.986
63	0.982	0.984	0.984	0.986	0.984	0.986	0.982	0.984	0.980	0.984

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 15

IR SCAN TIME 20.19 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.978	0.976	0.973	0.973	0.971	0.976	0.976	0.980	0.978	0.982	0.976	0.986	0.986	0.997	1.020	1.094	1.141	1.161	1.169	1.176
65	0.973	0.971	0.973	0.969	0.973	0.969	0.976	0.973	0.978	0.978	0.984	0.986	0.992	0.996	1.036	1.105	1.146	1.159	1.170	1.175
66	0.967	0.969	0.967	0.971	0.967	0.971	0.971	0.973	0.971	0.976	0.978	0.982	0.988	1.001	1.054	1.120	1.148	1.160	1.167	1.173
67	0.971	0.969	0.971	0.969	0.973	0.969	0.971	0.973	0.978	0.976	0.980	0.982	0.990	1.006	1.075	1.131	1.153	1.162	1.168	1.172
68	0.971	0.969	0.967	0.967	0.971	0.969	0.971	0.971	0.973	0.973	0.978	0.980	0.990	1.014	1.094	1.144	1.163	1.170	1.175	1.176
69	0.973	0.971	0.967	0.971	0.967	0.971	0.973	0.976	0.976	0.978	0.976	0.980	0.986	1.030	1.117	1.172	1.188	1.194	1.195	1.195
70	0.971	0.971	0.962	0.969	0.964	0.973	0.973	0.976	0.973	0.978	0.978	0.982	0.988	1.041	1.142	1.198	1.216	1.225	1.228	1.229
71	0.978	0.976	0.971	0.971	0.969	0.971	0.976	0.980	0.973	0.980	0.973	0.982	0.988	1.063	1.164	1.216	1.233	1.244	1.250	1.255
72	0.973	0.973	0.969	0.971	0.967	0.973	0.973	0.976	0.976	0.978	0.976	0.984	1.003	1.096	1.187	1.225	1.241	1.253	1.260	1.266
73	0.971	0.969	0.973	0.969	0.969	0.971	0.978	0.978	0.980	0.976	0.980	0.984	1.020	1.120	1.198	1.229	1.244	1.254	1.262	1.268
74	0.971	0.971	0.969	0.971	0.969	0.973	0.976	0.978	0.978	0.978	0.980	0.988	1.040	1.146	1.208	1.233	1.246	1.255	1.262	1.269
75	0.971	0.969	0.971	0.969	0.976	0.976	0.980	0.976	0.982	0.978	0.986	0.994	1.068	1.167	1.216	1.236	1.248	1.255	1.262	1.269
76	0.971	0.971	0.971	0.973	0.973	0.978	0.978	0.980	0.980	0.982	0.984	1.003	1.085	1.178	1.220	1.237	1.248	1.256	1.262	1.268
77	0.976	0.978	0.973	0.976	0.978	0.982	0.986	0.988	0.980	0.984	0.984	1.009	1.100	1.188	1.221	1.237	1.247	1.254	1.260	1.266
78	0.984	0.996	0.996	1.008	1.006	1.006	0.996	1.001	0.992	0.990	0.982	1.011	1.098	1.179	1.209	1.226	1.235	1.243	1.247	1.254
79	1.003	1.009	1.011	1.032	1.025	1.022	1.014	1.003	1.001	0.996	0.999	1.022	1.105	1.164	1.188	1.200	1.209	1.215	1.221	1.227
80	1.017	1.025	1.040	1.057	1.042	1.029	1.020	1.013	1.011	1.004	1.009	1.042	1.110	1.150	1.167	1.176	1.184	1.189	1.194	1.198
81	1.057	1.059	1.075	1.095	1.097	1.052	1.028	1.014	1.009	1.014	1.019	1.057	1.110	1.139	1.150	1.159	1.164	1.168	1.173	1.179
82	1.166	1.106	1.095	1.117	1.117	1.075	1.041	1.025	1.013	1.011	1.022	1.063	1.109	1.129	1.140	1.143	1.149	1.155	1.159	1.163
83	1.227	1.129	1.104	1.114	1.124	1.081	1.041	1.016	1.009	1.009	1.038	1.097	1.138	1.146	1.147	1.144	1.144	1.143	1.146	1.148
84	1.181	1.105	1.078	1.077	1.084	1.070	1.040	1.019	1.006	1.019	1.052	1.135	1.197	1.217	1.215	1.207	1.195	1.185	1.174	1.165
85	1.089	1.062	1.052	1.049	1.054	1.050	1.053	1.038	1.038	1.037	1.044	1.051	1.076	1.092	1.106	1.116	1.130	1.142	1.157	1.165
86	1.047	1.037	1.035	1.033	1.041	1.044	1.044	1.038	1.038	1.037	1.040	1.029	1.028	1.026	1.026	1.026	1.029	1.029	1.033	1.035
87	1.028	1.022	1.022	1.017	1.022	1.026	1.026	1.026	1.030	1.035	1.040	1.029	1.026	1.023	1.022	1.019	1.022	1.020	1.022	1.017
88	1.008	1.008	1.009	1.004	1.006	1.006	1.013	1.016	1.029	1.037	1.038	1.023	1.022	1.017	1.019	1.014	1.017	1.014	1.019	1.014
89	0.999	0.999	0.997	1.003	1.001	1.006	1.004	1.013	1.022	1.036	1.033	1.023	1.017	1.016	1.014	1.016	1.013	1.014	1.011	1.013
90	0.996	0.996	1.001	0.997	1.001	0.997	1.001	1.003	1.016	1.030	1.030	1.020	1.019	1.014	1.016	1.013	1.014	1.011	1.013	1.009
91	0.994	0.996	0.994	0.996	0.994	0.996	0.994	1.001	1.008	1.022	1.023	1.019	1.014	1.019	1.013	1.017	1.013	1.013	1.009	1.011
92	0.996	0.996	0.992	0.999	0.990	0.996	0.992	0.999	0.994	1.013	1.017	1.019	1.016	1.017	1.014	1.016	1.011	1.014	1.009	1.013
93	1.004	1.001	1.003	0.996	0.997	0.996	1.004	1.004	1.008	1.006	1.022	1.020	1.019	1.014	1.016	1.014	1.016	1.011	1.014	1.006
94	1.017	1.014	1.014	1.009	1.011	1.011	1.016	1.014	1.017	1.016	1.022	1.019	1.019	1.017	1.019	1.016	1.019	1.013	1.014	1.009
95	1.026	1.026	1.028	1.026	1.026	1.022	1.023	1.022	1.026	1.025	1.030	1.025	1.022	1.017	1.019	1.016	1.019	1.014	1.016	1.013
96	1.030	1.030	1.032	1.032	1.036	1.030	1.032	1.028	1.030	1.036	1.038	1.030	1.028	1.023	1.026	1.025	1.028	1.022	1.023	1.017
97	1.032	1.033	1.032	1.036	1.035	1.035	1.033	1.030	1.032	1.040	1.040	1.032	1.028	1.028	1.030	1.036	1.033	1.033	1.028	1.025
98	1.032	1.033	1.035	1.036	1.040	1.035	1.035	1.026	1.035	1.042	1.047	1.033	1.032	1.029	1.037	1.040	1.042	1.040	1.037	1.029

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 15

IR SCAN TIME 20.19 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	1.180	1.185	1.188	1.194	1.198	1.205	1.211	1.218	1.225	1.231	1.234	1.241	1.248	1.249	1.249	1.253	1.256	1.261	1.262	1.264
65	1.181	1.183	1.190	1.194	1.201	1.207	1.214	1.214	1.225	1.226	1.230	1.233	1.243	1.241	1.245	1.246	1.254	1.254	1.259	1.262
66	1.177	1.182	1.187	1.194	1.199	1.205	1.211	1.217	1.223	1.230	1.232	1.232	1.234	1.235	1.235	1.238	1.241	1.245	1.249	1.254
67	1.176	1.179	1.184	1.189	1.195	1.200	1.206	1.212	1.217	1.221	1.226	1.227	1.229	1.231	1.235	1.237	1.239	1.239	1.242	1.244
68	1.179	1.181	1.184	1.187	1.192	1.195	1.200	1.203	1.210	1.213	1.218	1.221	1.222	1.222	1.226	1.229	1.233	1.236	1.241	1.244
69	1.193	1.192	1.192	1.194	1.195	1.198	1.200	1.203	1.207	1.211	1.214	1.217	1.217	1.217	1.217	1.218	1.220	1.225	1.228	1.232
70	1.227	1.225	1.222	1.219	1.217	1.216	1.214	1.211	1.209	1.209	1.210	1.212	1.214	1.214	1.214	1.215	1.215	1.217	1.219	1.221
71	1.256	1.257	1.257	1.259	1.259	1.257	1.257	1.254	1.249	1.242	1.237	1.229	1.222	1.214	1.208	1.206	1.206	1.208	1.211	1.214
72	1.270	1.274	1.278	1.282	1.286	1.289	1.292	1.295	1.294	1.294	1.290	1.284	1.273	1.260	1.243	1.230	1.217	1.211	1.203	1.201
73	1.274	1.279	1.285	1.291	1.298	1.306	1.314	1.321	1.327	1.330	1.331	1.330	1.328	1.321	1.307	1.291	1.274	1.258	1.244	1.230
74	1.275	1.282	1.288	1.296	1.302	1.312	1.322	1.331	1.340	1.347	1.352	1.358	1.363	1.364	1.355	1.344	1.332	1.320	1.307	1.293
75	1.275	1.280	1.288	1.296	1.305	1.313	1.324	1.333	1.343	1.352	1.360	1.365	1.370	1.373	1.373	1.372	1.370	1.363	1.357	1.348
76	1.274	1.281	1.287	1.296	1.304	1.314	1.324	1.334	1.342	1.351	1.360	1.368	1.372	1.376	1.378	1.379	1.380	1.381	1.380	1.379
77	1.272	1.280	1.286	1.293	1.301	1.311	1.321	1.332	1.341	1.350	1.357	1.366	1.373	1.378	1.381	1.385	1.387	1.389	1.390	1.392
78	1.260	1.268	1.275	1.283	1.291	1.300	1.310	1.322	1.332	1.342	1.350	1.357	1.363	1.368	1.372	1.376	1.380	1.384	1.386	1.388
79	1.233	1.241	1.248	1.254	1.263	1.269	1.280	1.288	1.298	1.307	1.317	1.324	1.331	1.336	1.342	1.348	1.354	1.359	1.365	1.370
80	1.204	1.209	1.215	1.221	1.229	1.234	1.241	1.247	1.254	1.261	1.266	1.271	1.275	1.278	1.281	1.285	1.289	1.294	1.300	1.308
81	1.183	1.189	1.193	1.200	1.204	1.210	1.215	1.220	1.226	1.231	1.235	1.239	1.239	1.241	1.240	1.239	1.238	1.238	1.237	1.239
82	1.168	1.172	1.177	1.183	1.190	1.195	1.199	1.204	1.207	1.212	1.215	1.218	1.220	1.223	1.224	1.225	1.226	1.227	1.227	1.227
83	1.154	1.159	1.164	1.169	1.176	1.181	1.186	1.189	1.194	1.196	1.200	1.202	1.205	1.207	1.209	1.207	1.210	1.211	1.213	1.214
84	1.159	1.156	1.156	1.159	1.163	1.168	1.173	1.178	1.181	1.185	1.187	1.190	1.191	1.193	1.193	1.194	1.194	1.195	1.196	1.198
85	1.176	1.175	1.169	1.166	1.172	1.178	1.182	1.181	1.182	1.183	1.189	1.195	1.201	1.198	1.195	1.190	1.188	1.186	1.187	1.188
86	1.038	1.040	1.046	1.045	1.056	1.065	1.075	1.071	1.072	1.069	1.079	1.094	1.113	1.119	1.120	1.115	1.114	1.111	1.112	1.114
87	1.019	1.016	1.019	1.016	1.017	1.013	1.017	1.016	1.019	1.016	1.017	1.016	1.019	1.017	1.022	1.017	1.019	1.017	1.019	1.016
88	1.016	1.009	1.013	1.009	1.014	1.011	1.013	1.011	1.013	1.013	1.013	1.008	1.014	1.011	1.014	1.013	1.014	1.011	1.011	1.008
89	1.009	1.011	1.006	1.008	1.003	1.008	1.006	1.011	1.006	1.009	1.006	1.011	1.009	1.011	1.008	1.008	1.004	1.008	1.006	1.008
90	1.014	1.008	1.008	1.004	1.006	1.001	1.006	1.003	1.008	1.006	1.008	1.004	1.008	1.006	1.009	1.006	1.009	1.006	1.006	1.003
91	1.009	1.009	1.006	1.006	1.006	1.006	1.003	1.003	1.004	1.006	1.008	1.019	1.037	1.037	1.019	1.008	1.004	1.006	1.003	1.006
92	1.009	1.013	1.008	1.009	1.004	1.006	1.001	1.003	1.003	1.006	1.008	1.036	1.076	1.086	1.054	1.023	1.008	1.006	1.004	1.004
93	1.014	1.004	1.011	1.001	1.006	0.996	1.004	0.996	1.004	0.996	1.006	0.999	1.019	1.020	1.020	1.008	1.009	1.003	1.008	1.004
94	1.014	1.013	1.014	1.009	1.009	1.004	1.006	0.999	1.004	1.001	1.003	1.001	1.003	0.999	1.003	1.001	1.003	0.997	1.003	0.997
95	1.017	1.013	1.014	1.008	1.008	1.004	1.006	1.001	1.004	1.001	1.003	1.001	1.003	0.999	1.003	1.003	1.008	1.006	1.006	1.003
96	1.019	1.014	1.017	1.011	1.013	1.008	1.008	1.003	1.008	1.003	1.004	1.003	1.006	1.003	1.003	0.999	1.004	1.004	1.008	1.004
97	1.017	1.019	1.014	1.014	1.011	1.009	1.008	1.009	1.006	1.008	1.006	1.006	1.001	1.003	1.003	1.004	1.003	1.006	1.004	1.004
98	1.026	1.023	1.023	1.019	1.020	1.017	1.019	1.014	1.017	1.014	1.016	1.009	1.011	1.006	1.008	1.004	1.008	1.004	1.011	1.006

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 15

IR SCAN TIME 20.19 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	1.264	1.268	1.273	1.278	1.283	1.289	1.296	1.306	1.312	1.316	1.322	1.332	1.350	1.375	1.364	1.284	1.174	1.088	1.036	1.017
65	1.267	1.267	1.271	1.274	1.279	1.285	1.294	1.300	1.303	1.304	1.310	1.321	1.333	1.350	1.374	1.366	1.287	1.176	1.090	1.038
66	1.259	1.262	1.265	1.269	1.274	1.280	1.286	1.291	1.293	1.296	1.300	1.308	1.317	1.333	1.351	1.374	1.371	1.305	1.195	1.104
67	1.248	1.251	1.256	1.261	1.266	1.274	1.283	1.287	1.286	1.286	1.290	1.294	1.304	1.317	1.331	1.350	1.375	1.385	1.334	1.226
68	1.248	1.248	1.248	1.250	1.257	1.264	1.272	1.275	1.277	1.280	1.285	1.289	1.296	1.304	1.316	1.331	1.348	1.371	1.394	1.368
69	1.236	1.243	1.247	1.250	1.255	1.262	1.266	1.265	1.264	1.267	1.272	1.278	1.287	1.299	1.313	1.324	1.331	1.344	1.363	1.389
70	1.223	1.228	1.231	1.237	1.244	1.251	1.258	1.261	1.258	1.258	1.261	1.266	1.273	1.282	1.290	1.299	1.307	1.317	1.328	1.344
71	1.216	1.220	1.222	1.225	1.227	1.233	1.239	1.242	1.243	1.245	1.251	1.258	1.263	1.268	1.273	1.277	1.281	1.289	1.299	1.312
72	1.200	1.203	1.206	1.209	1.211	1.216	1.224	1.227	1.227	1.228	1.231	1.236	1.240	1.245	1.251	1.259	1.266	1.273	1.283	1.295
73	1.219	1.208	1.200	1.194	1.195	1.197	1.206	1.208	1.209	1.210	1.212	1.214	1.219	1.222	1.228	1.233	1.242	1.249	1.260	1.270
74	1.275	1.254	1.234	1.216	1.207	1.207	1.210	1.211	1.203	1.198	1.197	1.198	1.200	1.206	1.211	1.217	1.222	1.230	1.236	1.245
75	1.338	1.326	1.308	1.283	1.261	1.242	1.231	1.220	1.209	1.200	1.199	1.197	1.199	1.199	1.201	1.202	1.206	1.209	1.217	1.224
76	1.376	1.374	1.368	1.358	1.346	1.329	1.308	1.285	1.257	1.231	1.211	1.200	1.193	1.193	1.195	1.199	1.201	1.203	1.204	1.209
77	1.392	1.394	1.393	1.391	1.388	1.383	1.377	1.366	1.348	1.323	1.295	1.265	1.236	1.214	1.199	1.193	1.191	1.194	1.198	1.204
78	1.390	1.392	1.392	1.393	1.392	1.393	1.395	1.398	1.394	1.387	1.375	1.359	1.337	1.310	1.279	1.249	1.221	1.203	1.193	1.192
79	1.375	1.378	1.383	1.385	1.387	1.388	1.392	1.397	1.399	1.398	1.398	1.394	1.387	1.377	1.364	1.347	1.325	1.297	1.267	1.238
80	1.317	1.325	1.333	1.341	1.349	1.356	1.366	1.377	1.385	1.390	1.394	1.394	1.394	1.391	1.390	1.385	1.380	1.372	1.359	1.339
81	1.241	1.245	1.249	1.256	1.263	1.272	1.284	1.297	1.310	1.322	1.333	1.345	1.356	1.365	1.372	1.378	1.381	1.382	1.379	1.375
82	1.226	1.226	1.224	1.224	1.222	1.223	1.224	1.229	1.233	1.239	1.242	1.249	1.257	1.269	1.281	1.295	1.308	1.322	1.332	1.341
83	1.217	1.218	1.220	1.221	1.224	1.225	1.228	1.231	1.235	1.233	1.231	1.229	1.229	1.227	1.230	1.231	1.235	1.238	1.243	1.249
84	1.198	1.200	1.201	1.203	1.204	1.207	1.209	1.214	1.219	1.224	1.226	1.229	1.232	1.236	1.239	1.241	1.242	1.244	1.243	1.241
85	1.190	1.192	1.194	1.195	1.196	1.197	1.197	1.197	1.201	1.202	1.203	1.202	1.203	1.204	1.209	1.215	1.224	1.233	1.245	1.254
86	1.121	1.128	1.139	1.147	1.156	1.163	1.172	1.180	1.190	1.195	1.194	1.186	1.180	1.175	1.173	1.172	1.174	1.178	1.185	1.193
87	1.022	1.016	1.023	1.020	1.026	1.026	1.032	1.032	1.038	1.036	1.041	1.037	1.040	1.037	1.041	1.044	1.046	1.050	1.056	1.059
88	1.014	1.011	1.014	1.011	1.016	1.014	1.019	1.016	1.019	1.014	1.017	1.014	1.017	1.014	1.014	1.013	1.016	1.011	1.019	1.011
89	1.004	1.006	1.004	1.009	1.008	1.009	1.006	1.008	1.006	1.011	1.009	1.009	1.006	1.008	1.006	1.009	1.009	1.011	1.009	1.013
90	1.008	1.004	1.008	1.004	1.008	1.003	1.004	1.003	1.008	1.006	1.009	1.006	1.009	1.004	1.008	1.004	1.009	1.006	1.011	1.009
91	1.004	1.006	1.001	1.003	1.001	1.006	1.003	1.009	1.008	1.013	1.013	1.013	1.008	1.008	1.006	1.009	1.008	1.009	1.004	1.006
92	1.003	1.004	1.001	1.003	1.001	1.003	1.003	1.008	1.013	1.037	1.059	1.058	1.033	1.019	1.008	1.009	1.008	1.009	1.008	1.011
93	1.006	1.003	1.006	1.001	1.004	1.004	1.008	1.006	1.013	1.022	1.042	1.047	1.032	1.016	1.014	1.011	1.013	1.009	1.008	1.009
94	1.004	1.001	1.009	1.003	1.008	1.003	1.008	1.003	1.008	1.004	1.011	1.006	1.011	1.011	1.011	1.006	1.011	1.009	1.014	1.013
95	1.003	1.001	1.004	1.003	1.008	1.006	1.009	1.006	1.009	1.006	1.008	1.008	1.011	1.008	1.013	1.006	1.013	1.008	1.013	1.011
96	1.008	1.003	1.006	1.003	1.008	1.008	1.011	1.009	1.013	1.009	1.013	1.008	1.011	1.014	1.014	1.009	1.014	1.013	1.014	1.016
97	1.003	1.006	1.003	1.008	1.008	1.011	1.009	1.011	1.006	1.013	1.011	1.014	1.011	1.016	1.013	1.014	1.013	1.016	1.016	1.022
98	1.009	1.004	1.009	1.008	1.014	1.011	1.014	1.013	1.017	1.014	1.019	1.014	1.019	1.016	1.017	1.016	1.022	1.020	1.025	1.023

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NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 15

IR SCAN TIME 20.19 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	1.001	0.999	0.992	0.996	0.990	0.994	0.988	0.990	0.986	0.990	0.986	0.988	0.988	0.988	0.986	0.988	0.984	0.988	0.986	0.988
65	1.020	1.003	1.001	0.992	0.992	0.988	0.988	0.984	0.986	0.984	0.988	0.984	0.986	0.984	0.986	0.982	0.984	0.984	0.984	0.984
66	1.045	1.020	1.001	0.992	0.986	0.986	0.982	0.984	0.982	0.984	0.978	0.980	0.978	0.978	0.976	0.980	0.978	0.982	0.978	0.980
67	1.125	1.056	1.019	0.994	0.988	0.976	0.982	0.971	0.978	0.969	0.973	0.967	0.973	0.969	0.976	0.971	0.973	0.969	0.973	0.971
68	1.271	1.156	1.073	1.025	1.001	0.984	0.980	0.971	0.973	0.967	0.959	0.967	0.969	0.967	0.969	0.967	0.969	0.964	0.967	0.962
69	1.381	1.300	1.186	1.095	1.035	1.006	0.984	0.976	0.969	0.967	0.967	0.967	0.962	0.967	0.964	0.964	0.962	0.959	0.957	0.962
70	1.368	1.379	1.326	1.214	1.113	1.047	1.009	0.986	0.971	0.967	0.962	0.964	0.959	0.964	0.959	0.962	0.954	0.957	0.957	0.957
71	1.328	1.350	1.362	1.321	1.222	1.123	1.053	1.017	0.990	0.976	0.969	0.964	0.962	0.964	0.962	0.964	0.957	0.957	0.957	0.959
72	1.307	1.320	1.338	1.353	1.325	1.236	1.134	1.060	1.017	0.992	0.973	0.967	0.962	0.962	0.959	0.962	0.957	0.957	0.954	0.957
73	1.281	1.293	1.308	1.328	1.348	1.331	1.253	1.149	1.072	1.022	0.997	0.978	0.971	0.962	0.964	0.959	0.964	0.959	0.959	0.954
74	1.252	1.264	1.278	1.298	1.318	1.342	1.333	1.264	1.159	1.080	1.025	0.999	0.971	0.967	0.954	0.962	0.952	0.962	0.959	0.959
75	1.232	1.242	1.253	1.264	1.278	1.297	1.321	1.323	1.270	1.176	1.092	1.033	1.006	0.980	0.973	0.967	0.964	0.962	0.964	0.954
76	1.214	1.222	1.229	1.236	1.245	1.257	1.273	1.293	1.302	1.262	1.175	1.093	1.036	1.011	0.990	0.978	0.969	0.967	0.962	0.962
77	1.208	1.214	1.218	1.224	1.229	1.233	1.241	1.253	1.267	1.277	1.251	1.180	1.097	1.042	1.013	0.997	0.978	0.973	0.962	0.964
78	1.193	1.197	1.202	1.210	1.217	1.226	1.232	1.239	1.246	1.254	1.262	1.249	1.192	1.114	1.053	1.022	1.003	0.992	0.975	0.971
79	1.214	1.200	1.196	1.196	1.200	1.204	1.211	1.218	1.231	1.243	1.256	1.265	1.259	1.212	1.140	1.072	1.030	1.008	1.003	0.988
80	1.314	1.281	1.250	1.225	1.210	1.202	1.202	1.202	1.209	1.215	1.227	1.241	1.260	1.271	1.248	1.181	1.103	1.045	1.017	1.003
81	1.370	1.361	1.343	1.320	1.292	1.265	1.239	1.220	1.207	1.205	1.207	1.214	1.221	1.236	1.249	1.229	1.160	1.086	1.032	1.009
82	1.349	1.356	1.360	1.359	1.354	1.345	1.329	1.308	1.280	1.252	1.229	1.217	1.212	1.213	1.217	1.217	1.190	1.133	1.068	1.025
83	1.258	1.270	1.286	1.301	1.318	1.332	1.343	1.350	1.351	1.341	1.322	1.297	1.268	1.241	1.224	1.213	1.206	1.179	1.128	1.070
84	1.239	1.237	1.236	1.239	1.244	1.253	1.264	1.281	1.298	1.318	1.335	1.346	1.348	1.337	1.317	1.291	1.263	1.235	1.198	1.147
85	1.264	1.268	1.272	1.271	1.269	1.267	1.267	1.267	1.268	1.271	1.276	1.286	1.300	1.314	1.330	1.340	1.342	1.334	1.314	1.274
86	1.205	1.219	1.239	1.261	1.285	1.310	1.337	1.359	1.377	1.387	1.390	1.386	1.379	1.371	1.364	1.361	1.364	1.371	1.379	1.377
87	1.069	1.075	1.086	1.097	1.121	1.156	1.208	1.265	1.318	1.360	1.389	1.404	1.409	1.406	1.398	1.390	1.385	1.382	1.379	1.379
88	1.019	1.016	1.025	1.020	1.028	1.023	1.035	1.040	1.060	1.075	1.096	1.109	1.125	1.132	1.137	1.139	1.142	1.144	1.150	1.155
89	1.011	1.014	1.014	1.017	1.014	1.017	1.019	1.023	1.026	1.030	1.032	1.038	1.042	1.046	1.045	1.042	1.036	1.040	1.037	1.041
90	1.011	1.008	1.011	1.009	1.014	1.011	1.016	1.013	1.019	1.019	1.028	1.030	1.035	1.035	1.036	1.032	1.033	1.032	1.033	1.032
91	1.004	1.008	1.006	1.011	1.011	1.014	1.011	1.013	1.009	1.013	1.017	1.025	1.026	1.028	1.028	1.030	1.026	1.023	1.019	1.020
92	1.006	1.009	1.008	1.011	1.013	1.028	1.042	1.045	1.032	1.023	1.019	1.022	1.025	1.029	1.028	1.030	1.028	1.026	1.022	1.020
93	1.011	1.013	1.014	1.014	1.017	1.028	1.049	1.054	1.041	1.028	1.025	1.023	1.029	1.029	1.033	1.030	1.030	1.029	1.028	1.025
94	1.016	1.014	1.017	1.013	1.019	1.016	1.025	1.023	1.026	1.025	1.028	1.029	1.033	1.036	1.037	1.038	1.040	1.038	1.037	1.036
95	1.017	1.014	1.019	1.017	1.022	1.019	1.023	1.022	1.025	1.023	1.030	1.032	1.038	1.041	1.044	1.046	1.050	1.044	1.044	1.042
96	1.019	1.019	1.022	1.019	1.028	1.028	1.029	1.029	1.029	1.029	1.035	1.038	1.045	1.047	1.052	1.051	1.056	1.052	1.054	1.050
97	1.022	1.025	1.025	1.026	1.026	1.030	1.033	1.035	1.033	1.036	1.036	1.042	1.050	1.053	1.061	1.066	1.062	1.061	1.058	1.059
98	1.028	1.028	1.032	1.032	1.035	1.033	1.036	1.035	1.037	1.037	1.042	1.051	1.057	1.061	1.068	1.069	1.071	1.066	1.066	1.062

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 15

IR SCAN TIME 20.19 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.986	0.990	0.984	0.988	0.986	0.988	0.986	0.988	0.986	0.990	0.986	0.988	0.982	0.986	0.984	0.986	0.984	0.988	0.982	0.986
65	0.986	0.984	0.986	0.982	0.984	0.982	0.986	0.984	0.986	0.982	0.984	0.980	0.986	0.980	0.982	0.980	0.982	0.980	0.982	0.978
66	0.978	0.978	0.976	0.978	0.978	0.980	0.978	0.978	0.978	0.978	0.976	0.976	0.973	0.976	0.976	0.978	0.973	0.976	0.971	0.973
67	0.973	0.969	0.973	0.971	0.976	0.971	0.976	0.969	0.971	0.967	0.971	0.967	0.971	0.969	0.971	0.971	0.969	0.964	0.969	0.967
68	0.967	0.959	0.967	0.959	0.967	0.957	0.964	0.954	0.962	0.957	0.962	0.957	0.964	0.957	0.962	0.957	0.959	0.959	0.962	0.959
69	0.957	0.962	0.959	0.962	0.957	0.959	0.954	0.962	0.954	0.959	0.954	0.957	0.952	0.957	0.952	0.954	0.952	0.954	0.954	0.957
70	0.954	0.957	0.954	0.954	0.952	0.954	0.952	0.954	0.952	0.952	0.946	0.949	0.946	0.952	0.949	0.954	0.949	0.949	0.946	0.946
71	0.957	0.959	0.954	0.957	0.952	0.954	0.952	0.957	0.952	0.954	0.949	0.952	0.952	0.954	0.949	0.949	0.949	0.949	0.949	0.952
72	0.952	0.954	0.949	0.957	0.952	0.954	0.952	0.952	0.949	0.952	0.952	0.952	0.949	0.949	0.946	0.949	0.949	0.949	0.946	0.946
73	0.959	0.957	0.959	0.954	0.954	0.952	0.957	0.954	0.957	0.952	0.954	0.949	0.954	0.949	0.952	0.949	0.949	0.949	0.952	0.949
74	0.954	0.959	0.957	0.959	0.957	0.954	0.952	0.954	0.952	0.957	0.952	0.952	0.949	0.954	0.952	0.952	0.949	0.954	0.949	0.952
75	0.959	0.952	0.959	0.952	0.959	0.946	0.957	0.952	0.957	0.949	0.954	0.946	0.952	0.949	0.954	0.952	0.954	0.949	0.954	0.952
76	0.962	0.964	0.962	0.967	0.957	0.962	0.957	0.957	0.954	0.957	0.952	0.954	0.952	0.954	0.952	0.954	0.949	0.952	0.943	0.954
77	0.957	0.962	0.959	0.964	0.959	0.962	0.957	0.957	0.954	0.954	0.954	0.957	0.954	0.957	0.952	0.952	0.949	0.954	0.949	0.954
78	0.964	0.967	0.959	0.964	0.959	0.964	0.962	0.962	0.954	0.959	0.954	0.957	0.954	0.959	0.957	0.957	0.952	0.954	0.952	0.954
79	0.982	0.969	0.969	0.962	0.954	0.959	0.964	0.962	0.962	0.957	0.957	0.952	0.957	0.954	0.962	0.954	0.957	0.957	0.957	0.952
80	0.999	0.990	0.986	0.976	0.973	0.962	0.967	0.962	0.964	0.959	0.964	0.957	0.964	0.957	0.959	0.954	0.957	0.957	0.962	0.957
81	0.999	0.997	0.994	0.994	0.986	0.980	0.971	0.969	0.962	0.964	0.957	0.962	0.957	0.959	0.954	0.957	0.952	0.954	0.957	0.957
82	0.999	0.997	0.988	0.994	0.990	0.992	0.988	0.990	0.980	0.980	0.971	0.967	0.959	0.967	0.959	0.962	0.957	0.957	0.952	0.954
83	1.030	1.008	1.003	0.997	0.999	0.996	0.999	0.996	0.999	0.994	0.994	0.988	0.990	0.982	0.982	0.962	0.976	0.954	0.964	0.949
84	1.097	1.041	1.020	1.009	1.001	0.997	0.994	0.997	0.994	0.999	0.996	0.997	0.996	0.996	0.996	0.996	0.992	0.990	0.984	0.980
85	1.215	1.144	1.084	1.037	1.016	0.999	0.999	0.992	0.996	0.994	0.997	0.996	1.001	0.997	1.001	1.001	1.004	1.003	1.003	0.996
86	1.356	1.311	1.238	1.155	1.084	1.030	1.008	0.997	0.996	0.997	0.999	0.996	1.001	0.999	1.004	0.999	1.008	1.003	1.008	1.004
87	1.380	1.367	1.318	1.231	1.139	1.068	1.028	1.011	1.009	1.004	1.008	1.003	1.006	1.003	1.006	1.004	1.008	1.008	1.013	1.009
88	1.164	1.166	1.152	1.114	1.073	1.038	1.025	1.011	1.013	1.009	1.011	1.008	1.009	1.003	1.006	1.004	1.009	1.006	1.008	1.006
89	1.044	1.045	1.036	1.035	1.025	1.020	1.014	1.014	1.006	1.008	1.004	1.009	1.006	1.009	1.004	1.006	1.003	1.006	1.004	1.008
90	1.033	1.029	1.028	1.019	1.019	1.014	1.017	1.014	1.017	1.011	1.013	1.008	1.011	1.004	1.009	1.003	1.006	0.999	1.006	1.001
91	1.017	1.019	1.016	1.017	1.011	1.013	1.011	1.016	1.014	1.017	1.016	1.017	1.011	1.013	1.011	1.011	1.009	1.009	1.006	1.008
92	1.019	1.019	1.016	1.019	1.016	1.019	1.016	1.019	1.016	1.019	1.017	1.019	1.017	1.019	1.016	1.016	1.013	1.014	1.011	1.011
93	1.026	1.022	1.026	1.025	1.026	1.023	1.026	1.023	1.026	1.025	1.026	1.026	1.026	1.023	1.026	1.022	1.022	1.019	1.020	1.016
94	1.036	1.033	1.035	1.033	1.035	1.035	1.037	1.035	1.037	1.035	1.037	1.033	1.035	1.033	1.036	1.035	1.036	1.030	1.030	1.029
95	1.046	1.046	1.047	1.049	1.049	1.047	1.050	1.050	1.047	1.047	1.049	1.049	1.049	1.045	1.045	1.042	1.045	1.042	1.042	1.040
96	1.052	1.053	1.059	1.057	1.060	1.059	1.062	1.060	1.063	1.062	1.066	1.063	1.067	1.063	1.067	1.065	1.067	1.066	1.069	1.066
97	1.059	1.065	1.065	1.069	1.069	1.072	1.073	1.078	1.080	1.085	1.087	1.091	1.089	1.092	1.091	1.095	1.093	1.095	1.093	1.095
98	1.067	1.067	1.073	1.075	1.080	1.082	1.088	1.091	1.097	1.100	1.105	1.106	1.109	1.109	1.110	1.110	1.111	1.110	1.110	1.109

NASA/RI OH90 TRANSITION TEST
V41B-P4A
APO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 15

IR SCAN TIME 20.19 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.980	0.984	0.980	0.984	0.980	0.986	0.982	0.982	0.980	0.982
65	0.982	0.976	0.978	0.978	0.978	0.978	0.980	0.978	0.980	0.976
66	0.967	0.973	0.971	0.973	0.971	0.973	0.971	0.976	0.969	0.971
67	0.969	0.967	0.969	0.967	0.969	0.962	0.964	0.964	0.962	0.964
68	0.962	0.957	0.962	0.957	0.959	0.954	0.959	0.954	0.962	0.954
69	0.943	0.952	0.943	0.954	0.946	0.954	0.943	0.954	0.937	0.952
70	0.946	0.949	0.949	0.952	0.946	0.946	0.946	0.946	0.946	0.949
71	0.949	0.949	0.943	0.949	0.946	0.952	0.946	0.949	0.943	0.949
72	0.946	0.949	0.946	0.946	0.943	0.946	0.946	0.949	0.943	0.946
73	0.946	0.946	0.949	0.949	0.949	0.943	0.946	0.946	0.949	0.946
74	0.949	0.949	0.943	0.949	0.949	0.949	0.943	0.943	0.946	0.949
75	0.954	0.949	0.949	0.946	0.949	0.949	0.954	0.946	0.949	0.943
76	0.946	0.954	0.943	0.952	0.940	0.949	0.940	0.949	0.946	0.949
77	0.949	0.952	0.949	0.949	0.946	0.952	0.946	0.952	0.949	0.952
78	0.954	0.957	0.954	0.957	0.949	0.952	0.949	0.949	0.949	0.952
79	0.954	0.949	0.957	0.952	0.957	0.954	0.957	0.952	0.957	0.949
80	0.959	0.954	0.962	0.952	0.957	0.949	0.957	0.954	0.957	0.954
81	0.954	0.954	0.952	0.959	0.928	0.954	0.949	0.954	0.952	0.957
82	0.949	0.954	0.949	0.952	0.949	0.952	0.949	0.949	0.946	0.949
83	0.959	0.943	0.957	0.940	0.957	0.937	0.952	0.937	0.952	0.937
84	0.973	0.976	0.969	0.967	0.959	0.959	0.957	0.957	0.952	0.954
85	0.997	0.992	0.994	0.988	0.988	0.978	0.978	0.971	0.973	0.967
86	1.008	1.004	1.003	1.001	1.001	0.997	0.999	0.988	0.990	0.984
87	1.011	1.006	1.009	1.009	1.009	1.006	1.006	0.999	1.001	0.996
88	1.006	1.003	1.008	1.008	1.006	1.003	1.004	0.999	1.003	0.997
89	1.003	1.003	1.003	1.006	1.004	1.008	1.003	1.003	0.999	0.999
90	1.006	1.001	1.008	1.003	1.009	1.003	1.006	0.999	1.004	1.001
91	1.004	1.006	1.003	1.008	1.008	1.009	1.008	1.009	1.008	1.008
92	1.009	1.011	1.008	1.013	1.006	1.014	1.011	1.014	1.016	1.016
93	1.019	1.016	1.019	1.016	1.019	1.016	1.022	1.020	1.025	1.025
94	1.029	1.028	1.028	1.028	1.029	1.029	1.033	1.033	1.033	1.033
95	1.042	1.041	1.042	1.038	1.041	1.044	1.045	1.047	1.050	1.047
96	1.067	1.066	1.070	1.070	1.072	1.072	1.074	1.072	1.073	1.071
97	1.092	1.095	1.093	1.095	1.094	1.096	1.094	1.097	1.096	1.098
98	1.110	1.109	1.111	1.110	1.111	1.111	1.114	1.117	1.121	1.123

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT = H(,9TO)/HRFR
IR SCAN TIME 20.19 SEC
HRFR = 0.2056-01

GROUP 15

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	0.022	0.024	0.024	0.024	0.024	0.021	0.024	0.022	0.024	0.021	0.023	0.022	0.019	0.019	0.020	0.021	0.022	0.022	0.022	0.021
30	0.025	0.025	0.024	0.024	0.024	0.021	0.022	0.022	0.022	0.022	0.023	0.022	0.020	0.021	0.021	0.022	0.022	0.022	0.022	0.021
31	0.027	0.025	0.022	0.022	0.023	0.024	0.021	0.024	0.023	0.022	0.021	0.022	0.024	0.022	0.022	0.021	0.019	0.020	0.020	0.019
32	0.023	0.024	0.021	0.024	0.024	0.024	0.022	0.023	0.022	0.021	0.022	0.021	0.019	0.021	0.021	0.019	0.018	0.019	0.017	0.017
33	0.021	0.024	0.022	0.024	0.023	0.022	0.022	0.021	0.022	0.022	0.021	0.019	0.019	0.018	0.019	0.016	0.018	0.018	0.019	0.020
34	0.022	0.024	0.022	0.023	0.022	0.020	0.021	0.019	0.018	0.019	0.018	0.018	0.016	0.017	0.018	0.019	0.020	0.019	0.020	0.020
35	0.025	0.024	0.021	0.019	0.021	0.017	0.019	0.015	0.016	0.015	0.017	0.017	0.019	0.018	0.019	0.021	0.020	0.020	0.021	0.021
36	0.024	0.020	0.020	0.018	0.017	0.017	0.016	0.017	0.018	0.019	0.018	0.019	0.019	0.019	0.019	0.020	0.020	0.019	0.015	0.014
37	0.019	0.018	0.018	0.017	0.017	0.018	0.018	0.019	0.019	0.019	0.019	0.019	0.018	0.020	0.020	0.018	0.015	0.011	0.005	0.002
38	0.017	0.016	0.017	0.018	0.018	0.019	0.019	0.019	0.018	0.019	0.019	0.019	0.018	0.016	0.012	0.007	0.001	0.001	0.001	0.001
39	0.018	0.017	0.019	0.019	0.019	0.020	0.020	0.019	0.019	0.019	0.016	0.013	0.008	0.003	0.001	0.001	0.001	0.001	0.000	0.000
40	0.021	0.021	0.020	0.019	0.019	0.019	0.019	0.018	0.016	0.009	0.006	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000
41	0.021	0.019	0.019	0.020	0.019	0.017	0.013	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	0.019	0.022	0.020	0.014	0.011	0.003	0.003	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.001	0.000	0.002	0.002
43	0.021	0.017	0.012	0.006	0.002	0.002	0.001	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000
44	0.013	0.008	0.006	0.003	0.003	0.001	0.003	0.001	0.003	0.002	0.002	0.001	0.002	0.000	0.003	0.002	0.004	0.002	0.003	0.003
45	0.006	0.006	0.005	0.006	0.003	0.003	0.003	0.004	0.003	0.004	0.002	0.003	0.003	0.003	0.003	0.004	0.003	0.006	0.013	0.022
46	0.007	0.008	0.006	0.007	0.006	0.006	0.005	0.006	0.005	0.006	0.004	0.006	0.006	0.007	0.006	0.006	0.006	0.013	0.036	0.070
47	0.008	0.008	0.008	0.008	0.007	0.008	0.006	0.006	0.006	0.008	0.006	0.007	0.006	0.007	0.006	0.008	0.008	0.017	0.044	0.080
48	0.010	0.009	0.008	0.009	0.008	0.009	0.006	0.008	0.007	0.008	0.008	0.008	0.008	0.008	0.008	0.011	0.011	0.022	0.055	0.088
49	0.010	0.011	0.011	0.008	0.010	0.007	0.009	0.007	0.009	0.007	0.009	0.008	0.009	0.008	0.010	0.009	0.013	0.026	0.062	0.090
50	0.010	0.009	0.008	0.010	0.008	0.010	0.008	0.008	0.007	0.008	0.007	0.008	0.008	0.009	0.008	0.010	0.013	0.034	0.068	0.094
51	0.008	0.008	0.009	0.008	0.008	0.007	0.008	0.006	0.008	0.007	0.009	0.007	0.008	0.007	0.008	0.008	0.016	0.041	0.076	0.096
52	0.006	0.006	0.006	0.005	0.003	0.004	0.003	0.005	0.003	0.006	0.005	0.006	0.005	0.005	0.004	0.006	0.014	0.042	0.074	0.093
53	0.002	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.002	0.013	0.046	0.076	0.093
54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.012	0.048	0.077	0.092
55	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.018	0.054	0.080	0.092
56	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.026	0.064	0.083	0.092
57	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.036	0.068	0.086	0.092
58	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.011	0.045	0.075	0.087	0.094
59	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.018	0.053	0.077	0.088	0.092
60	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.022	0.057	0.079	0.088	0.094
61	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.025	0.061	0.080	0.088	0.093
62	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.027	0.061	0.079	0.087	0.092
63	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.004	0.033	0.064	0.079	0.085	0.089

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 20.19 SEC
GROUP 15 HRFR = 0.205E-01

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	0.019	0.021	0.019	0.021	0.019	0.019	0.017	0.018	0.016	0.016	0.015	0.016	0.014	0.016	0.014	0.017	0.017	0.018	0.018	0.019
30	0.019	0.020	0.019	0.019	0.018	0.019	0.017	0.016	0.016	0.018	0.019	0.019	0.019	0.019	0.019	0.021	0.022	0.021	0.019	0.022
31	0.018	0.018	0.017	0.018	0.018	0.018	0.018	0.019	0.021	0.021	0.022	0.023	0.022	0.022	0.022	0.022	0.021	0.019	0.017	0.015
32	0.017	0.018	0.019	0.020	0.020	0.021	0.022	0.022	0.021	0.022	0.022	0.022	0.020	0.018	0.016	0.014	0.011	0.008	0.003	0.001
33	0.020	0.020	0.021	0.021	0.022	0.022	0.021	0.020	0.018	0.017	0.014	0.011	0.008	0.003	0.000	0.000	0.000	0.000	0.000	0.000
34	0.020	0.021	0.022	0.021	0.018	0.018	0.014	0.010	0.006	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.019	0.017	0.015	0.011	0.007	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.008	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
37	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000
41	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	0.001	0.001	0.002	0.000	0.001	0.000	0.002	0.000	0.003	0.000	0.001	0.001	0.002	0.001	0.002	0.001	0.001	0.000	0.002	0.000
43	0.000	0.001	0.001	0.002	0.000	0.002	0.002	0.001	0.001	0.001	0.001	0.003	0.001	0.003	0.000	0.002	0.001	0.002	0.001	0.003
44	0.005	0.003	0.005	0.003	0.004	0.003	0.004	0.003	0.004	0.003	0.005	0.003	0.004	0.000	0.003	0.001	0.003	0.001	0.003	0.003
45	0.030	0.033	0.032	0.030	0.025	0.021	0.018	0.014	0.011	0.008	0.006	0.006	0.006	0.006	0.005	0.006	0.003	0.006	0.004	0.005
46	0.094	0.107	0.113	0.116	0.115	0.111	0.100	0.086	0.070	0.056	0.041	0.030	0.019	0.014	0.011	0.010	0.008	0.009	0.007	0.008
47	0.104	0.119	0.129	0.139	0.150	0.159	0.167	0.169	0.166	0.159	0.144	0.122	0.095	0.070	0.049	0.033	0.018	0.015	0.011	0.011
48	0.107	0.118	0.126	0.134	0.143	0.152	0.162	0.170	0.174	0.177	0.179	0.180	0.179	0.174	0.153	0.115	0.075	0.044	0.024	0.016
49	0.107	0.117	0.125	0.132	0.139	0.146	0.155	0.162	0.167	0.170	0.172	0.173	0.178	0.189	0.203	0.196	0.154	0.103	0.063	0.036
50	0.106	0.115	0.121	0.128	0.134	0.142	0.148	0.154	0.157	0.164	0.171	0.176	0.177	0.182	0.192	0.205	0.205	0.167	0.114	0.074
51	0.106	0.112	0.118	0.123	0.129	0.135	0.141	0.147	0.152	0.155	0.159	0.163	0.170	0.173	0.179	0.186	0.202	0.212	0.186	0.128
52	0.101	0.108	0.113	0.119	0.124	0.130	0.134	0.139	0.143	0.145	0.146	0.149	0.154	0.160	0.167	0.174	0.180	0.192	0.213	0.210
53	0.100	0.105	0.110	0.114	0.119	0.126	0.132	0.137	0.142	0.144	0.144	0.145	0.147	0.153	0.159	0.168	0.177	0.185	0.192	0.209
54	0.098	0.103	0.107	0.112	0.116	0.123	0.128	0.133	0.137	0.141	0.143	0.146	0.146	0.148	0.152	0.158	0.165	0.176	0.189	0.200
55	0.099	0.103	0.106	0.110	0.114	0.120	0.124	0.130	0.134	0.136	0.138	0.140	0.143	0.146	0.150	0.152	0.156	0.161	0.169	0.179
56	0.097	0.101	0.104	0.108	0.113	0.119	0.123	0.128	0.131	0.132	0.132	0.134	0.135	0.137	0.141	0.146	0.151	0.156	0.159	0.166
57	0.097	0.099	0.103	0.106	0.111	0.115	0.121	0.125	0.129	0.130	0.131	0.131	0.132	0.135	0.137	0.138	0.143	0.148	0.154	0.160
58	0.097	0.100	0.103	0.107	0.111	0.116	0.120	0.125	0.128	0.129	0.128	0.130	0.133	0.136	0.136	0.137	0.139	0.143	0.146	0.153
59	0.097	0.099	0.102	0.106	0.111	0.115	0.121	0.124	0.128	0.129	0.129	0.130	0.133	0.134	0.136	0.137	0.141	0.142	0.144	0.147
60	0.096	0.099	0.102	0.106	0.109	0.114	0.118	0.123	0.127	0.129	0.129	0.131	0.134	0.136	0.135	0.137	0.139	0.142	0.143	0.146
61	0.096	0.099	0.101	0.106	0.109	0.113	0.118	0.122	0.125	0.126	0.126	0.129	0.132	0.135	0.136	0.138	0.138	0.139	0.140	0.144
62	0.095	0.098	0.100	0.104	0.107	0.111	0.115	0.120	0.124	0.126	0.125	0.127	0.129	0.132	0.134	0.137	0.138	0.139	0.140	0.143
63	0.091	0.094	0.097	0.101	0.105	0.109	0.113	0.118	0.123	0.124	0.125	0.127	0.131	0.134	0.135	0.136	0.137	0.139	0.140	0.143

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
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VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 20.19 SEC
HRFR = 0.205E-01

GROUP 15

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	0.020	0.021	0.020	0.020	0.020	0.019	0.020	0.020	0.019	0.017	0.015	0.014	0.013	0.013	0.011	0.010	0.008	0.008	0.006	0.004
30	0.021	0.022	0.017	0.018	0.016	0.016	0.013	0.014	0.009	0.008	0.004	0.004	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
31	0.013	0.013	0.010	0.008	0.004	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
32	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
37	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	0.002	0.001	0.001	0.000	0.001	0.001	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	0.001	0.003	0.003	0.001	0.000	0.001	0.000	0.003	0.000	0.001	0.001	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000
44	0.003	0.000	0.003	0.001	0.003	0.003	0.003	0.000	0.003	0.001	0.003	0.001	0.002	0.000	0.002	0.002	0.002	0.000	0.001	0.001
45	0.003	0.004	0.003	0.004	0.003	0.003	0.002	0.003	0.003	0.004	0.003	0.003	0.000	0.003	0.001	0.003	0.000	0.002	0.002	0.003
46	0.006	0.007	0.006	0.007	0.006	0.008	0.006	0.006	0.005	0.006	0.006	0.006	0.005	0.006	0.005	0.006	0.005	0.006	0.005	0.006
47	0.010	0.010	0.009	0.009	0.008	0.008	0.007	0.008	0.008	0.008	0.006	0.008	0.007	0.008	0.007	0.007	0.006	0.007	0.006	0.008
48	0.013	0.012	0.011	0.012	0.011	0.010	0.008	0.009	0.008	0.009	0.007	0.008	0.008	0.008	0.008	0.008	0.007	0.008	0.007	0.008
49	0.022	0.014	0.014	0.011	0.011	0.011	0.011	0.008	0.010	0.008	0.009	0.008	0.009	0.008	0.009	0.007	0.009	0.007	0.008	0.008
50	0.046	0.031	0.020	0.016	0.013	0.013	0.011	0.011	0.010	0.011	0.010	0.011	0.009	0.009	0.008	0.009	0.008	0.009	0.008	0.009
51	0.081	0.049	0.034	0.020	0.017	0.011	0.012	0.009	0.011	0.009	0.010	0.008	0.010	0.008	0.010	0.008	0.009	0.007	0.008	0.007
52	0.161	0.101	0.057	0.031	0.018	0.014	0.011	0.008	0.007	0.006	0.005	0.006	0.004	0.006	0.005	0.006	0.004	0.006	0.004	0.006
53	0.219	0.178	0.110	0.059	0.030	0.016	0.010	0.006	0.003	0.003	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.001	0.002
54	0.208	0.206	0.169	0.109	0.059	0.031	0.016	0.008	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
55	0.195	0.210	0.214	0.185	0.126	0.072	0.036	0.018	0.010	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.000
56	0.174	0.188	0.208	0.224	0.204	0.145	0.064	0.043	0.020	0.011	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
57	0.164	0.170	0.180	0.199	0.227	0.230	0.179	0.110	0.059	0.029	0.014	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	0.159	0.165	0.170	0.177	0.191	0.220	0.246	0.216	0.141	0.078	0.037	0.017	0.006	0.001	0.001	0.001	0.001	0.001	0.001	0.001
59	0.152	0.158	0.166	0.174	0.180	0.189	0.211	0.241	0.218	0.139	0.073	0.034	0.016	0.005	0.002	0.002	0.002	0.002	0.002	0.002
60	0.150	0.154	0.158	0.164	0.173	0.183	0.191	0.203	0.219	0.202	0.137	0.074	0.034	0.016	0.007	0.003	0.003	0.003	0.003	0.003
61	0.147	0.151	0.155	0.159	0.163	0.169	0.179	0.192	0.205	0.216	0.201	0.144	0.079	0.038	0.016	0.009	0.003	0.001	0.001	0.001
62	0.145	0.147	0.150	0.156	0.160	0.165	0.170	0.178	0.189	0.202	0.215	0.210	0.164	0.099	0.049	0.024	0.012	0.006	0.001	0.001
63	0.146	0.149	0.150	0.153	0.156	0.162	0.169	0.179	0.185	0.189	0.196	0.212	0.222	0.195	0.129	0.070	0.033	0.014	0.006	0.002

NASA/RI OH90 TRANSITION TEST
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IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 20.19 SEC
GROUP 15 HRFR = 0.205E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.001	0.001	0.001	0.000	0.000	0.001	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
30	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
31	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
32	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
37	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	0.001	0.000	0.002	0.002	0.002	0.000	0.000	0.000	0.001	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001
45	0.000	0.003	0.000	0.003	0.003	0.003	0.003	0.003	0.000	0.002	0.001	0.002	0.001	0.001	0.000	0.001	0.001	0.002	0.000	0.001
46	0.005	0.006	0.003	0.005	0.004	0.006	0.004	0.005	0.003	0.006	0.000	0.006	0.001	0.004	0.000	0.005	0.001	0.005	0.000	0.004
47	0.006	0.006	0.006	0.007	0.006	0.007	0.006	0.006	0.006	0.007	0.006	0.006	0.005	0.006	0.006	0.006	0.005	0.006	0.005	0.006
48	0.007	0.008	0.006	0.008	0.007	0.008	0.006	0.007	0.006	0.007	0.006	0.008	0.006	0.006	0.006	0.007	0.006	0.006	0.006	0.007
49	0.008	0.007	0.008	0.007	0.008	0.008	0.008	0.006	0.008	0.006	0.008	0.007	0.008	0.006	0.007	0.006	0.007	0.006	0.008	0.006
50	0.008	0.009	0.008	0.008	0.007	0.008	0.008	0.008	0.008	0.008	0.006	0.008	0.006	0.008	0.007	0.008	0.007	0.008	0.006	0.008
51	0.009	0.008	0.010	0.008	0.008	0.007	0.008	0.008	0.008	0.008	0.009	0.008	0.008	0.007	0.008	0.006	0.008	0.007	0.008	0.007
52	0.005	0.007	0.006	0.007	0.006	0.008	0.007	0.008	0.006	0.008	0.006	0.008	0.006	0.008	0.007	0.008	0.006	0.007	0.006	0.008
53	0.003	0.003	0.003	0.006	0.005	0.006	0.006	0.007	0.004	0.006	0.003	0.006	0.005	0.006	0.004	0.007	0.004	0.006	0.003	0.006
54	0.001	0.001	0.002	0.004	0.004	0.006	0.004	0.006	0.004	0.006	0.005	0.005	0.005	0.006	0.006	0.006	0.004	0.005	0.004	0.004
55	0.000	0.002	0.003	0.004	0.004	0.006	0.006	0.006	0.005	0.006	0.005	0.007	0.005	0.008	0.006	0.006	0.004	0.005	0.003	0.005
56	0.003	0.002	0.002	0.003	0.004	0.005	0.004	0.006	0.003	0.005	0.005	0.005	0.005	0.006	0.004	0.005	0.003	0.003	0.003	0.003
57	0.001	0.001	0.003	0.002	0.003	0.003	0.003	0.002	0.004	0.003	0.003	0.002	0.003	0.001	0.003	0.003	0.003	0.001	0.002	0.002
58	0.001	0.000	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.001	0.001	0.001	0.001	0.000	0.001	0.001	0.000	0.000	0.000
59	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
61	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
62	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
63	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 20.19 SEC
HRFR = 0.205E-01

GROUP 15

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
31	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
32	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
37	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
45	0.000	0.002	0.000	0.002	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.001
46	0.001	0.004	0.001	0.005	0.001	0.004	0.003	0.005	0.003	0.004	0.003	0.004	0.003	0.005	0.003	0.003	0.003	0.003	0.003	0.003
47	0.006	0.006	0.006	0.006	0.006	0.007	0.006	0.006	0.003	0.006	0.003	0.006	0.003	0.005	0.003	0.006	0.003	0.006	0.003	0.005
48	0.006	0.008	0.007	0.008	0.006	0.008	0.006	0.007	0.006	0.007	0.006	0.006	0.006	0.007	0.006	0.006	0.005	0.006	0.006	0.006
49	0.008	0.007	0.008	0.007	0.008	0.007	0.008	0.006	0.007	0.006	0.008	0.006	0.008	0.006	0.007	0.006	0.007	0.006	0.007	0.006
50	0.007	0.008	0.006	0.008	0.007	0.008	0.006	0.008	0.006	0.007	0.007	0.008	0.006	0.008	0.006	0.007	0.006	0.007	0.006	0.008
51	0.008	0.007	0.008	0.006	0.008	0.006	0.007	0.006	0.007	0.005	0.006	0.005	0.006	0.005	0.006	0.006	0.007	0.006	0.007	0.004
52	0.006	0.007	0.008	0.007	0.006	0.005	0.003	0.004	0.003	0.004	0.003	0.003	0.003	0.005	0.002	0.003	0.002	0.003	0.002	0.003
53	0.003	0.005	0.003	0.005	0.003	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54	0.003	0.003	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
55	0.003	0.004	0.003	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
56	0.002	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
57	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
61	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
62	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
63	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 20.19 SEC
GROUP 15 HRFR = 0.205E-01

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
31	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
32	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
37	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000
45	0.001	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000
46	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
47	0.003	0.006	0.003	0.006	0.004	0.006	0.004	0.005	0.005	0.004
48	0.005	0.006	0.005	0.006	0.005	0.006	0.003	0.006	0.003	0.006
49	0.007	0.006	0.006	0.006	0.007	0.006	0.007	0.005	0.006	0.006
50	0.006	0.007	0.005	0.006	0.006	0.007	0.006	0.007	0.006	0.006
51	0.006	0.005	0.006	0.005	0.006	0.004	0.006	0.003	0.005	0.003
52	0.002	0.003	0.001	0.003	0.001	0.002	0.000	0.002	0.000	0.003
53	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
55	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
56	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
57	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
61	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
62	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
63	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 20.19 SEC
HRFR = 0.205E-01

GROUP 15

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.009	0.045	0.070	0.081	0.085	0.090
65	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.016	0.050	0.073	0.080	0.086	0.089
66	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.025	0.058	0.073	0.080	0.084	0.088
67	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.035	0.064	0.076	0.081	0.085	0.087
68	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.006	0.045	0.072	0.082	0.086	0.089	0.089
69	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.014	0.057	0.087	0.097	0.100	0.101	0.101
70	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.019	0.070	0.103	0.114	0.119	0.121	0.121
71	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.030	0.083	0.114	0.124	0.132	0.135	0.138
72	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.001	0.046	0.096	0.119	0.130	0.137	0.142	0.146
73	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.009	0.058	0.103	0.121	0.131	0.138	0.143	0.147
74	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.018	0.072	0.108	0.124	0.132	0.139	0.143	0.148
75	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.032	0.084	0.114	0.126	0.134	0.139	0.143	0.148
76	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.001	0.040	0.091	0.116	0.127	0.134	0.139	0.143	0.147
77	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.004	0.048	0.097	0.117	0.127	0.133	0.138	0.142	0.146
78	0.006	0.006	0.006	0.003	0.003	0.003	0.003	0.000	0.000	0.000	0.000	0.005	0.047	0.091	0.109	0.120	0.125	0.131	0.133	0.138
79	0.001	0.004	0.005	0.014	0.011	0.010	0.006	0.001	0.000	0.000	0.000	0.010	0.050	0.083	0.097	0.104	0.109	0.113	0.116	0.120
80	0.008	0.011	0.018	0.026	0.019	0.013	0.009	0.006	0.005	0.002	0.004	0.019	0.053	0.075	0.084	0.089	0.094	0.097	0.100	0.103
81	0.026	0.027	0.035	0.045	0.041	0.024	0.013	0.006	0.004	0.006	0.008	0.026	0.053	0.068	0.075	0.080	0.082	0.085	0.088	0.091
82	0.084	0.051	0.046	0.057	0.057	0.035	0.019	0.011	0.006	0.005	0.010	0.030	0.052	0.063	0.069	0.071	0.074	0.077	0.079	0.082
83	0.120	0.063	0.050	0.055	0.060	0.038	0.019	0.007	0.004	0.004	0.018	0.046	0.068	0.072	0.073	0.071	0.072	0.071	0.073	0.074
84	0.092	0.050	0.037	0.036	0.040	0.033	0.018	0.009	0.003	0.008	0.024	0.066	0.102	0.114	0.113	0.108	0.101	0.094	0.088	0.083
85	0.042	0.029	0.024	0.022	0.025	0.023	0.025	0.018	0.018	0.017	0.020	0.024	0.036	0.044	0.051	0.056	0.064	0.070	0.079	0.083
86	0.022	0.017	0.016	0.015	0.019	0.020	0.020	0.018	0.018	0.017	0.018	0.013	0.013	0.012	0.012	0.012	0.013	0.013	0.015	0.016
87	0.013	0.010	0.010	0.008	0.010	0.012	0.012	0.012	0.014	0.016	0.018	0.013	0.012	0.011	0.010	0.008	0.010	0.009	0.010	0.008
88	0.003	0.003	0.004	0.002	0.003	0.003	0.006	0.007	0.013	0.017	0.018	0.011	0.010	0.008	0.008	0.006	0.008	0.006	0.008	0.006
89	0.001	0.001	0.001	0.001	0.000	0.003	0.002	0.006	0.010	0.016	0.015	0.011	0.008	0.007	0.006	0.007	0.006	0.006	0.005	0.006
90	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.007	0.014	0.014	0.009	0.006	0.006	0.007	0.006	0.006	0.005	0.006	0.004
91	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.010	0.011	0.008	0.006	0.008	0.006	0.008	0.006	0.006	0.004	0.005
92	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.006	0.008	0.008	0.007	0.008	0.006	0.007	0.005	0.006	0.004	0.006
93	0.002	0.000	0.001	0.001	0.001	0.001	0.002	0.002	0.003	0.003	0.010	0.009	0.008	0.006	0.007	0.006	0.007	0.005	0.006	0.003
94	0.008	0.006	0.006	0.004	0.005	0.005	0.007	0.006	0.008	0.007	0.010	0.008	0.008	0.008	0.008	0.007	0.008	0.006	0.006	0.004
95	0.012	0.012	0.013	0.012	0.012	0.010	0.011	0.010	0.012	0.011	0.014	0.011	0.010	0.008	0.008	0.007	0.008	0.006	0.007	0.006
96	0.014	0.014	0.014	0.014	0.016	0.014	0.014	0.013	0.014	0.016	0.018	0.014	0.013	0.011	0.012	0.011	0.013	0.010	0.011	0.008
97	0.014	0.015	0.014	0.016	0.016	0.016	0.015	0.014	0.014	0.018	0.018	0.014	0.013	0.013	0.014	0.016	0.015	0.015	0.013	0.011
98	0.014	0.015	0.016	0.016	0.018	0.016	0.016	0.012	0.016	0.019	0.022	0.015	0.014	0.013	0.017	0.018	0.019	0.018	0.017	0.013

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 20.19 SEC
GROUP 15 HREF = 0.205E-01

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	0.092	0.094	0.097	0.100	0.102	0.107	0.111	0.115	0.119	0.123	0.125	0.130	0.134	0.135	0.135	0.137	0.139	0.143	0.143	0.144
65	0.092	0.094	0.097	0.100	0.104	0.108	0.112	0.113	0.119	0.120	0.122	0.124	0.131	0.130	0.132	0.132	0.138	0.138	0.141	0.143
66	0.090	0.093	0.096	0.100	0.103	0.107	0.110	0.114	0.118	0.122	0.123	0.123	0.125	0.125	0.125	0.128	0.130	0.132	0.134	0.138
67	0.090	0.091	0.094	0.097	0.100	0.103	0.107	0.111	0.114	0.117	0.120	0.121	0.121	0.123	0.125	0.127	0.128	0.128	0.130	0.132
68	0.091	0.092	0.094	0.096	0.099	0.100	0.103	0.106	0.110	0.112	0.115	0.117	0.117	0.117	0.120	0.122	0.124	0.126	0.129	0.131
69	0.099	0.099	0.099	0.100	0.100	0.103	0.104	0.105	0.108	0.111	0.113	0.114	0.114	0.114	0.114	0.115	0.116	0.119	0.121	0.123
70	0.120	0.119	0.117	0.115	0.114	0.113	0.113	0.111	0.109	0.109	0.110	0.111	0.112	0.112	0.113	0.113	0.113	0.114	0.115	0.117
71	0.139	0.140	0.140	0.141	0.141	0.140	0.140	0.138	0.134	0.130	0.127	0.122	0.117	0.113	0.108	0.107	0.107	0.109	0.110	0.112
72	0.149	0.151	0.154	0.157	0.160	0.162	0.164	0.166	0.166	0.165	0.163	0.158	0.150	0.142	0.131	0.122	0.114	0.110	0.105	0.104
73	0.152	0.155	0.159	0.163	0.169	0.174	0.180	0.186	0.190	0.192	0.193	0.192	0.191	0.185	0.175	0.163	0.151	0.140	0.132	0.122
74	0.152	0.157	0.161	0.167	0.172	0.179	0.186	0.193	0.200	0.206	0.210	0.214	0.218	0.219	0.212	0.203	0.194	0.184	0.175	0.164
75	0.152	0.156	0.161	0.167	0.173	0.179	0.187	0.195	0.203	0.210	0.216	0.221	0.224	0.227	0.227	0.226	0.224	0.219	0.213	0.206
76	0.151	0.156	0.161	0.167	0.173	0.180	0.187	0.195	0.202	0.209	0.216	0.222	0.226	0.229	0.231	0.232	0.233	0.234	0.233	0.232
77	0.150	0.155	0.160	0.165	0.170	0.178	0.185	0.193	0.201	0.208	0.214	0.221	0.227	0.231	0.234	0.237	0.239	0.240	0.242	0.243
78	0.142	0.147	0.152	0.158	0.163	0.170	0.177	0.186	0.194	0.202	0.208	0.214	0.218	0.222	0.226	0.230	0.233	0.236	0.238	0.240
79	0.124	0.129	0.134	0.138	0.144	0.148	0.155	0.161	0.169	0.175	0.183	0.187	0.193	0.197	0.202	0.206	0.211	0.216	0.220	0.224
80	0.106	0.109	0.113	0.116	0.121	0.125	0.129	0.133	0.138	0.142	0.146	0.149	0.152	0.154	0.156	0.159	0.162	0.166	0.170	0.175
81	0.094	0.097	0.099	0.103	0.106	0.110	0.113	0.116	0.120	0.123	0.125	0.128	0.128	0.129	0.129	0.128	0.128	0.127	0.127	0.128
82	0.085	0.087	0.090	0.094	0.097	0.100	0.103	0.106	0.108	0.111	0.113	0.115	0.116	0.118	0.118	0.119	0.120	0.121	0.120	0.121
83	0.077	0.079	0.082	0.086	0.089	0.092	0.095	0.097	0.100	0.101	0.103	0.105	0.107	0.108	0.109	0.108	0.110	0.110	0.111	0.112
84	0.079	0.078	0.078	0.079	0.082	0.085	0.087	0.091	0.092	0.094	0.096	0.097	0.098	0.099	0.099	0.100	0.100	0.101	0.101	0.102
85	0.089	0.089	0.085	0.084	0.087	0.091	0.093	0.092	0.093	0.093	0.097	0.101	0.104	0.103	0.100	0.097	0.096	0.095	0.096	0.096
86	0.018	0.018	0.021	0.021	0.026	0.030	0.035	0.033	0.034	0.032	0.037	0.045	0.055	0.058	0.058	0.056	0.055	0.054	0.054	0.055
87	0.008	0.007	0.008	0.007	0.008	0.006	0.008	0.007	0.008	0.007	0.008	0.007	0.008	0.008	0.010	0.008	0.008	0.008	0.008	0.007
88	0.007	0.004	0.006	0.004	0.006	0.005	0.006	0.005	0.006	0.006	0.006	0.003	0.006	0.005	0.006	0.006	0.006	0.005	0.005	0.003
89	0.004	0.005	0.003	0.003	0.001	0.003	0.003	0.005	0.003	0.004	0.003	0.005	0.004	0.005	0.003	0.003	0.002	0.003	0.003	0.003
90	0.006	0.003	0.003	0.002	0.003	0.000	0.003	0.001	0.003	0.003	0.003	0.002	0.003	0.003	0.004	0.003	0.004	0.003	0.003	0.001
91	0.004	0.004	0.003	0.003	0.003	0.003	0.001	0.001	0.002	0.003	0.003	0.008	0.017	0.017	0.008	0.003	0.002	0.003	0.001	0.003
92	0.004	0.006	0.003	0.004	0.002	0.003	0.000	0.001	0.001	0.003	0.003	0.016	0.036	0.041	0.025	0.011	0.003	0.003	0.002	0.002
93	0.006	0.002	0.005	0.000	0.003	0.003	0.002	0.002	0.002	0.002	0.003	0.003	0.008	0.009	0.009	0.003	0.004	0.001	0.003	0.002
94	0.006	0.006	0.006	0.004	0.004	0.002	0.003	0.003	0.002	0.000	0.001	0.000	0.001	0.001	0.001	0.000	0.001	0.001	0.001	0.001
95	0.008	0.006	0.006	0.003	0.003	0.002	0.003	0.000	0.002	0.000	0.001	0.000	0.001	0.001	0.001	0.001	0.003	0.003	0.003	0.001
96	0.008	0.006	0.008	0.005	0.006	0.003	0.003	0.001	0.003	0.001	0.002	0.001	0.003	0.001	0.001	0.001	0.002	0.002	0.003	0.002
97	0.008	0.008	0.006	0.006	0.005	0.004	0.003	0.004	0.003	0.003	0.003	0.003	0.000	0.001	0.001	0.002	0.001	0.003	0.002	0.002
98	0.012	0.011	0.011	0.008	0.009	0.008	0.008	0.006	0.008	0.006	0.007	0.004	0.005	0.003	0.003	0.002	0.003	0.002	0.005	0.003

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 20.19 SEC
HRFR = 0.205E-01

GROUP 15

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	0.145	0.147	0.151	0.154	0.157	0.162	0.167	0.174	0.179	0.182	0.186	0.194	0.208	0.228	0.219	0.159	0.088	0.042	0.016	0.008
65	0.147	0.147	0.149	0.151	0.155	0.159	0.166	0.170	0.172	0.173	0.177	0.185	0.194	0.208	0.227	0.221	0.161	0.089	0.043	0.018
66	0.141	0.143	0.145	0.148	0.151	0.156	0.160	0.164	0.165	0.167	0.170	0.175	0.183	0.194	0.209	0.227	0.225	0.174	0.101	0.050
67	0.134	0.136	0.139	0.143	0.146	0.151	0.158	0.160	0.160	0.160	0.163	0.166	0.173	0.182	0.193	0.208	0.228	0.237	0.195	0.120
68	0.134	0.134	0.134	0.135	0.140	0.145	0.150	0.152	0.154	0.156	0.159	0.162	0.167	0.173	0.182	0.193	0.206	0.225	0.245	0.223
69	0.126	0.131	0.133	0.135	0.138	0.143	0.146	0.145	0.144	0.147	0.150	0.154	0.160	0.169	0.179	0.187	0.193	0.203	0.219	0.240
70	0.118	0.121	0.123	0.127	0.131	0.136	0.140	0.143	0.141	0.141	0.143	0.146	0.150	0.157	0.163	0.169	0.175	0.182	0.191	0.203
71	0.114	0.116	0.118	0.119	0.120	0.124	0.128	0.130	0.131	0.132	0.136	0.141	0.144	0.147	0.150	0.153	0.157	0.162	0.169	0.178
72	0.103	0.106	0.107	0.109	0.110	0.114	0.118	0.121	0.120	0.121	0.123	0.126	0.129	0.132	0.136	0.141	0.146	0.151	0.157	0.166
73	0.115	0.109	0.104	0.100	0.101	0.102	0.107	0.109	0.109	0.110	0.111	0.113	0.115	0.118	0.121	0.124	0.130	0.134	0.142	0.149
74	0.152	0.138	0.125	0.114	0.108	0.108	0.110	0.110	0.105	0.103	0.102	0.103	0.104	0.107	0.110	0.114	0.118	0.122	0.126	0.132
75	0.199	0.189	0.176	0.158	0.143	0.130	0.123	0.116	0.109	0.104	0.103	0.102	0.103	0.103	0.104	0.105	0.107	0.109	0.114	0.118
76	0.230	0.228	0.223	0.215	0.205	0.192	0.176	0.159	0.140	0.123	0.110	0.103	0.099	0.099	0.101	0.103	0.104	0.105	0.106	0.109
77	0.243	0.244	0.244	0.242	0.239	0.236	0.230	0.221	0.206	0.187	0.166	0.146	0.126	0.112	0.103	0.099	0.098	0.100	0.103	0.106
78	0.241	0.243	0.243	0.244	0.243	0.244	0.246	0.248	0.245	0.238	0.229	0.215	0.198	0.177	0.155	0.134	0.117	0.105	0.099	0.099
79	0.228	0.231	0.235	0.237	0.239	0.240	0.243	0.248	0.250	0.249	0.248	0.244	0.239	0.230	0.219	0.205	0.188	0.168	0.147	0.127
80	0.182	0.188	0.195	0.201	0.207	0.213	0.221	0.230	0.237	0.241	0.245	0.245	0.245	0.243	0.241	0.237	0.233	0.226	0.215	0.199
81	0.129	0.132	0.135	0.139	0.144	0.150	0.158	0.168	0.177	0.186	0.195	0.204	0.213	0.220	0.226	0.231	0.234	0.234	0.232	0.229
82	0.120	0.120	0.119	0.118	0.118	0.118	0.119	0.122	0.124	0.128	0.130	0.134	0.140	0.148	0.156	0.166	0.176	0.186	0.194	0.200
83	0.114	0.115	0.116	0.116	0.119	0.119	0.121	0.123	0.125	0.124	0.123	0.121	0.121	0.121	0.122	0.123	0.125	0.127	0.131	0.135
84	0.103	0.104	0.104	0.105	0.106	0.108	0.109	0.112	0.115	0.119	0.120	0.122	0.123	0.126	0.128	0.130	0.130	0.131	0.131	0.130
85	0.098	0.099	0.100	0.101	0.101	0.102	0.102	0.102	0.104	0.105	0.106	0.105	0.105	0.106	0.109	0.113	0.119	0.124	0.132	0.138
86	0.059	0.063	0.069	0.073	0.078	0.082	0.087	0.092	0.098	0.101	0.100	0.095	0.092	0.089	0.088	0.087	0.088	0.091	0.094	0.099
87	0.010	0.007	0.011	0.009	0.012	0.012	0.014	0.014	0.018	0.016	0.019	0.017	0.018	0.017	0.019	0.020	0.021	0.023	0.026	0.027
88	0.006	0.005	0.006	0.005	0.007	0.006	0.008	0.007	0.008	0.006	0.008	0.006	0.008	0.006	0.006	0.006	0.007	0.005	0.008	0.005
89	0.002	0.003	0.002	0.004	0.003	0.004	0.003	0.003	0.003	0.005	0.004	0.004	0.003	0.003	0.003	0.004	0.004	0.005	0.004	0.006
90	0.003	0.002	0.003	0.002	0.003	0.001	0.002	0.001	0.003	0.003	0.004	0.003	0.004	0.002	0.003	0.002	0.004	0.003	0.005	0.003
91	0.002	0.003	0.000	0.001	0.000	0.003	0.001	0.004	0.003	0.006	0.006	0.006	0.003	0.003	0.003	0.004	0.003	0.004	0.002	0.003
92	0.001	0.002	0.000	0.001	0.000	0.001	0.001	0.003	0.006	0.017	0.027	0.027	0.015	0.008	0.003	0.004	0.003	0.004	0.003	0.005
93	0.003	0.001	0.003	0.000	0.002	0.002	0.003	0.003	0.006	0.010	0.019	0.022	0.014	0.007	0.006	0.005	0.006	0.004	0.003	0.004
94	0.002	0.000	0.004	0.001	0.003	0.001	0.003	0.001	0.003	0.002	0.005	0.003	0.005	0.005	0.005	0.003	0.005	0.004	0.006	0.006
95	0.001	0.000	0.002	0.001	0.003	0.003	0.004	0.003	0.004	0.003	0.003	0.003	0.005	0.003	0.006	0.003	0.006	0.003	0.006	0.005
96	0.003	0.001	0.003	0.001	0.003	0.003	0.005	0.004	0.006	0.004	0.006	0.003	0.005	0.006	0.006	0.004	0.006	0.006	0.006	0.007
97	0.001	0.003	0.001	0.003	0.003	0.005	0.004	0.005	0.003	0.005	0.005	0.006	0.005	0.007	0.006	0.006	0.006	0.007	0.007	0.010
98	0.004	0.002	0.004	0.003	0.006	0.005	0.006	0.006	0.008	0.006	0.008	0.006	0.008	0.007	0.008	0.007	0.010	0.009	0.011	0.011

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 20.19 SEC
GROUP 15 HRFR = 0.205E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
66	0.021	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
67	0.061	0.026	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
68	0.149	0.078	0.034	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
69	0.233	0.170	0.095	0.046	0.016	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
70	0.222	0.232	0.189	0.113	0.055	0.022	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
71	0.191	0.208	0.218	0.186	0.118	0.060	0.025	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
72	0.175	0.185	0.198	0.211	0.188	0.126	0.066	0.028	0.009	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
73	0.156	0.164	0.176	0.191	0.206	0.193	0.137	0.074	0.034	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
74	0.137	0.145	0.154	0.168	0.183	0.201	0.194	0.144	0.080	0.038	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
75	0.123	0.130	0.137	0.144	0.154	0.168	0.185	0.187	0.149	0.089	0.044	0.015	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
76	0.112	0.117	0.121	0.126	0.132	0.140	0.151	0.165	0.171	0.143	0.089	0.044	0.016	0.005	0.005	0.005	0.005	0.005	0.005	0.005
77	0.108	0.112	0.115	0.118	0.121	0.124	0.129	0.137	0.146	0.153	0.136	0.092	0.046	0.019	0.006	0.006	0.006	0.006	0.006	0.006
78	0.099	0.102	0.105	0.110	0.114	0.120	0.124	0.128	0.132	0.138	0.143	0.135	0.099	0.055	0.025	0.010	0.001	0.001	0.001	0.001
79	0.112	0.103	0.101	0.101	0.103	0.106	0.110	0.115	0.123	0.131	0.139	0.146	0.141	0.111	0.069	0.034	0.014	0.003	0.001	0.001
80	0.180	0.157	0.135	0.119	0.110	0.105	0.105	0.105	0.109	0.113	0.120	0.129	0.142	0.149	0.134	0.092	0.049	0.021	0.008	0.001
81	0.224	0.217	0.202	0.184	0.164	0.145	0.128	0.116	0.108	0.107	0.108	0.112	0.116	0.126	0.135	0.122	0.080	0.041	0.014	0.004
82	0.207	0.213	0.216	0.215	0.211	0.204	0.192	0.176	0.156	0.137	0.122	0.114	0.111	0.112	0.114	0.114	0.098	0.065	0.032	0.011
83	0.140	0.149	0.160	0.171	0.183	0.193	0.202	0.208	0.209	0.201	0.186	0.167	0.147	0.129	0.118	0.112	0.107	0.091	0.063	0.033
84	0.128	0.127	0.126	0.128	0.131	0.137	0.145	0.156	0.169	0.183	0.196	0.205	0.206	0.198	0.182	0.164	0.144	0.126	0.103	0.073
85	0.144	0.148	0.150	0.149	0.148	0.147	0.146	0.146	0.147	0.149	0.153	0.160	0.169	0.180	0.192	0.200	0.201	0.196	0.180	0.151
86	0.107	0.115	0.128	0.142	0.159	0.177	0.197	0.216	0.230	0.239	0.241	0.237	0.232	0.225	0.220	0.217	0.219	0.225	0.232	0.230
87	0.032	0.035	0.041	0.046	0.059	0.078	0.109	0.145	0.183	0.216	0.241	0.254	0.259	0.255	0.248	0.241	0.237	0.234	0.232	0.232
88	0.008	0.007	0.011	0.009	0.013	0.011	0.016	0.018	0.026	0.035	0.046	0.052	0.061	0.065	0.068	0.068	0.070	0.072	0.075	0.077
89	0.005	0.006	0.006	0.008	0.006	0.008	0.008	0.011	0.012	0.014	0.014	0.018	0.019	0.021	0.021	0.019	0.016	0.018	0.017	0.019
90	0.005	0.003	0.005	0.004	0.006	0.005	0.007	0.006	0.008	0.008	0.013	0.014	0.016	0.016	0.016	0.014	0.015	0.014	0.015	0.014
91	0.002	0.003	0.003	0.005	0.005	0.006	0.005	0.006	0.004	0.006	0.008	0.011	0.012	0.013	0.013	0.014	0.012	0.011	0.008	0.009
92	0.003	0.004	0.003	0.005	0.006	0.013	0.019	0.021	0.014	0.011	0.008	0.010	0.011	0.013	0.013	0.014	0.013	0.012	0.010	0.009
93	0.005	0.006	0.006	0.006	0.008	0.013	0.022	0.025	0.019	0.013	0.011	0.011	0.013	0.013	0.015	0.014	0.014	0.013	0.013	0.011
94	0.007	0.006	0.008	0.006	0.008	0.007	0.011	0.011	0.012	0.011	0.013	0.013	0.015	0.016	0.017	0.018	0.018	0.018	0.017	0.016
95	0.008	0.006	0.008	0.008	0.010	0.008	0.011	0.010	0.011	0.011	0.014	0.014	0.018	0.019	0.020	0.021	0.023	0.020	0.020	0.019
96	0.008	0.008	0.010	0.008	0.013	0.013	0.013	0.013	0.013	0.013	0.016	0.018	0.021	0.022	0.024	0.024	0.026	0.024	0.025	0.023
97	0.010	0.011	0.011	0.012	0.012	0.014	0.015	0.016	0.015	0.016	0.016	0.019	0.023	0.025	0.029	0.031	0.029	0.029	0.027	0.027
98	0.013	0.013	0.014	0.014	0.016	0.015	0.016	0.016	0.017	0.017	0.019	0.024	0.026	0.029	0.032	0.032	0.033	0.031	0.031	0.029

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 20.19 SEC
HRFR = 0.205E-01

GROUP 15

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
66	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
67	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
68	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
69	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
70	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
71	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
72	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
73	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
74	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
75	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
76	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
77	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
78	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
79	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
80	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
81	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
82	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
83	0.014	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
84	0.041	0.019	0.009	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
85	0.113	0.071	0.040	0.017	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.000	0.000	0.000	0.000	0.002	0.001	0.001	0.001
86	0.215	0.178	0.128	0.077	0.040	0.014	0.003	0.003	0.003	0.003	0.003	0.003	0.000	0.000	0.002	0.002	0.003	0.001	0.003	0.002
87	0.232	0.222	0.183	0.123	0.069	0.032	0.013	0.005	0.004	0.002	0.003	0.001	0.003	0.001	0.003	0.002	0.003	0.003	0.006	0.004
88	0.082	0.084	0.076	0.055	0.034	0.018	0.011	0.005	0.006	0.004	0.005	0.003	0.004	0.001	0.003	0.002	0.004	0.003	0.003	0.003
89	0.020	0.021	0.016	0.016	0.011	0.009	0.006	0.006	0.003	0.003	0.002	0.004	0.003	0.004	0.002	0.003	0.001	0.003	0.002	0.003
90	0.015	0.013	0.013	0.008	0.008	0.006	0.008	0.006	0.008	0.005	0.006	0.003	0.005	0.002	0.004	0.001	0.003	0.003	0.003	0.000
91	0.008	0.008	0.007	0.008	0.005	0.006	0.005	0.007	0.006	0.008	0.007	0.008	0.005	0.006	0.005	0.005	0.004	0.004	0.003	0.003
92	0.008	0.008	0.007	0.008	0.007	0.008	0.007	0.008	0.007	0.008	0.008	0.008	0.008	0.008	0.007	0.007	0.006	0.006	0.005	0.005
93	0.012	0.010	0.012	0.011	0.012	0.011	0.012	0.011	0.012	0.011	0.012	0.012	0.012	0.011	0.012	0.010	0.010	0.008	0.009	0.007
94	0.016	0.015	0.016	0.015	0.016	0.016	0.017	0.016	0.017	0.016	0.017	0.015	0.016	0.015	0.016	0.016	0.016	0.014	0.014	0.013
95	0.021	0.021	0.022	0.022	0.022	0.022	0.023	0.023	0.022	0.022	0.022	0.022	0.022	0.021	0.021	0.019	0.021	0.019	0.019	0.018
96	0.024	0.025	0.027	0.026	0.028	0.027	0.029	0.028	0.030	0.029	0.031	0.030	0.031	0.030	0.031	0.030	0.031	0.031	0.032	0.031
97	0.027	0.030	0.030	0.032	0.032	0.034	0.034	0.037	0.038	0.040	0.041	0.043	0.042	0.044	0.043	0.045	0.044	0.045	0.044	0.045
98	0.031	0.031	0.034	0.035	0.038	0.039	0.042	0.043	0.046	0.048	0.050	0.051	0.052	0.052	0.053	0.053	0.054	0.053	0.053	0.052

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 20.19 SEC
HRFR = 0.205E-01

GROUP 15

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
66	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
67	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
68	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
69	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
70	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
71	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
72	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
73	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
74	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
75	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
76	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
77	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
78	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
79	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
80	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
81	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
82	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
83	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
84	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
85	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
86	0.003	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
87	0.005	0.003	0.004	0.004	0.004	0.003	0.003	0.003	0.000	0.000
88	0.003	0.001	0.003	0.003	0.003	0.001	0.002	0.002	0.001	0.001
89	0.001	0.001	0.001	0.003	0.002	0.003	0.001	0.001	0.001	0.001
90	0.003	0.000	0.003	0.001	0.004	0.001	0.003	0.003	0.002	0.000
91	0.002	0.003	0.001	0.003	0.003	0.004	0.003	0.004	0.003	0.003
92	0.004	0.005	0.003	0.006	0.003	0.006	0.005	0.006	0.007	0.007
93	0.008	0.007	0.008	0.007	0.008	0.007	0.010	0.009	0.011	0.011
94	0.013	0.013	0.013	0.013	0.013	0.013	0.015	0.015	0.015	0.015
95	0.019	0.019	0.019	0.018	0.019	0.020	0.021	0.022	0.023	0.022
96	0.031	0.031	0.033	0.033	0.034	0.034	0.035	0.034	0.034	0.033
97	0.044	0.046	0.044	0.046	0.045	0.046	0.045	0.046	0.046	0.047
98	0.053	0.052	0.054	0.053	0.054	0.054	0.055	0.057	0.059	0.060

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

GROUP 18

TIME,SEC		TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
426	6	593.892	593.936	593.936	593.936	0.000	591.671
426	7	593.892	593.936	593.936	593.936	0.000	591.671
426	7	593.979	594.023	593.936	594.023	0.000	591.671
426	8	593.979	594.023	593.936	594.023	0.000	591.671
426	8	594.153	594.153	593.936	594.153	0.000	591.671
426	9	594.153	594.153	593.936	594.153	0.000	591.671
426	10	594.284	594.284	593.936	594.241	0.000	591.671
426	11	594.328	594.328	593.936	594.328	0.000	591.671
426	11	594.371	594.328	593.936	594.328	0.000	591.671
426	12	594.415	594.415	593.936	594.371	0.000	591.671
426	12	594.502	594.458	593.936	594.415	0.000	591.671
426	13	594.502	594.458	593.936	594.415	0.000	591.671
426	13	594.502	594.502	593.936	594.458	0.000	591.671
426	14	594.545	594.502	593.936	594.458	0.000	591.671
426	14	594.589	594.545	593.936	594.502	0.000	591.671
426	15	594.589	594.545	593.936	594.502	0.000	591.671
426	15	594.632	594.589	593.936	594.545	0.000	591.671
426	16	594.632	594.589	593.936	594.545	0.000	591.671
426	16	594.676	594.632	593.936	594.589	0.000	591.671
426	17	594.676	594.632	593.936	594.589	0.000	591.671
426	17	594.719	594.676	593.936	594.589	0.000	591.671
426	18	594.719	594.676	593.936	594.589	0.000	591.671
426	19	594.719	594.676	593.936	594.632	0.000	591.671
426	20	594.763	594.719	593.936	594.632	0.000	591.671
426	21	594.806	594.719	593.936	594.632	0.000	591.671
426	21	594.806	594.719	593.936	594.632	0.000	591.671
426	22	594.806	594.763	593.936	594.676	0.000	591.671
426	22	594.806	594.763	593.936	594.676	0.000	591.671
426	23	594.850	594.806	593.936	594.676	0.000	591.671
426	23	594.850	594.806	593.936	594.676	0.000	591.671
426	24	594.894	594.806	593.936	594.719	0.000	591.671
426	24	594.894	594.806	593.936	594.719	0.000	591.671
426	25	594.894	594.806	593.936	594.719	0.000	591.671
426	25	594.894	594.806	593.936	594.719	0.000	591.671

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

GROUP	* * * * TITLE TYPE	MODEL DESCRIPTION * * * * GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
18	RSI FORWARD	0.01	0.005	-0.06	30.06	0.053	4	25	53

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/F FT-1	HRFR BTU/FT2-SEC-R	INITIAL TEMP DEG R
7.94	211.03	1272.67	93.52	0.0227	3764.	0.102E+04	0.753E-07	0.102E+07	0.206E-01	536.7

IR CAMERA INFORMATION

MOUNTING LOCATION	260
F STOP	1.8
LENS-DEG	15
SENSITIVITY	1000.
BLACK LEVEL VOLTAGE	1.3423
LINE-SCAN PHI	90
MODEL EMISSIVITY	0.96
REF EMISSIVITY	0.94
WINDOW FACTOR	0.860

TIME RECORDS

LIFT OFF	0.00
CENTER LINE	1.99
IR SCAN TIME	20.89
DELTA TIME,SEC	19.77
PHOTO 1 TIME	426
PHOTO 2 TIME	0
PHOTO 3 TIME	0
PHOTO 4 TIME	0

REFERENCE TARGET INFORMATION

TCR5	500.47
TCR6	-228.49
POINT	0
LINE	-650

DIGITAL DATA AREA PRINTOUT LOCATION

LINE 29 THROUGH 98

POINT 1 THROUGH 110

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 18

IR SCAN TIME 19.77 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	1.022	1.022	1.023	1.022	1.022	1.020	1.022	1.020	1.023	1.020	1.020	1.017	1.013	1.017	1.017	1.019	1.019	1.020	1.017	1.019
30	1.022	1.022	1.022	1.023	1.020	1.022	1.019	1.020	1.017	1.019	1.017	1.019	1.017	1.019	1.019	1.019	1.017	1.019	1.017	1.020
31	1.023	1.023	1.022	1.020	1.019	1.019	1.017	1.020	1.019	1.020	1.019	1.022	1.017	1.020	1.017	1.019	1.017	1.019	1.016	1.017
32	1.022	1.022	1.022	1.020	1.020	1.019	1.019	1.017	1.019	1.019	1.019	1.019	1.019	1.017	1.017	1.014	1.014	1.013	1.016	1.014
33	1.020	1.017	1.020	1.020	1.019	1.020	1.019	1.019	1.016	1.019	1.016	1.017	1.016	1.016	1.014	1.016	1.014	1.016	1.016	1.019
34	1.020	1.020	1.019	1.019	1.017	1.017	1.016	1.016	1.016	1.016	1.016	1.014	1.014	1.013	1.016	1.017	1.019	1.019	1.020	1.022
35	1.022	1.019	1.013	1.019	1.009	1.016	1.009	1.014	1.006	1.013	1.008	1.016	1.013	1.017	1.013	1.017	1.019	1.022	1.019	1.022
36	1.019	1.017	1.016	1.013	1.014	1.013	1.014	1.014	1.016	1.014	1.016	1.016	1.019	1.019	1.020	1.017	1.019	1.011	1.013	1.003
37	1.016	1.016	1.017	1.013	1.014	1.014	1.016	1.017	1.017	1.014	1.017	1.017	1.019	1.019	1.017	1.008	1.006	0.997	0.994	0.986
38	1.016	1.016	1.017	1.016	1.017	1.017	1.019	1.019	1.019	1.017	1.019	1.017	1.016	1.008	1.003	0.992	0.990	0.986	0.986	0.982
39	1.017	1.017	1.017	1.016	1.016	1.017	1.017	1.016	1.016	1.011	1.008	1.001	0.994	0.986	0.984	0.984	0.986	0.984	0.984	0.982
40	1.019	1.019	1.019	1.020	1.019	1.020	1.016	1.013	1.003	1.001	0.992	0.988	0.984	0.986	0.986	0.986	0.984	0.986	0.982	0.986
41	1.020	1.019	1.019	1.017	1.017	1.011	1.004	0.994	0.988	0.986	0.988	0.988	0.988	0.986	0.988	0.986	0.988	0.988	0.988	0.986
42	1.022	1.022	1.013	1.009	0.994	0.995	0.982	0.992	0.962	0.990	0.982	0.988	0.982	0.990	0.990	0.992	0.986	0.990	0.986	0.992
43	1.020	1.013	1.004	0.997	0.992	0.990	0.992	0.988	0.988	0.986	0.988	0.986	0.990	0.988	0.992	0.986	0.990	0.984	0.990	0.984
44	1.008	1.001	0.994	0.994	0.990	0.994	0.990	0.994	0.992	0.994	0.990	0.992	0.986	0.994	0.992	0.994	0.994	0.995	0.994	0.997
45	0.999	1.001	0.995	0.999	0.995	0.997	0.995	0.997	0.994	0.995	0.994	0.997	0.995	0.999	0.995	1.001	0.997	1.006	1.016	1.032
46	1.001	1.003	0.999	1.003	0.997	1.003	0.999	1.001	0.997	1.001	0.997	1.001	0.999	1.001	1.001	1.004	1.004	1.033	1.098	1.160
47	1.004	1.004	1.004	1.004	1.003	1.003	1.003	1.003	1.001	1.003	1.003	1.001	1.006	1.004	1.006	1.003	1.013	1.060	1.152	1.220
48	1.008	1.006	1.006	1.008	1.001	1.006	1.003	1.006	1.004	1.008	1.006	1.006	1.006	1.006	1.006	1.011	1.026	1.092	1.186	1.246
49	1.008	1.006	1.008	1.003	1.006	1.001	1.004	1.001	1.004	1.003	1.008	1.008	1.009	1.006	1.009	1.011	1.040	1.126	1.217	1.268
50	1.006	1.006	1.006	1.008	1.006	1.006	1.004	1.006	1.006	1.006	1.006	1.009	1.006	1.009	1.006	1.016	1.047	1.146	1.226	1.272
51	1.006	1.006	1.006	1.003	1.004	1.004	1.006	1.004	1.004	1.003	1.006	1.004	1.008	1.006	1.009	1.013	1.050	1.131	1.201	1.239
52	1.001	0.999	0.999	1.001	0.999	0.999	0.997	1.001	0.999	1.001	0.999	1.003	0.999	1.004	1.003	1.011	1.047	1.119	1.169	1.196
53	0.997	0.994	0.994	0.992	0.994	0.992	0.992	0.990	0.992	0.992	0.994	0.992	0.994	0.994	0.997	1.004	1.052	1.116	1.155	1.172
54	0.986	0.984	0.986	0.984	0.986	0.982	0.984	0.980	0.982	0.982	0.986	0.982	0.984	0.984	0.988	1.003	1.067	1.130	1.160	1.171
55	0.982	0.980	0.978	0.980	0.978	0.976	0.978	0.980	0.980	0.980	0.982	0.980	0.980	0.980	0.986	1.017	1.086	1.138	1.161	1.172
56	0.980	0.982	0.966	0.978	0.966	0.978	0.969	0.978	0.969	0.980	0.973	0.980	0.980	0.984	0.988	1.034	1.101	1.142	1.158	1.169
57	0.980	0.978	0.978	0.976	0.978	0.976	0.978	0.973	0.978	0.976	0.978	0.973	0.980	0.978	0.994	1.047	1.112	1.140	1.154	1.161
58	0.984	0.980	0.978	0.980	0.978	0.978	0.978	0.978	0.978	0.980	0.980	0.982	0.978	0.984	0.999	1.066	1.120	1.147	1.156	1.163
59	0.982	0.984	0.982	0.982	0.982	0.982	0.982	0.973	0.978	0.980	0.980	0.980	0.986	0.984	1.011	1.074	1.124	1.144	1.155	1.161
60	0.988	0.984	0.984	0.986	0.984	0.986	0.986	0.986	0.984	0.984	0.982	0.986	0.986	0.990	1.020	1.085	1.129	1.147	1.153	1.161
61	0.994	0.992	0.990	0.986	0.988	0.986	0.990	0.986	0.988	0.990	0.988	0.988	0.990	0.992	1.029	1.095	1.134	1.148	1.157	1.162
62	0.992	0.992	0.992	0.990	0.992	0.994	0.992	0.992	0.990	0.990	0.994	0.992	0.995	1.001	1.048	1.112	1.143	1.156	1.163	1.167
63	0.994	0.995	0.992	0.990	0.982	0.992	0.986	0.994	0.990	0.992	0.988	0.994	0.994	1.013	1.071	1.126	1.146	1.158	1.165	1.172

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NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 18

IR SCAN TIME 19.77 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	1.013	1.020	1.014	1.022	1.014	1.019	1.011	1.014	1.009	1.014	1.011	1.014	1.008	1.013	1.008	1.014	1.014	1.017	1.017	1.020
30	1.016	1.019	1.016	1.017	1.014	1.014	1.013	1.016	1.014	1.016	1.016	1.017	1.016	1.020	1.014	1.020	1.020	1.023	1.017	1.025
31	1.016	1.016	1.013	1.016	1.014	1.019	1.016	1.020	1.020	1.023	1.020	1.023	1.020	1.023	1.023	1.025	1.020	1.019	1.014	1.014
32	1.014	1.016	1.019	1.017	1.020	1.019	1.022	1.020	1.023	1.023	1.023	1.020	1.019	1.014	1.013	1.008	1.003	0.999	0.995	0.992
33	1.019	1.022	1.020	1.022	1.020	1.022	1.020	1.019	1.016	1.014	1.008	1.006	0.995	0.992	0.986	0.984	0.978	0.980	0.978	0.980
34	1.022	1.019	1.020	1.017	1.016	1.011	1.008	1.001	0.997	0.986	0.982	0.976	0.978	0.978	0.978	0.978	0.978	0.976	0.978	0.971
35	1.016	1.014	1.004	1.001	0.994	0.988	0.984	0.982	0.978	0.978	0.973	0.978	0.976	0.978	0.978	0.982	0.978	0.980	0.978	0.980
36	1.001	0.986	0.988	0.973	0.980	0.973	0.978	0.976	0.980	0.973	0.976	0.973	0.980	0.980	0.980	0.980	0.980	0.978	0.980	0.978
37	0.984	0.978	0.980	0.980	0.982	0.980	0.982	0.980	0.980	0.980	0.982	0.982	0.982	0.980	0.980	0.971	0.984	0.969	0.984	0.971
38	0.984	0.982	0.986	0.984	0.986	0.984	0.986	0.984	0.986	0.982	0.984	0.984	0.986	0.984	0.984	0.982	0.986	0.984	0.986	0.984
39	0.984	0.984	0.986	0.984	0.984	0.984	0.986	0.986	0.986	0.982	0.984	0.984	0.986	0.984	0.984	0.982	0.984	0.984	0.986	0.984
40	0.986	0.990	0.984	0.988	0.986	0.988	0.988	0.990	0.984	0.986	0.986	0.990	0.986	0.986	0.984	0.988	0.986	0.988	0.984	0.988
41	0.986	0.986	0.990	0.988	0.986	0.988	0.988	0.988	0.990	0.988	0.988	0.986	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988
42	0.988	0.992	0.990	0.990	0.988	0.990	0.990	0.992	0.990	0.992	0.990	0.992	0.988	0.992	0.990	0.994	0.990	0.992	0.988	0.992
43	0.992	0.988	0.994	0.990	0.994	0.988	0.992	0.988	0.994	0.990	0.994	0.994	0.994	0.992	0.994	0.990	0.994	0.992	0.995	0.992
44	0.994	0.999	0.995	0.999	0.995	0.999	0.997	0.999	0.995	0.997	0.995	0.999	0.995	0.999	0.992	0.999	0.990	0.995	0.988	0.995
45	1.041	1.044	1.038	1.036	1.028	1.023	1.016	1.013	1.008	1.008	1.001	1.006	1.003	1.004	1.003	1.003	0.999	1.001	0.999	1.003
46	1.190	1.202	1.200	1.194	1.182	1.169	1.151	1.134	1.114	1.095	1.073	1.053	1.034	1.023	1.014	1.011	1.006	1.008	1.006	1.006
47	1.257	1.275	1.285	1.289	1.290	1.286	1.282	1.280	1.278	1.269	1.249	1.221	1.186	1.149	1.110	1.080	1.047	1.028	1.019	1.014
48	1.276	1.293	1.306	1.318	1.327	1.331	1.327	1.317	1.304	1.297	1.293	1.289	1.285	1.288	1.285	1.258	1.194	1.123	1.064	1.033
49	1.295	1.313	1.328	1.341	1.354	1.365	1.373	1.372	1.358	1.335	1.311	1.293	1.284	1.282	1.288	1.295	1.276	1.214	1.139	1.080
50	1.298	1.320	1.337	1.354	1.369	1.385	1.398	1.407	1.407	1.402	1.386	1.359	1.328	1.305	1.297	1.295	1.291	1.275	1.225	1.150
51	1.267	1.290	1.313	1.337	1.359	1.381	1.402	1.420	1.434	1.440	1.437	1.426	1.406	1.373	1.338	1.309	1.297	1.294	1.290	1.255
52	1.215	1.233	1.253	1.277	1.303	1.332	1.360	1.388	1.413	1.430	1.437	1.440	1.439	1.431	1.414	1.385	1.347	1.313	1.295	1.296
53	1.185	1.194	1.206	1.218	1.234	1.253	1.276	1.302	1.331	1.358	1.379	1.395	1.406	1.414	1.419	1.419	1.412	1.394	1.362	1.325
54	1.179	1.184	1.189	1.195	1.204	1.214	1.226	1.239	1.255	1.272	1.291	1.310	1.330	1.350	1.367	1.379	1.389	1.396	1.399	1.393
55	1.180	1.185	1.189	1.192	1.198	1.202	1.208	1.213	1.221	1.227	1.235	1.244	1.254	1.267	1.285	1.303	1.322	1.338	1.351	1.363
56	1.174	1.181	1.185	1.192	1.197	1.203	1.207	1.211	1.212	1.213	1.212	1.214	1.216	1.221	1.227	1.237	1.248	1.262	1.277	1.293
57	1.170	1.173	1.181	1.186	1.194	1.200	1.207	1.211	1.214	1.213	1.212	1.209	1.208	1.209	1.211	1.213	1.219	1.225	1.233	1.240
58	1.167	1.171	1.174	1.181	1.186	1.194	1.200	1.207	1.212	1.216	1.214	1.213	1.211	1.213	1.211	1.211	1.209	1.213	1.215	1.222
59	1.167	1.170	1.175	1.181	1.186	1.191	1.196	1.200	1.203	1.205	1.207	1.209	1.215	1.220	1.218	1.214	1.214	1.214	1.214	1.213
60	1.164	1.169	1.172	1.178	1.182	1.189	1.193	1.198	1.202	1.205	1.204	1.206	1.208	1.212	1.214	1.217	1.221	1.225	1.222	1.217
61	1.167	1.169	1.174	1.178	1.182	1.187	1.192	1.194	1.198	1.198	1.200	1.202	1.208	1.211	1.212	1.211	1.212	1.214	1.218	1.224
62	1.171	1.173	1.177	1.180	1.185	1.188	1.194	1.197	1.201	1.199	1.199	1.199	1.203	1.206	1.208	1.211	1.215	1.215	1.214	1.214
63	1.175	1.180	1.184	1.187	1.189	1.192	1.196	1.200	1.202	1.202	1.201	1.204	1.207	1.209	1.209	1.210	1.209	1.212	1.212	1.214

NASA/RI OH90 TRANSITION TEST
V41B-P4A
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MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 18

IR SCAN TIME 19.77 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	1.019	1.020	1.019	1.020	1.020	1.022	1.020	1.022	1.017	1.017	1.013	1.013	1.009	1.011	1.008	1.008	1.003	1.003	1.001	0.997
30	1.019	1.022	1.014	1.019	1.011	1.014	1.008	1.011	1.001	1.003	0.994	0.997	0.988	0.994	0.988	0.990	0.984	0.984	0.982	0.982
31	1.009	1.008	1.004	1.003	0.997	0.994	0.988	0.982	0.980	0.976	0.976	0.978	0.976	0.980	0.976	0.978	0.969	0.976	0.969	0.976
32	0.986	0.980	0.978	0.976	0.976	0.976	0.978	0.980	0.978	0.973	0.976	0.973	0.973	0.973	0.973	0.976	0.976	0.973	0.976	0.973
33	0.978	0.980	0.973	0.976	0.976	0.976	0.978	0.980	0.976	0.978	0.976	0.976	0.973	0.976	0.973	0.976	0.976	0.978	0.976	0.976
34	0.976	0.976	0.978	0.978	0.980	0.978	0.978	0.973	0.978	0.976	0.976	0.976	0.978	0.976	0.976	0.973	0.973	0.976	0.976	0.976
35	0.982	0.980	0.980	0.984	0.976	0.978	0.976	0.978	0.976	0.980	0.978	0.980	0.976	0.978	0.971	0.976	0.976	0.978	0.976	0.978
36	0.982	0.980	0.982	0.978	0.980	0.980	0.980	0.980	0.982	0.980	0.978	0.978	0.980	0.980	0.980	0.980	0.980	0.978	0.978	0.976
37	0.982	0.971	0.982	0.973	0.984	0.969	0.982	0.971	0.982	0.971	0.982	0.982	0.980	0.980	0.980	0.980	0.980	0.978	0.978	0.980
38	0.984	0.984	0.986	0.984	0.984	0.984	0.984	0.982	0.986	0.982	0.982	0.982	0.986	0.980	0.982	0.976	0.984	0.978	0.982	0.973
39	0.984	0.984	0.986	0.986	0.984	0.982	0.984	0.984	0.986	0.984	0.982	0.982	0.984	0.982	0.986	0.982	0.982	0.982	0.982	0.982
40	0.984	0.988	0.988	0.986	0.984	0.986	0.986	0.988	0.984	0.986	0.982	0.986	0.984	0.988	0.984	0.986	0.982	0.982	0.984	0.984
41	0.990	0.984	0.988	0.988	0.988	0.988	0.988	0.986	0.986	0.986	0.986	0.986	0.986	0.984	0.986	0.984	0.986	0.986	0.984	0.982
42	0.988	0.992	0.990	0.992	0.988	0.990	0.988	0.990	0.988	0.992	0.988	0.990	0.984	0.986	0.986	0.988	0.986	0.988	0.984	0.986
43	0.992	0.988	0.990	0.990	0.992	0.992	0.994	0.992	0.992	0.988	0.988	0.988	0.990	0.988	0.990	0.990	0.988	0.986	0.988	0.986
44	0.988	0.997	0.992	0.995	0.988	0.994	0.986	0.992	0.988	0.995	0.992	0.994	0.988	0.992	0.988	0.990	0.990	0.992	0.990	0.992
45	0.999	1.001	0.997	0.999	0.995	0.999	0.994	0.999	0.994	0.999	0.995	0.995	0.990	0.994	0.988	0.994	0.988	0.995	0.986	0.995
46	1.004	1.006	1.003	1.004	1.001	1.001	0.999	1.003	0.999	1.003	0.999	1.003	0.999	1.001	0.997	1.001	0.997	1.001	0.997	1.001
47	1.011	1.009	1.011	1.009	1.009	1.009	1.009	1.008	1.004	1.008	1.006	1.004	1.004	1.011	1.006	1.004	1.003	1.003	1.003	0.997
48	1.019	1.017	1.013	1.014	1.009	1.009	1.006	1.009	1.006	1.009	1.004	1.008	1.004	1.004	1.006	1.006	1.004	1.004	1.004	1.006
49	1.047	1.026	1.020	1.014	1.013	1.011	1.011	1.009	1.009	1.008	1.008	1.006	1.006	1.004	1.006	1.004	1.006	1.003	1.004	1.004
50	1.086	1.052	1.037	1.032	1.020	1.019	1.014	1.014	1.011	1.011	1.009	1.009	1.008	1.009	1.009	1.009	1.008	1.008	1.006	1.008
51	1.189	1.111	1.057	1.032	1.033	1.028	1.023	1.016	1.014	1.011	1.013	1.008	1.009	1.008	1.009	1.009	1.009	1.006	1.008	1.006
52	1.292	1.253	1.177	1.104	1.050	1.033	1.026	1.020	1.013	1.009	1.003	1.008	0.997	1.003	0.997	1.003	0.997	1.003	0.997	1.008
53	1.302	1.304	1.295	1.228	1.136	1.069	1.034	1.025	1.022	1.009	1.004	0.997	0.997	0.994	0.994	0.990	0.992	0.992	0.997	0.995
54	1.374	1.346	1.320	1.293	1.234	1.146	1.078	1.036	1.025	1.019	1.011	0.995	0.992	0.988	0.986	0.984	0.984	0.984	0.988	0.992
55	1.372	1.375	1.367	1.348	1.320	1.265	1.160	1.097	1.046	1.023	1.020	1.009	1.001	0.988	0.986	0.982	0.984	0.984	0.990	0.994
56	1.308	1.323	1.336	1.348	1.353	1.348	1.315	1.239	1.142	1.072	1.032	1.025	1.014	1.004	0.988	0.986	0.980	0.986	0.988	0.995
57	1.251	1.261	1.271	1.284	1.301	1.321	1.344	1.348	1.298	1.201	1.111	1.051	1.029	1.017	1.006	0.992	0.990	0.990	0.992	0.992
58	1.228	1.234	1.238	1.244	1.251	1.262	1.277	1.307	1.348	1.351	1.275	1.163	1.079	1.038	1.020	1.011	0.994	0.992	0.990	0.994
59	1.217	1.221	1.227	1.234	1.239	1.243	1.247	1.253	1.269	1.302	1.323	1.264	1.157	1.072	1.033	1.017	1.013	0.997	0.995	0.988
60	1.215	1.219	1.222	1.225	1.229	1.237	1.245	1.251	1.254	1.260	1.271	1.276	1.228	1.139	1.066	1.029	1.014	1.013	1.003	0.997
61	1.228	1.225	1.224	1.224	1.227	1.231	1.236	1.242	1.253	1.265	1.274	1.279	1.274	1.240	1.166	1.086	1.037	1.016	1.011	1.004
62	1.218	1.222	1.227	1.233	1.237	1.236	1.237	1.239	1.246	1.254	1.267	1.279	1.291	1.295	1.276	1.214	1.128	1.060	1.026	1.011
63	1.217	1.221	1.223	1.224	1.226	1.234	1.243	1.250	1.252	1.254	1.256	1.262	1.270	1.281	1.295	1.302	1.266	1.184	1.096	1.042

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 18

IR SCAN TIME 19.77 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.994	0.992	0.992	0.990	0.988	0.992	0.990	0.994	0.992	0.994	0.990	0.992	0.990	0.992	0.990	0.994	0.990	0.992	0.988	0.990
30	0.980	0.982	0.980	0.982	0.978	0.976	0.978	0.980	0.973	0.980	0.980	0.982	0.982	0.980	0.978	0.982	0.978	0.980	0.980	0.982
31	0.969	0.978	0.971	0.978	0.971	0.976	0.969	0.973	0.969	0.976	0.971	0.978	0.976	0.980	0.973	0.978	0.976	0.978	0.978	0.980
32	0.973	0.976	0.973	0.978	0.976	0.973	0.973	0.971	0.971	0.971	0.971	0.971	0.973	0.964	0.973	0.964	0.973	0.962	0.973	0.966
33	0.971	0.973	0.973	0.976	0.973	0.976	0.971	0.971	0.971	0.969	0.971	0.973	0.973	0.976	0.971	0.976	0.969	0.971	0.969	0.973
34	0.978	0.973	0.973	0.973	0.969	0.971	0.971	0.973	0.976	0.973	0.973	0.971	0.971	0.971	0.973	0.973	0.973	0.973	0.973	0.971
35	0.973	0.973	0.973	0.976	0.976	0.978	0.976	0.980	0.971	0.973	0.973	0.976	0.973	0.978	0.976	0.973	0.969	0.973	0.969	0.976
36	0.978	0.978	0.980	0.978	0.976	0.976	0.976	0.976	0.978	0.976	0.976	0.973	0.976	0.973	0.976	0.973	0.976	0.971	0.973	0.971
37	0.982	0.978	0.980	0.976	0.978	0.976	0.982	0.980	0.978	0.978	0.978	0.976	0.978	0.980	0.976	0.976	0.978	0.976	0.978	0.976
38	0.984	0.978	0.982	0.976	0.980	0.976	0.982	0.976	0.980	0.980	0.982	0.982	0.980	0.978	0.978	0.980	0.982	0.980	0.980	0.978
39	0.982	0.982	0.982	0.982	0.982	0.980	0.978	0.978	0.980	0.980	0.982	0.971	0.980	0.973	0.980	0.976	0.978	0.971	0.978	0.973
40	0.982	0.984	0.980	0.984	0.982	0.982	0.980	0.984	0.982	0.984	0.980	0.982	0.980	0.982	0.982	0.982	0.980	0.980	0.978	0.982
41	0.986	0.982	0.984	0.982	0.984	0.982	0.984	0.982	0.984	0.982	0.984	0.980	0.982	0.984	0.980	0.982	0.982	0.982	0.982	0.980
42	0.982	0.986	0.984	0.988	0.984	0.986	0.982	0.984	0.982	0.986	0.984	0.986	0.982	0.982	0.980	0.984	0.982	0.986	0.984	0.984
43	0.988	0.986	0.990	0.988	0.988	0.984	0.988	0.986	0.986	0.984	0.986	0.986	0.986	0.984	0.984	0.982	0.986	0.982	0.986	0.986
44	0.988	0.990	0.988	0.990	0.988	0.988	0.988	0.990	0.990	0.990	0.988	0.988	0.986	0.990	0.986	0.990	0.988	0.990	0.988	0.984
45	0.988	0.992	0.986	0.992	0.988	0.994	0.988	0.995	0.992	0.994	0.988	0.992	0.990	0.992	0.990	0.994	0.992	0.994	0.988	0.990
46	0.997	0.999	0.995	0.997	0.994	0.997	0.995	0.999	0.994	0.999	0.988	0.995	0.986	0.995	0.988	0.997	0.988	0.999	0.988	0.995
47	1.003	1.001	1.003	1.001	1.001	0.999	1.001	0.999	1.001	1.001	0.995	1.001	1.001	0.997	1.001	0.997	0.997	0.999	1.001	0.997
48	1.001	1.003	1.001	1.004	1.001	1.004	0.997	1.004	1.001	1.003	0.999	1.003	0.999	1.003	1.001	1.003	0.999	1.001	1.001	1.003
49	1.004	1.004	1.008	1.004	1.004	1.004	1.003	1.003	1.004	1.003	1.004	1.003	1.003	1.001	1.003	1.001	1.004	1.003	1.003	1.001
50	1.006	1.008	1.004	1.006	1.004	1.006	1.004	1.006	1.003	1.004	0.999	1.006	1.003	1.006	1.003	1.004	1.001	1.004	1.003	1.006
51	1.008	1.006	1.006	1.006	1.008	1.006	1.008	1.006	1.004	1.004	1.006	1.006	1.006	1.004	1.004	1.004	1.006	1.004	1.008	1.004
52	0.999	1.006	1.001	1.004	1.001	1.008	1.006	1.008	1.004	1.006	1.004	1.008	1.006	1.008	1.003	1.006	1.004	1.008	1.003	1.004
53	0.999	1.001	1.004	1.004	1.006	1.004	1.006	1.003	1.008	1.003	1.008	1.001	1.008	1.003	1.008	1.003	1.006	1.001	1.006	1.001
54	0.997	0.997	1.003	1.004	1.008	1.006	1.006	1.004	1.008	1.008	1.009	1.008	1.008	1.006	1.008	1.006	1.008	1.004	1.004	1.004
55	1.001	0.999	1.003	1.003	1.006	1.006	1.008	1.008	1.008	1.006	1.009	1.009	1.009	1.008	1.009	1.006	1.008	1.004	1.008	1.004
56	0.997	1.003	1.001	1.004	1.003	1.008	1.006	1.008	1.006	1.009	1.004	1.008	1.004	1.008	1.004	1.008	1.004	1.006	1.001	1.003
57	0.999	0.997	1.001	1.003	1.004	1.001	1.003	1.001	1.003	1.001	1.004	1.003	1.004	1.001	1.003	0.999	1.001	0.997	1.001	0.999
58	0.994	0.997	0.997	0.997	0.995	0.997	0.995	0.999	0.995	0.997	0.995	0.997	0.995	0.995	0.992	0.995	0.994	0.995	0.992	0.995
59	0.990	0.986	0.994	0.992	0.995	0.994	0.995	0.992	0.994	0.992	0.992	0.992	0.994	0.990	0.994	0.992	0.992	0.988	0.992	0.992
60	0.990	0.992	0.986	0.988	0.988	0.990	0.984	0.988	0.982	0.988	0.982	0.988	0.982	0.986	0.980	0.988	0.980	0.986	0.978	0.984
61	0.997	0.992	0.990	0.988	0.988	0.988	0.990	0.990	0.988	0.986	0.988	0.984	0.986	0.988	0.988	0.984	0.984	0.982	0.982	0.982
62	1.008	0.997	0.995	0.990	0.992	0.990	0.994	0.988	0.988	0.986	0.988	0.984	0.990	0.986	0.986	0.984	0.984	0.984	0.988	0.986
63	1.016	1.009	1.001	0.995	0.988	0.988	0.984	0.990	0.986	0.988	0.982	0.984	0.982	0.984	0.984	0.986	0.982	0.984	0.982	0.984

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 18

IR SCAN TIME 19.77 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.986	0.988	0.986	0.992	0.988	0.990	0.986	0.986	0.984	0.986	0.986	0.986	0.984	0.986	0.982	0.982	0.980	0.984	0.980	0.982
30	0.982	0.980	0.978	0.982	0.980	0.982	0.982	0.982	0.980	0.982	0.978	0.980	0.973	0.980	0.978	0.980	0.976	0.978	0.976	0.971
31	0.976	0.980	0.978	0.980	0.980	0.980	0.976	0.978	0.980	0.980	0.980	0.978	0.976	0.978	0.976	0.978	0.976	0.978	0.976	0.973
32	0.973	0.966	0.976	0.969	0.976	0.966	0.973	0.966	0.976	0.978	0.978	0.976	0.976	0.973	0.973	0.971	0.973	0.971	0.971	0.971
33	0.971	0.973	0.973	0.976	0.971	0.973	0.971	0.971	0.971	0.973	0.973	0.976	0.966	0.971	0.964	0.971	0.964	0.971	0.964	0.971
34	0.969	0.969	0.971	0.969	0.971	0.971	0.973	0.971	0.971	0.969	0.969	0.969	0.973	0.971	0.971	0.969	0.969	0.969	0.969	0.969
35	0.971	0.976	0.971	0.969	0.971	0.973	0.969	0.973	0.971	0.973	0.969	0.971	0.969	0.971	0.971	0.973	0.971	0.971	0.969	0.969
36	0.973	0.973	0.976	0.971	0.973	0.971	0.971	0.973	0.973	0.973	0.973	0.971	0.971	0.971	0.971	0.973	0.973	0.969	0.971	0.971
37	0.976	0.973	0.976	0.976	0.976	0.973	0.973	0.973	0.973	0.976	0.976	0.973	0.973	0.973	0.973	0.973	0.976	0.971	0.976	0.971
38	0.980	0.980	0.982	0.978	0.978	0.980	0.980	0.980	0.976	0.976	0.976	0.978	0.980	0.976	0.976	0.976	0.978	0.978	0.978	0.976
39	0.978	0.973	0.976	0.971	0.978	0.973	0.978	0.978	0.980	0.978	0.980	0.978	0.978	0.978	0.978	0.978	0.980	0.976	0.978	0.978
40	0.980	0.980	0.978	0.980	0.978	0.982	0.980	0.978	0.978	0.978	0.971	0.980	0.973	0.978	0.969	0.980	0.971	0.980	0.969	0.978
41	0.982	0.982	0.984	0.980	0.980	0.978	0.982	0.978	0.980	0.978	0.980	0.978	0.982	0.978	0.980	0.978	0.980	0.978	0.980	0.978
42	0.982	0.982	0.980	0.984	0.980	0.984	0.980	0.984	0.978	0.982	0.978	0.982	0.980	0.984	0.978	0.980	0.978	0.980	0.980	0.982
43	0.986	0.984	0.982	0.982	0.984	0.982	0.984	0.982	0.984	0.982	0.982	0.980	0.982	0.982	0.986	0.980	0.986	0.982	0.982	0.982
44	0.986	0.988	0.984	0.988	0.986	0.988	0.984	0.988	0.984	0.986	0.982	0.986	0.982	0.986	0.984	0.988	0.984	0.986	0.984	0.986
45	0.988	0.994	0.990	0.994	0.992	0.994	0.990	0.990	0.988	0.992	0.990	0.990	0.990	0.992	0.990	0.990	0.988	0.990	0.984	0.990
46	0.986	0.998	0.990	0.998	0.988	0.997	0.995	0.997	0.994	0.994	0.992	0.997	0.994	0.995	0.994	0.995	0.994	0.994	0.992	0.994
47	1.001	0.997	0.999	0.999	0.994	1.001	0.999	1.001	1.001	1.003	1.001	0.997	0.997	0.999	0.997	0.999	1.003	1.001	1.001	0.997
48	1.001	1.001	1.003	1.004	1.001	1.001	0.999	1.001	1.001	1.003	1.001	1.003	0.997	1.001	0.997	1.001	0.999	1.003	0.999	1.003
49	1.003	1.001	1.004	1.003	1.004	1.003	1.003	1.001	1.003	0.997	1.004	1.001	1.001	1.001	1.003	1.001	1.003	1.001	1.003	1.001
50	1.004	1.004	1.001	1.004	1.003	1.006	1.003	1.004	0.999	1.004	1.001	1.004	1.001	1.004	1.001	1.003	1.001	1.004	1.001	1.003
51	1.004	1.006	1.004	1.001	1.004	1.003	1.004	1.003	1.003	0.999	1.001	1.001	1.003	1.001	1.001	1.003	1.003	0.999	1.001	0.997
52	1.003	1.004	1.003	1.004	1.001	1.001	0.999	1.003	0.999	0.997	0.995	0.997	0.995	0.999	0.994	0.995	0.994	0.995	0.992	0.995
53	1.006	1.001	1.003	0.999	1.001	0.997	0.995	0.990	0.992	0.988	0.992	0.990	0.990	0.986	0.988	0.986	0.988	0.986	0.986	0.988
54	1.004	1.003	1.004	0.997	0.997	0.990	0.990	0.984	0.986	0.978	0.982	0.976	0.982	0.978	0.980	0.976	0.980	0.976	0.980	0.976
55	1.006	1.003	1.003	0.999	0.999	0.994	0.990	0.986	0.982	0.976	0.978	0.978	0.978	0.976	0.976	0.973	0.978	0.971	0.976	0.973
56	0.999	1.003	0.997	1.001	0.995	0.994	0.986	0.984	0.978	0.980	0.978	0.980	0.976	0.978	0.973	0.976	0.973	0.976	0.973	0.978
57	0.999	0.997	0.999	0.994	0.992	0.988	0.984	0.986	0.982	0.978	0.980	0.976	0.978	0.973	0.978	0.973	0.976	0.976	0.978	0.976
58	0.992	0.992	0.986	0.990	0.986	0.988	0.984	0.984	0.982	0.980	0.978	0.978	0.978	0.978	0.982	0.982	0.980	0.976	0.978	0.980
59	0.992	0.992	0.992	0.990	0.990	0.984	0.986	0.984	0.988	0.984	0.984	0.982	0.982	0.980	0.980	0.978	0.980	0.978	0.980	0.980
60	0.978	0.988	0.984	0.984	0.984	0.986	0.984	0.984	0.980	0.984	0.980	0.980	0.982	0.984	0.980	0.980	0.978	0.980	0.980	0.982
61	0.984	0.984	0.986	0.982	0.984	0.978	0.982	0.978	0.982	0.976	0.982	0.982	0.982	0.976	0.980	0.978	0.980	0.980	0.982	0.982
62	0.986	0.984	0.986	0.984	0.986	0.982	0.986	0.982	0.984	0.982	0.984	0.980	0.982	0.982	0.982	0.982	0.984	0.980	0.982	0.980
63	0.982	0.986	0.982	0.986	0.980	0.982	0.980	0.984	0.982	0.984	0.978	0.982	0.980	0.982	0.980	0.982	0.980	0.982	0.978	0.982

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
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50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 18

IR SCAN TIME 19.77 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.982	0.982	0.978	0.980	0.976	0.980	0.978	0.982	0.978	0.980
30	0.973	0.976	0.969	0.978	0.976	0.978	0.973	0.973	0.969	0.973
31	0.971	0.973	0.971	0.973	0.973	0.976	0.971	0.976	0.971	0.971
32	0.973	0.971	0.969	0.966	0.969	0.971	0.969	0.971	0.971	0.971
33	0.964	0.969	0.962	0.969	0.962	0.971	0.962	0.971	0.971	0.966
34	0.971	0.969	0.969	0.969	0.959	0.966	0.966	0.966	0.969	0.962
35	0.969	0.971	0.969	0.971	0.969	0.969	0.966	0.969	0.969	0.971
36	0.976	0.971	0.973	0.969	0.971	0.969	0.971	0.971	0.973	0.971
37	0.976	0.973	0.973	0.971	0.973	0.973	0.976	0.971	0.973	0.971
38	0.976	0.976	0.978	0.978	0.976	0.976	0.976	0.978	0.978	0.976
39	0.980	0.978	0.978	0.976	0.978	0.978	0.980	0.978	0.976	0.976
40	0.973	0.978	0.973	0.978	0.973	0.980	0.978	0.980	0.978	0.982
41	0.980	0.976	0.978	0.978	0.980	0.980	0.980	0.971	0.980	0.969
42	0.980	0.982	0.978	0.980	0.978	0.982	0.980	0.982	0.982	0.982
43	0.984	0.980	0.984	0.982	0.984	0.982	0.984	0.982	0.984	0.982
44	0.984	0.988	0.986	0.992	0.984	0.986	0.982	0.986	0.984	0.986
45	0.988	0.988	0.990	0.992	0.988	0.990	0.986	0.990	0.986	0.992
46	0.992	0.994	0.994	0.995	0.994	0.994	0.990	0.994	0.992	0.995
47	0.988	0.995	0.999	0.994	0.999	0.997	0.999	0.997	0.997	0.994
48	0.997	0.999	0.999	0.999	0.999	1.001	0.994	0.999	0.992	0.999
49	1.001	0.999	1.001	0.999	1.003	1.001	1.003	0.999	0.999	0.999
50	0.999	1.001	1.001	1.004	1.001	1.003	0.999	1.001	0.999	1.003
51	1.001	0.999	1.001	0.999	0.999	0.997	0.999	0.997	0.999	0.997
52	0.992	0.995	0.992	0.995	0.992	0.994	0.990	0.994	0.992	0.994
53	0.988	0.986	0.988	0.984	0.986	0.986	0.986	0.986	0.986	0.984
54	0.980	0.978	0.980	0.980	0.960	0.978	0.978	0.978	0.980	0.978
55	0.978	0.971	0.973	0.962	0.973	0.959	0.976	0.959	0.971	0.957
56	0.971	0.976	0.969	0.971	0.969	0.976	0.971	0.973	0.969	0.971
57	0.976	0.971	0.971	0.971	0.973	0.971	0.976	0.971	0.973	0.969
58	0.976	0.978	0.976	0.978	0.978	0.978	0.976	0.976	0.973	0.976
59	0.982	0.980	0.976	0.978	0.978	0.980	0.978	0.978	0.980	0.978
60	0.982	0.984	0.980	0.980	0.980	0.980	0.980	0.984	0.980	0.982
61	0.984	0.980	0.980	0.980	0.982	0.984	0.982	0.980	0.982	0.980
62	0.982	0.976	0.982	0.976	0.982	0.976	0.980	0.973	0.982	0.978
63	0.978	0.982	0.978	0.982	0.976	0.980	0.978	0.982	0.980	0.980

200

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 18

IR SCAN TIME 19.77 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.990	0.988	0.990	0.988	0.988	0.984	0.988	0.986	0.988	0.984	0.990	0.984	0.992	1.017	1.091	1.132	1.150	1.158	1.167	1.170
65	0.986	0.988	0.984	0.986	0.984	0.986	0.982	0.982	0.982	0.986	0.984	0.988	0.994	1.041	1.106	1.137	1.148	1.159	1.164	1.171
66	0.982	0.978	0.978	0.976	0.973	0.976	0.978	0.976	0.978	0.976	0.980	0.982	0.999	1.058	1.114	1.137	1.148	1.156	1.161	1.165
67	0.976	0.973	0.971	0.969	0.971	0.971	0.969	0.969	0.969	0.973	0.973	0.982	1.001	1.071	1.120	1.139	1.149	1.157	1.160	1.165
68	0.966	0.969	0.966	0.966	0.964	0.962	0.962	0.962	0.966	0.966	0.969	0.971	1.008	1.079	1.122	1.137	1.146	1.153	1.159	1.163
69	0.966	0.962	0.962	0.962	0.962	0.962	0.957	0.959	0.959	0.966	0.964	0.971	1.013	1.090	1.128	1.142	1.151	1.158	1.161	1.167
70	0.964	0.962	0.951	0.962	0.951	0.962	0.959	0.962	0.959	0.962	0.962	0.976	1.033	1.109	1.140	1.152	1.160	1.167	1.171	1.176
71	0.964	0.962	0.959	0.962	0.959	0.959	0.957	0.957	0.951	0.966	0.957	0.986	1.056	1.119	1.139	1.152	1.158	1.167	1.170	1.175
72	0.959	0.962	0.962	0.962	0.962	0.959	0.957	0.957	0.959	0.962	0.964	0.999	1.075	1.119	1.135	1.143	1.150	1.156	1.161	1.164
73	0.962	0.959	0.959	0.962	0.959	0.962	0.959	0.962	0.959	0.962	0.966	1.019	1.082	1.115	1.126	1.135	1.141	1.145	1.148	1.152
74	0.973	0.964	0.962	0.966	0.954	0.957	0.962	0.962	0.949	0.964	0.976	1.033	1.086	1.108	1.119	1.125	1.131	1.134	1.138	1.141
75	0.966	0.959	0.962	0.959	0.962	0.962	0.962	0.959	0.962	0.959	0.980	1.041	1.086	1.101	1.110	1.116	1.120	1.122	1.126	1.129
76	0.964	0.964	0.962	0.959	0.957	0.959	0.959	0.962	0.959	0.964	0.988	1.048	1.084	1.099	1.106	1.111	1.115	1.118	1.120	1.124
77	0.969	0.966	0.957	0.964	0.962	0.964	0.966	0.962	0.959	0.964	0.992	1.054	1.086	1.097	1.102	1.107	1.111	1.117	1.118	1.122
78	0.971	0.976	0.962	0.984	0.980	0.982	0.973	0.978	0.964	0.971	1.001	1.061	1.082	1.095	1.099	1.106	1.107	1.113	1.113	1.119
79	0.990	1.003	0.999	0.995	0.999	0.999	0.982	0.984	0.984	0.992	1.029	1.071	1.087	1.096	1.100	1.106	1.107	1.112	1.114	1.117
80	1.008	1.017	1.006	1.001	1.009	1.006	0.997	0.990	0.988	0.997	1.042	1.071	1.086	1.093	1.099	1.102	1.106	1.107	1.112	1.114
81	1.044	1.045	1.028	1.020	1.011	1.008	1.004	1.009	1.003	1.020	1.054	1.079	1.088	1.095	1.096	1.101	1.106	1.110	1.112	1.116
82	1.110	1.092	1.062	1.060	1.036	1.009	1.001	1.001	1.008	1.026	1.064	1.077	1.086	1.092	1.096	1.101	1.107	1.109	1.114	1.117
83	1.127	1.110	1.084	1.101	1.069	1.022	0.995	0.982	0.994	1.037	1.069	1.085	1.087	1.090	1.091	1.095	1.096	1.101	1.106	1.111
84	1.083	1.073	1.060	1.077	1.057	1.019	0.995	0.982	1.003	1.069	1.126	1.141	1.138	1.128	1.120	1.112	1.109	1.106	1.104	1.103
85	1.045	1.040	1.032	1.037	1.028	1.017	1.003	1.009	1.013	1.030	1.054	1.070	1.078	1.085	1.087	1.093	1.095	1.101	1.104	1.112
86	1.025	1.023	1.022	1.023	1.020	1.017	1.013	1.016	1.014	1.014	1.011	1.014	1.011	1.014	1.011	1.013	1.011	1.017	1.016	1.020
87	1.006	1.006	1.008	1.011	1.006	1.006	1.006	1.019	1.016	1.009	1.006	1.008	1.004	1.004	1.003	1.003	1.003	1.003	1.004	1.008
88	0.994	0.992	0.988	0.990	0.994	0.995	1.004	1.017	1.017	1.006	1.004	1.001	1.003	0.999	1.003	0.997	1.001	0.999	1.001	0.999
89	0.982	0.976	0.978	0.984	0.982	0.997	0.999	1.013	1.011	1.008	1.003	1.003	1.001	1.003	0.999	0.997	0.995	0.995	0.994	0.997
90	0.971	0.969	0.971	0.980	0.986	0.990	0.992	1.006	1.009	1.008	1.009	1.006	1.006	0.999	0.999	0.995	0.997	0.994	0.999	0.997
91	0.971	0.966	0.964	0.978	0.980	0.984	0.988	1.003	1.008	1.009	1.006	1.008	1.004	1.004	0.997	1.001	0.997	0.999	0.997	0.997
92	0.969	0.966	0.969	0.969	0.980	0.978	0.988	0.994	1.006	1.004	1.008	1.004	1.006	1.001	1.004	0.999	1.003	0.999	0.999	0.995
93	0.973	0.971	0.973	0.978	0.980	0.984	0.986	0.999	1.008	1.011	1.006	1.009	1.009	1.011	1.004	1.008	1.003	1.003	0.999	0.997
94	0.995	0.994	0.988	0.994	0.992	0.997	0.995	1.003	1.009	1.011	1.011	1.014	1.013	1.014	1.013	1.014	1.009	1.006	1.001	1.001
95	1.009	1.008	1.006	1.008	1.006	1.004	1.004	1.011	1.014	1.016	1.013	1.016	1.017	1.020	1.019	1.019	1.013	1.011	1.003	1.003
96	1.022	1.023	1.022	1.019	1.019	1.013	1.014	1.017	1.022	1.020	1.017	1.019	1.023	1.023	1.026	1.023	1.020	1.013	1.008	1.001
97	1.028	1.026	1.028	1.026	1.023	1.019	1.016	1.020	1.022	1.023	1.022	1.028	1.025	1.029	1.028	1.030	1.023	1.019	1.009	1.008
98	1.029	1.028	1.029	1.028	1.026	1.019	1.019	1.019	1.020	1.017	1.020	1.023	1.030	1.030	1.032	1.028	1.026	1.019	1.016	1.014

NASA/RI GH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
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MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 18

IR SCAN TIME 19.77 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	1.174	1.177	1.182	1.185	1.191	1.195	1.201	1.206	1.210	1.209	1.211	1.214	1.217	1.215	1.214	1.214	1.215	1.216	1.218	1.217
65	1.174	1.179	1.184	1.189	1.194	1.199	1.202	1.207	1.207	1.211	1.210	1.219	1.222	1.222	1.219	1.221	1.217	1.219	1.216	1.218
66	1.169	1.173	1.177	1.182	1.186	1.190	1.195	1.201	1.207	1.212	1.214	1.214	1.217	1.216	1.215	1.215	1.218	1.219	1.218	1.219
67	1.168	1.173	1.177	1.181	1.184	1.189	1.192	1.197	1.199	1.203	1.206	1.207	1.208	1.212	1.216	1.222	1.226	1.227	1.228	1.229
68	1.169	1.173	1.177	1.183	1.189	1.193	1.198	1.202	1.208	1.213	1.219	1.221	1.222	1.222	1.225	1.229	1.232	1.233	1.237	1.242
69	1.170	1.176	1.181	1.186	1.190	1.195	1.198	1.204	1.209	1.216	1.222	1.227	1.231	1.233	1.234	1.235	1.236	1.238	1.239	1.241
70	1.179	1.184	1.187	1.192	1.195	1.200	1.200	1.203	1.206	1.210	1.213	1.217	1.218	1.218	1.219	1.220	1.222	1.225	1.228	1.232
71	1.177	1.183	1.186	1.191	1.193	1.198	1.201	1.203	1.204	1.207	1.209	1.211	1.211	1.211	1.211	1.210	1.211	1.213	1.214	1.215
72	1.169	1.172	1.176	1.179	1.184	1.186	1.191	1.192	1.197	1.198	1.202	1.202	1.204	1.203	1.204	1.202	1.205	1.205	1.206	1.206
73	1.155	1.160	1.162	1.166	1.170	1.173	1.175	1.178	1.176	1.181	1.182	1.185	1.187	1.188	1.186	1.187	1.186	1.189	1.190	1.193
74	1.144	1.146	1.149	1.151	1.156	1.157	1.161	1.163	1.163	1.163	1.165	1.169	1.172	1.171	1.171	1.171	1.170	1.171	1.175	1.178
75	1.132	1.135	1.139	1.141	1.142	1.144	1.146	1.148	1.151	1.152	1.154	1.154	1.157	1.157	1.158	1.158	1.160	1.160	1.161	1.162
76	1.125	1.130	1.131	1.135	1.137	1.141	1.141	1.142	1.142	1.145	1.146	1.148	1.148	1.149	1.148	1.150	1.150	1.153	1.152	1.154
77	1.123	1.126	1.128	1.131	1.133	1.137	1.137	1.139	1.139	1.141	1.141	1.143	1.143	1.145	1.145	1.146	1.147	1.149	1.149	1.149
78	1.119	1.124	1.125	1.128	1.130	1.133	1.134	1.137	1.136	1.138	1.137	1.139	1.139	1.141	1.141	1.143	1.143	1.144	1.144	1.145
79	1.119	1.123	1.125	1.128	1.125	1.130	1.130	1.134	1.132	1.137	1.133	1.137	1.135	1.137	1.137	1.139	1.138	1.141	1.140	1.143
80	1.118	1.120	1.123	1.124	1.127	1.128	1.130	1.131	1.133	1.133	1.135	1.135	1.137	1.136	1.136	1.135	1.137	1.138	1.138	1.139
81	1.117	1.120	1.123	1.125	1.128	1.129	1.130	1.131	1.132	1.135	1.134	1.136	1.135	1.136	1.135	1.137	1.135	1.137	1.137	1.140
82	1.121	1.123	1.129	1.131	1.134	1.137	1.137	1.139	1.142	1.142	1.143	1.142	1.142	1.142	1.144	1.143	1.144	1.144	1.145	1.144
83	1.114	1.120	1.123	1.128	1.131	1.135	1.137	1.141	1.142	1.144	1.144	1.146	1.148	1.152	1.152	1.154	1.155	1.158	1.159	1.163
84	1.106	1.110	1.116	1.119	1.124	1.128	1.132	1.135	1.137	1.137	1.141	1.141	1.143	1.144	1.145	1.146	1.148	1.149	1.152	1.154
85	1.110	1.108	1.110	1.117	1.123	1.128	1.128	1.130	1.130	1.132	1.135	1.142	1.142	1.143	1.142	1.143	1.142	1.144	1.145	1.148
86	1.020	1.028	1.028	1.038	1.038	1.045	1.040	1.040	1.038	1.045	1.051	1.060	1.060	1.064	1.062	1.064	1.060	1.064	1.066	1.070
87	1.008	1.009	1.008	1.009	1.006	1.009	1.009	1.011	1.006	1.008	1.004	1.006	1.004	1.006	1.004	1.008	1.004	1.008	1.004	1.006
88	1.003	1.003	1.004	1.006	1.008	1.006	1.008	1.006	1.006	1.003	1.004	1.003	1.004	1.001	1.003	0.999	1.001	1.001	1.003	1.003
89	0.997	1.001	0.999	1.003	0.999	1.003	1.003	1.004	1.003	1.004	1.001	1.003	0.997	1.001	0.997	1.001	0.997	0.999	0.997	0.999
90	0.999	0.995	0.999	0.997	1.003	0.999	1.003	0.999	1.001	1.001	1.001	1.001	1.003	1.001	0.999	0.995	0.997	0.995	0.999	0.997
91	0.994	0.999	0.999	1.003	1.001	1.001	0.999	1.003	1.003	1.006	1.006	1.019	1.022	1.016	1.003	1.003	0.997	0.997	0.995	0.999
92	0.997	0.995	1.001	0.995	0.999	0.997	1.003	1.001	1.003	1.003	1.016	1.047	1.064	1.048	1.020	1.004	1.003	0.997	0.999	0.999
93	0.986	0.995	0.988	0.999	0.992	0.999	0.992	1.001	0.997	1.006	0.999	1.011	1.014	1.017	1.001	1.003	0.995	0.999	0.997	1.001
94	0.995	0.999	0.995	1.001	1.001	1.004	1.004	1.009	1.008	1.011	1.008	1.009	1.003	1.001	0.999	1.001	0.997	0.999	0.992	0.997
95	0.997	1.001	0.997	1.006	1.003	1.009	1.011	1.014	1.013	1.016	1.014	1.014	1.008	1.004	1.001	1.003	0.999	1.001	0.997	0.999
96	1.001	1.003	1.008	1.006	1.011	1.011	1.016	1.017	1.020	1.017	1.019	1.014	1.014	1.009	1.008	1.003	1.003	0.999	0.999	0.995
97	1.003	1.006	1.006	1.014	1.016	1.020	1.019	1.022	1.020	1.022	1.020	1.022	1.017	1.019	1.013	1.009	1.003	1.001	0.997	1.001
98	1.016	1.014	1.016	1.013	1.017	1.017	1.020	1.019	1.020	1.019	1.020	1.019	1.019	1.016	1.014	1.011	1.009	1.004	1.003	0.999

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 18

IR SCAN TIME 19.77 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	1.216	1.215	1.216	1.220	1.224	1.227	1.229	1.234	1.244	1.254	1.258	1.255	1.254	1.257	1.264	1.277	1.292	1.285	1.224	1.127
65	1.217	1.219	1.217	1.217	1.216	1.217	1.219	1.224	1.228	1.232	1.232	1.233	1.237	1.243	1.247	1.250	1.258	1.270	1.268	1.220
66	1.219	1.218	1.217	1.216	1.216	1.215	1.217	1.219	1.221	1.219	1.218	1.216	1.217	1.218	1.223	1.230	1.239	1.248	1.257	1.258
67	1.229	1.228	1.228	1.231	1.234	1.237	1.238	1.241	1.241	1.241	1.237	1.234	1.231	1.230	1.229	1.233	1.238	1.244	1.251	1.260
68	1.250	1.257	1.259	1.257	1.253	1.254	1.257	1.261	1.264	1.262	1.258	1.255	1.253	1.252	1.252	1.253	1.252	1.253	1.257	1.261
69	1.239	1.242	1.244	1.248	1.251	1.259	1.266	1.272	1.269	1.261	1.255	1.255	1.256	1.258	1.258	1.260	1.262	1.267	1.268	1.266
70	1.233	1.236	1.237	1.239	1.242	1.246	1.249	1.254	1.257	1.258	1.258	1.259	1.260	1.260	1.258	1.258	1.262	1.266	1.268	1.272
71	1.216	1.220	1.223	1.227	1.229	1.232	1.237	1.244	1.246	1.245	1.245	1.247	1.248	1.254	1.259	1.263	1.267	1.270	1.269	1.270
72	1.207	1.207	1.209	1.210	1.210	1.210	1.214	1.221	1.226	1.227	1.231	1.234	1.239	1.242	1.244	1.245	1.245	1.247	1.251	1.253
73	1.195	1.197	1.197	1.198	1.198	1.202	1.205	1.213	1.214	1.213	1.210	1.211	1.210	1.211	1.211	1.214	1.214	1.217	1.220	1.226
74	1.181	1.182	1.185	1.182	1.181	1.183	1.190	1.195	1.200	1.197	1.193	1.191	1.192	1.191	1.192	1.193	1.192	1.196	1.199	1.200
75	1.164	1.165	1.168	1.167	1.165	1.165	1.170	1.174	1.178	1.174	1.169	1.167	1.168	1.169	1.170	1.174	1.175	1.178	1.179	1.181
76	1.154	1.155	1.156	1.157	1.158	1.161	1.161	1.163	1.162	1.160	1.156	1.156	1.155	1.157	1.155	1.157	1.157	1.159	1.158	1.161
77	1.149	1.151	1.152	1.152	1.152	1.154	1.152	1.156	1.156	1.157	1.152	1.152	1.151	1.152	1.152	1.154	1.154	1.157	1.156	1.158
78	1.146	1.146	1.147	1.147	1.148	1.149	1.149	1.152	1.153	1.154	1.151	1.149	1.149	1.148	1.146	1.146	1.146	1.148	1.148	1.149
79	1.142	1.143	1.144	1.146	1.146	1.147	1.148	1.151	1.152	1.154	1.152	1.149	1.149	1.149	1.148	1.148	1.147	1.147	1.146	1.148
80	1.142	1.141	1.144	1.142	1.144	1.144	1.146	1.148	1.153	1.152	1.152	1.151	1.151	1.148	1.148	1.146	1.147	1.148	1.148	1.149
81	1.141	1.142	1.142	1.144	1.146	1.148	1.148	1.151	1.152	1.156	1.154	1.154	1.152	1.151	1.149	1.149	1.149	1.149	1.148	1.148
82	1.146	1.146	1.148	1.149	1.149	1.150	1.152	1.153	1.157	1.158	1.159	1.157	1.156	1.154	1.153	1.152	1.152	1.149	1.149	1.149
83	1.164	1.168	1.168	1.171	1.170	1.173	1.173	1.174	1.175	1.177	1.176	1.174	1.168	1.167	1.161	1.161	1.158	1.158	1.156	1.155
84	1.158	1.160	1.165	1.167	1.171	1.176	1.181	1.186	1.192	1.198	1.203	1.204	1.202	1.199	1.197	1.194	1.191	1.187	1.184	1.181
85	1.151	1.156	1.157	1.162	1.164	1.167	1.168	1.171	1.174	1.181	1.186	1.191	1.191	1.194	1.194	1.197	1.200	1.205	1.207	1.211
86	1.073	1.079	1.085	1.094	1.098	1.106	1.114	1.124	1.135	1.147	1.156	1.160	1.156	1.152	1.148	1.147	1.146	1.148	1.150	1.155
87	1.001	1.006	1.004	1.006	1.004	1.011	1.008	1.009	1.006	1.011	1.009	1.013	1.008	1.013	1.008	1.013	1.011	1.013	1.009	1.014
88	1.004	1.003	1.004	1.001	1.004	1.003	1.003	1.001	1.004	1.004	1.006	1.003	1.001	0.999	0.999	0.997	1.001	0.992	0.997	0.988
89	0.995	1.001	0.997	1.003	0.999	1.001	0.997	0.999	0.997	1.001	0.997	0.999	0.997	0.997	0.992	0.995	0.992	0.994	0.990	0.995
90	1.001	0.995	0.997	0.997	1.001	0.997	0.999	0.997	0.997	0.994	0.997	0.994	0.997	0.992	0.992	0.988	0.990	0.988	0.990	0.988
91	0.997	1.001	0.997	0.999	0.995	1.001	0.997	0.999	0.995	0.997	0.997	1.001	0.999	0.999	0.992	0.990	0.988	0.990	0.988	0.988
92	1.001	0.999	1.001	0.999	1.001	1.001	1.001	0.997	0.997	0.997	1.011	1.036	1.046	1.026	1.008	0.995	0.994	0.988	0.988	0.988
93	0.997	1.001	0.997	1.001	1.001	1.003	0.997	0.999	0.995	0.999	0.999	1.016	1.025	1.017	1.004	0.999	0.992	0.992	0.988	0.988
94	0.992	0.999	0.994	1.001	0.994	1.001	0.997	1.001	0.994	0.999	0.990	0.995	0.992	0.995	0.992	0.992	0.990	0.992	0.990	0.992
95	0.995	0.999	0.995	1.001	0.997	1.003	0.999	1.003	0.997	1.001	0.994	0.995	0.990	0.994	0.990	0.994	0.984	0.988	0.982	0.988
96	0.999	0.997	0.999	0.997	1.001	0.999	1.001	0.999	1.003	0.999	0.999	0.995	0.994	0.992	0.992	0.990	0.992	0.988	0.988	0.986
97	0.997	1.001	0.997	1.001	0.997	1.001	1.001	1.004	1.001	1.003	0.997	0.999	0.994	0.995	0.992	0.994	0.990	0.994	0.988	0.994
98	1.001	0.997	0.999	0.997	1.003	1.001	1.003	1.003	1.003	0.999	1.003	0.997	0.999	0.995	0.995	0.992	0.990	0.988	0.990	0.990

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 18

IR SCAN TIME 19.77 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	1.054	1.022	1.011	1.001	0.994	0.986	0.988	0.984	0.986	0.980	0.982	0.980	0.984	0.984	0.982	0.980	0.982	0.980	0.984	0.984
65	1.132	1.060	1.022	1.011	1.004	0.997	0.988	0.984	0.982	0.984	0.980	0.980	0.978	0.980	0.978	0.982	0.976	0.980	0.980	0.980
66	1.231	1.157	1.078	1.029	1.011	1.003	0.994	0.982	0.980	0.978	0.978	0.976	0.976	0.973	0.976	0.973	0.976	0.976	0.973	0.973
67	1.267	1.259	1.203	1.117	1.046	1.019	1.001	0.995	0.978	0.978	0.969	0.971	0.964	0.971	0.964	0.971	0.964	0.971	0.962	0.971
68	1.267	1.273	1.275	1.241	1.160	1.076	1.029	1.009	1.001	0.984	0.973	0.966	0.969	0.966	0.964	0.962	0.964	0.962	0.964	0.962
69	1.265	1.269	1.277	1.286	1.270	1.209	1.122	1.056	1.017	1.004	0.988	0.978	0.964	0.964	0.959	0.959	0.957	0.962	0.957	0.959
70	1.275	1.279	1.285	1.292	1.300	1.303	1.264	1.175	1.084	1.033	1.009	0.999	0.978	0.969	0.959	0.959	0.954	0.959	0.957	0.959
71	1.274	1.281	1.286	1.293	1.299	1.304	1.305	1.276	1.195	1.101	1.040	1.013	0.995	0.982	0.966	0.959	0.954	0.962	0.954	0.959
72	1.253	1.256	1.260	1.265	1.269	1.274	1.283	1.292	1.282	1.222	1.128	1.054	1.017	1.001	0.984	0.966	0.959	0.957	0.957	0.954
73	1.229	1.233	1.237	1.240	1.245	1.253	1.263	1.274	1.284	1.281	1.236	1.149	1.069	1.023	1.001	0.988	0.971	0.964	0.959	0.959
74	1.206	1.209	1.214	1.219	1.225	1.235	1.245	1.253	1.263	1.275	1.277	1.248	1.171	1.086	1.033	1.006	0.990	0.976	0.959	0.962
75	1.185	1.188	1.194	1.198	1.204	1.210	1.216	1.222	1.229	1.239	1.251	1.259	1.248	1.194	1.111	1.045	1.011	0.994	0.982	0.964
76	1.163	1.166	1.169	1.174	1.178	1.186	1.191	1.197	1.203	1.211	1.218	1.226	1.233	1.233	1.202	1.133	1.060	1.019	0.995	0.988
77	1.158	1.160	1.161	1.161	1.162	1.165	1.168	1.173	1.177	1.182	1.186	1.194	1.202	1.212	1.218	1.207	1.157	1.086	1.030	1.004
78	1.150	1.154	1.156	1.160	1.163	1.166	1.169	1.171	1.173	1.176	1.178	1.182	1.186	1.193	1.198	1.204	1.201	1.171	1.109	1.048
79	1.149	1.152	1.152	1.153	1.153	1.157	1.159	1.164	1.168	1.173	1.175	1.180	1.184	1.190	1.195	1.202	1.209	1.211	1.190	1.137
80	1.149	1.148	1.150	1.151	1.152	1.151	1.152	1.155	1.160	1.163	1.165	1.167	1.170	1.175	1.181	1.188	1.194	1.202	1.210	1.207
81	1.145	1.146	1.144	1.147	1.146	1.148	1.146	1.149	1.151	1.156	1.157	1.163	1.162	1.165	1.167	1.172	1.175	1.180	1.185	1.192
82	1.149	1.145	1.146	1.144	1.144	1.144	1.145	1.146	1.146	1.148	1.151	1.152	1.156	1.157	1.160	1.165	1.170	1.168	1.170	1.171
83	1.152	1.149	1.148	1.147	1.143	1.144	1.144	1.146	1.146	1.147	1.148	1.149	1.151	1.152	1.152	1.156	1.157	1.160	1.160	1.163
84	1.177	1.173	1.169	1.165	1.162	1.158	1.157	1.155	1.154	1.152	1.153	1.152	1.154	1.154	1.156	1.157	1.158	1.158	1.160	1.161
85	1.213	1.215	1.216	1.217	1.215	1.214	1.211	1.208	1.203	1.200	1.196	1.194	1.193	1.192	1.190	1.189	1.187	1.185	1.183	1.181
86	1.160	1.167	1.173	1.182	1.193	1.204	1.213	1.225	1.238	1.255	1.278	1.306	1.330	1.350	1.363	1.367	1.363	1.354	1.340	1.325
87	1.013	1.017	1.017	1.020	1.022	1.026	1.029	1.038	1.044	1.059	1.076	1.107	1.134	1.162	1.185	1.201	1.210	1.213	1.211	1.207
88	0.994	0.988	0.995	0.990	0.997	0.994	0.999	0.992	0.997	0.994	1.001	0.997	1.008	1.009	1.014	1.016	1.020	1.020	1.023	1.020
89	0.992	0.990	0.988	0.992	0.990	0.994	0.992	0.995	0.992	0.994	0.992	0.995	0.995	1.001	1.003	1.006	1.003	1.006	1.003	1.004
90	0.990	0.988	0.986	0.988	0.988	0.988	0.990	0.986	0.988	0.986	0.986	0.986	0.990	0.990	0.992	0.992	0.997	0.995	0.997	0.995
91	0.984	0.988	0.986	0.990	0.986	0.988	0.984	0.988	0.986	0.992	0.988	0.990	0.986	0.986	0.988	0.997	0.994	0.992	0.990	0.992
92	0.988	0.986	0.988	0.984	0.990	0.990	0.990	0.988	0.994	1.013	1.033	1.028	1.009	0.994	0.988	0.986	0.990	0.988	0.988	0.986
93	0.988	0.988	0.986	0.988	0.988	0.990	0.990	0.988	0.988	1.004	1.019	1.025	1.006	0.995	0.986	0.988	0.984	0.988	0.984	0.990
94	0.986	0.992	0.986	0.990	0.988	0.990	0.986	0.990	0.986	0.992	0.992	0.992	0.988	0.988	0.988	0.988	0.986	0.988	0.988	0.990
95	0.984	0.990	0.982	0.986	0.980	0.986	0.982	0.990	0.982	0.986	0.980	0.988	0.984	0.988	0.984	0.988	0.986	0.990	0.988	0.992
96	0.988	0.984	0.988	0.986	0.988	0.986	0.986	0.982	0.986	0.984	0.986	0.984	0.986	0.982	0.982	0.978	0.986	0.982	0.990	0.986
97	0.986	0.988	0.986	0.990	0.988	0.990	0.988	0.992	0.986	0.988	0.984	0.988	0.984	0.990	0.988	0.994	0.990	0.995	0.990	0.994
98	0.990	0.990	0.990	0.988	0.994	0.986	0.990	0.986	0.988	0.986	0.988	0.988	0.988	0.988	0.990	0.994	0.999	0.999	1.001	0.999

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
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MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 18

IR SCAN TIME 19.77 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.984	0.980	0.982	0.980	0.982	0.982	0.980	0.978	0.980	0.978	0.982	0.976	0.978	0.976	0.980	0.978	0.980	0.976	0.978	0.976
65	0.978	0.978	0.978	0.980	0.978	0.980	0.976	0.978	0.976	0.980	0.976	0.978	0.973	0.978	0.978	0.978	0.976	0.973	0.976	0.976
66	0.976	0.973	0.976	0.971	0.973	0.973	0.973	0.973	0.971	0.971	0.971	0.971	0.971	0.969	0.969	0.969	0.969	0.971	0.966	0.966
67	0.969	0.971	0.966	0.969	0.966	0.966	0.969	0.971	0.962	0.966	0.964	0.966	0.966	0.966	0.962	0.966	0.964	0.966	0.964	0.964
68	0.962	0.957	0.962	0.957	0.962	0.954	0.959	0.951	0.959	0.957	0.962	0.954	0.959	0.951	0.957	0.954	0.964	0.962	0.959	0.954
69	0.957	0.959	0.957	0.957	0.954	0.959	0.954	0.959	0.954	0.959	0.951	0.954	0.951	0.957	0.954	0.957	0.954	0.954	0.951	0.957
70	0.957	0.957	0.954	0.957	0.951	0.954	0.951	0.957	0.951	0.954	0.951	0.954	0.949	0.951	0.949	0.954	0.954	0.951	0.946	0.951
71	0.954	0.957	0.951	0.954	0.951	0.954	0.951	0.957	0.954	0.954	0.949	0.951	0.949	0.954	0.951	0.954	0.951	0.954	0.949	0.951
72	0.954	0.954	0.957	0.954	0.954	0.951	0.951	0.949	0.951	0.951	0.951	0.951	0.954	0.951	0.949	0.949	0.949	0.949	0.951	0.949
73	0.957	0.957	0.954	0.957	0.954	0.957	0.954	0.954	0.954	0.954	0.951	0.951	0.951	0.954	0.949	0.957	0.949	0.951	0.949	0.949
74	0.957	0.954	0.954	0.954	0.957	0.954	0.957	0.951	0.954	0.951	0.954	0.951	0.951	0.954	0.957	0.954	0.954	0.951	0.949	0.951
75	0.962	0.949	0.951	0.946	0.954	0.946	0.954	0.949	0.951	0.946	0.951	0.943	0.951	0.946	0.954	0.951	0.951	0.951	0.951	0.949
76	0.976	0.966	0.959	0.959	0.951	0.951	0.951	0.954	0.951	0.954	0.951	0.949	0.949	0.951	0.949	0.951	0.949	0.951	0.937	0.949
77	0.990	0.986	0.976	0.966	0.957	0.957	0.954	0.957	0.954	0.957	0.949	0.954	0.951	0.954	0.951	0.954	0.949	0.951	0.946	0.954
78	1.011	0.994	0.984	0.986	0.980	0.971	0.959	0.957	0.954	0.957	0.951	0.951	0.951	0.954	0.951	0.954	0.949	0.954	0.949	0.954
79	1.071	1.028	1.001	0.990	0.986	0.988	0.980	0.980	0.964	0.962	0.957	0.959	0.951	0.954	0.951	0.954	0.954	0.954	0.949	0.954
80	1.174	1.107	1.045	1.008	0.994	0.986	0.984	0.980	0.978	0.976	0.976	0.969	0.964	0.957	0.957	0.951	0.957	0.954	0.954	0.951
81	1.188	1.158	1.098	1.042	1.008	0.994	0.982	0.982	0.980	0.984	0.980	0.982	0.978	0.978	0.973	0.973	0.966	0.966	0.959	0.959
82	1.175	1.171	1.152	1.101	1.047	1.004	0.994	0.980	0.984	0.978	0.984	0.976	0.980	0.982	0.982	0.982	0.982	0.980	0.980	0.976
83	1.166	1.169	1.166	1.153	1.115	1.067	1.019	0.997	0.986	0.986	0.984	0.984	0.978	0.978	0.978	0.982	0.973	0.984	0.973	0.980
84	1.164	1.165	1.168	1.165	1.156	1.129	1.083	1.033	1.006	0.988	0.986	0.982	0.980	0.978	0.980	0.976	0.980	0.978	0.980	0.980
85	1.181	1.182	1.183	1.185	1.182	1.174	1.153	1.117	1.064	1.023	0.994	0.986	0.978	0.980	0.978	0.978	0.978	0.980	0.980	0.978
86	1.312	1.302	1.291	1.278	1.257	1.230	1.198	1.168	1.125	1.070	1.022	0.999	0.984	0.984	0.976	0.980	0.978	0.980	0.978	0.982
87	1.201	1.198	1.192	1.182	1.161	1.135	1.106	1.085	1.060	1.034	1.006	0.994	0.982	0.982	0.980	0.980	0.978	0.980	0.978	0.980
88	1.020	1.016	1.017	1.013	1.011	1.006	1.004	0.997	0.999	0.994	0.990	0.986	0.976	0.980	0.980	0.980	0.980	0.980	0.980	0.978
89	0.995	1.001	0.990	0.994	0.986	0.990	0.984	0.988	0.982	0.986	0.978	0.982	0.978	0.980	0.978	0.980	0.978	0.982	0.976	0.980
90	0.997	0.992	0.988	0.986	0.988	0.984	0.984	0.980	0.980	0.978	0.980	0.978	0.980	0.973	0.976	0.971	0.976	0.971	0.978	0.971
91	0.994	0.995	0.984	0.984	0.982	0.982	0.980	0.980	0.976	0.978	0.978	0.980	0.978	0.980	0.976	0.978	0.976	0.978	0.973	0.976
92	0.990	0.986	0.986	0.980	0.982	0.978	0.982	0.978	0.980	0.976	0.978	0.980	0.980	0.978	0.978	0.978	0.978	0.980	0.978	0.976
93	0.984	0.992	0.982	0.982	0.978	0.980	0.980	0.980	0.978	0.978	0.976	0.978	0.978	0.980	0.976	0.980	0.976	0.980	0.976	0.978
94	0.990	0.990	0.984	0.986	0.982	0.982	0.982	0.980	0.976	0.982	0.978	0.980	0.976	0.978	0.978	0.980	0.976	0.980	0.976	0.980
95	0.990	0.990	0.984	0.984	0.978	0.984	0.978	0.982	0.978	0.980	0.978	0.982	0.982	0.980	0.976	0.980	0.980	0.980	0.980	0.982
96	0.992	0.986	0.984	0.978	0.982	0.976	0.980	0.976	0.980	0.976	0.980	0.978	0.980	0.980	0.980	0.978	0.980	0.976	0.978	0.978
97	0.992	0.994	0.986	0.988	0.982	0.980	0.980	0.980	0.978	0.984	0.978	0.984	0.973	0.982	0.969	0.978	0.971	0.978	0.971	0.980
98	1.001	0.997	0.994	0.984	0.984	0.982	0.982	0.982	0.984	0.982	0.982	0.976	0.980	0.978	0.978	0.978	0.978	0.978	0.980	0.973

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 19.77 SEC
INITIAL TEMP 536.7 DEG. R

GROUP 18

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.980	0.978	0.978	0.973	0.978	0.978	0.980	0.978	0.978	0.973
65	0.976	0.978	0.971	0.973	0.971	0.976	0.971	0.976	0.971	0.976
66	0.969	0.969	0.969	0.964	0.964	0.966	0.966	0.969	0.969	0.964
67	0.962	0.964	0.964	0.966	0.962	0.962	0.964	0.964	0.964	0.964
68	0.959	0.957	0.959	0.957	0.959	0.957	0.957	0.957	0.959	0.957
69	0.943	0.957	0.946	0.957	0.943	0.954	0.940	0.954	0.943	0.954
70	0.946	0.951	0.949	0.951	0.951	0.954	0.949	0.951	0.946	0.951
71	0.946	0.951	0.946	0.951	0.949	0.951	0.949	0.951	0.946	0.949
72	0.951	0.949	0.949	0.946	0.949	0.949	0.949	0.949	0.949	0.949
73	0.946	0.951	0.949	0.951	0.949	0.951	0.949	0.949	0.946	0.951
74	0.957	0.951	0.951	0.951	0.951	0.949	0.946	0.949	0.946	0.949
75	0.951	0.946	0.951	0.949	0.951	0.949	0.949	0.946	0.951	0.946
76	0.940	0.951	0.943	0.949	0.940	0.949	0.940	0.949	0.940	0.951
77	0.951	0.949	0.949	0.951	0.949	0.951	0.951	0.951	0.946	0.949
78	0.949	0.949	0.946	0.951	0.951	0.951	0.949	0.949	0.946	0.954
79	0.949	0.954	0.951	0.954	0.946	0.954	0.951	0.954	0.949	0.951
80	0.951	0.951	0.957	0.951	0.951	0.951	0.954	0.954	0.954	0.949
81	0.957	0.959	0.954	0.957	0.951	0.954	0.951	0.957	0.951	0.951
82	0.973	0.969	0.971	0.966	0.962	0.957	0.957	0.954	0.957	0.957
83	0.971	0.980	0.971	0.978	0.969	0.978	0.964	0.971	0.957	0.966
84	0.982	0.980	0.980	0.978	0.978	0.978	0.980	0.978	0.978	0.982
85	0.976	0.980	0.980	0.982	0.978	0.980	0.976	0.978	0.978	0.978
86	0.978	0.982	0.978	0.978	0.980	0.980	0.982	0.980	0.978	0.982
87	0.973	0.978	0.976	0.982	0.980	0.982	0.980	0.980	0.976	0.978
88	0.978	0.978	0.978	0.978	0.982	0.978	0.982	0.978	0.973	0.976
89	0.973	0.978	0.976	0.980	0.978	0.980	0.976	0.978	0.978	0.978
90	0.976	0.971	0.976	0.969	0.976	0.973	0.976	0.969	0.978	0.976
91	0.973	0.978	0.976	0.978	0.973	0.976	0.976	0.980	0.978	0.978
92	0.978	0.976	0.978	0.976	0.976	0.973	0.978	0.976	0.978	0.976
93	0.973	0.978	0.978	0.978	0.973	0.978	0.973	0.978	0.976	0.978
94	0.976	0.980	0.978	0.976	0.973	0.980	0.978	0.982	0.978	0.978
95	0.978	0.980	0.978	0.980	0.976	0.980	0.976	0.980	0.978	0.980
96	0.978	0.978	0.980	0.978	0.978	0.978	0.978	0.980	0.980	0.982
97	0.971	0.980	0.973	0.980	0.971	0.982	0.976	0.984	0.982	0.984
98	0.978	0.978	0.978	0.978	0.980	0.980	0.982	0.982	0.982	0.978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 19.77 SEC
HREF = 0.206E-01

GROUP 18

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	0.010	0.010	0.011	0.010	0.010	0.009	0.010	0.009	0.011	0.009	0.009	0.008	0.006	0.008	0.008	0.009	0.009	0.009	0.008	0.009
30	0.010	0.010	0.010	0.011	0.009	0.010	0.009	0.009	0.008	0.009	0.008	0.009	0.008	0.009	0.009	0.009	0.008	0.009	0.008	0.009
31	0.011	0.011	0.010	0.009	0.009	0.009	0.008	0.009	0.009	0.009	0.009	0.010	0.008	0.009	0.008	0.009	0.008	0.009	0.007	0.008
32	0.010	0.010	0.010	0.009	0.009	0.009	0.009	0.008	0.009	0.009	0.009	0.009	0.009	0.008	0.008	0.006	0.006	0.006	0.007	0.006
33	0.009	0.008	0.009	0.009	0.009	0.009	0.009	0.009	0.007	0.009	0.007	0.008	0.007	0.007	0.006	0.007	0.006	0.007	0.007	0.009
34	0.009	0.009	0.009	0.009	0.008	0.008	0.007	0.007	0.007	0.007	0.007	0.006	0.006	0.006	0.007	0.008	0.009	0.009	0.009	0.010
35	0.010	0.009	0.006	0.009	0.004	0.007	0.004	0.006	0.003	0.006	0.003	0.007	0.006	0.008	0.006	0.008	0.009	0.010	0.009	0.010
36	0.009	0.008	0.007	0.006	0.006	0.006	0.006	0.006	0.007	0.006	0.007	0.007	0.009	0.009	0.009	0.008	0.009	0.005	0.006	0.001
37	0.007	0.007	0.008	0.006	0.006	0.006	0.007	0.008	0.008	0.006	0.008	0.008	0.009	0.009	0.008	0.003	0.003	0.003	0.003	0.003
38	0.007	0.007	0.008	0.007	0.008	0.008	0.009	0.009	0.009	0.008	0.009	0.008	0.007	0.003	0.001	0.001	0.001	0.001	0.001	0.001
39	0.008	0.008	0.008	0.007	0.007	0.008	0.008	0.007	0.007	0.005	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.009	0.009	0.009	0.009	0.009	0.009	0.007	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.009	0.009	0.009	0.008	0.008	0.005	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
42	0.010	0.010	0.006	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
43	0.009	0.006	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
44	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.007	0.015
46	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.015	0.048	0.082
47	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.000	0.001	0.001	0.000	0.003	0.002	0.003	0.001	0.006	0.028	0.078	0.119
48	0.003	0.003	0.003	0.003	0.000	0.003	0.001	0.003	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.005	0.012	0.045	0.097	0.135
49	0.003	0.003	0.003	0.001	0.003	0.000	0.002	0.000	0.002	0.001	0.003	0.003	0.004	0.003	0.004	0.005	0.019	0.063	0.117	0.150
50	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.003	0.003	0.003	0.003	0.004	0.003	0.004	0.003	0.007	0.022	0.074	0.122	0.153
51	0.003	0.003	0.003	0.001	0.002	0.002	0.003	0.002	0.002	0.001	0.003	0.002	0.003	0.003	0.004	0.006	0.023	0.065	0.106	0.131
52	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.002	0.001	0.005	0.022	0.059	0.087	0.104
53	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.025	0.057	0.079	0.089
54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.032	0.065	0.082	0.088
55	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.008	0.041	0.069	0.082	0.089
56	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.016	0.049	0.072	0.081	0.087
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.022	0.055	0.070	0.078	0.083
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.031	0.060	0.074	0.080	0.084
59	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.035	0.062	0.073	0.079	0.082
60	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.009	0.041	0.064	0.074	0.078	0.083
61	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.013	0.046	0.067	0.075	0.080	0.083
62	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.000	0.023	0.055	0.072	0.079	0.084	0.086
63	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.006	0.034	0.063	0.074	0.081	0.085	0.089

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 19.77 SEC
GROUP 18 HREF = 0.206E-01

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	0.006	0.009	0.006	0.010	0.006	0.009	0.005	0.006	0.004	0.006	0.005	0.006	0.003	0.006	0.003	0.006	0.006	0.008	0.008	0.009
30	0.007	0.009	0.007	0.008	0.006	0.006	0.006	0.007	0.006	0.007	0.007	0.008	0.007	0.009	0.006	0.009	0.009	0.011	0.008	0.011
31	0.007	0.007	0.006	0.007	0.006	0.009	0.007	0.009	0.009	0.011	0.009	0.011	0.009	0.011	0.011	0.011	0.009	0.009	0.006	0.006
32	0.006	0.007	0.009	0.008	0.009	0.009	0.010	0.009	0.011	0.011	0.011	0.009	0.009	0.006	0.006	0.003	0.001	0.001	0.001	0.001
33	0.009	0.010	0.009	0.010	0.009	0.010	0.009	0.009	0.007	0.006	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
34	0.010	0.009	0.009	0.008	0.007	0.005	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.007	0.006	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
42	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
43	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.019	0.020	0.018	0.017	0.013	0.011	0.007	0.006	0.003	0.003	0.000	0.003	0.001	0.002	0.001	0.001	0.001	0.000	0.000	0.001
46	0.099	0.107	0.106	0.102	0.095	0.087	0.077	0.067	0.056	0.046	0.035	0.025	0.016	0.011	0.006	0.005	0.003	0.003	0.003	0.003
47	0.143	0.155	0.162	0.166	0.166	0.163	0.161	0.159	0.157	0.151	0.138	0.119	0.097	0.075	0.054	0.038	0.022	0.013	0.009	0.006
48	0.156	0.168	0.178	0.187	0.194	0.197	0.194	0.186	0.176	0.171	0.168	0.166	0.163	0.165	0.162	0.143	0.102	0.061	0.031	0.015
49	0.170	0.183	0.195	0.205	0.216	0.225	0.232	0.232	0.220	0.200	0.181	0.168	0.162	0.160	0.165	0.170	0.156	0.115	0.070	0.038
50	0.172	0.188	0.202	0.216	0.229	0.243	0.254	0.262	0.262	0.257	0.243	0.220	0.195	0.177	0.171	0.169	0.167	0.155	0.121	0.076
51	0.150	0.166	0.183	0.202	0.220	0.239	0.257	0.275	0.288	0.294	0.292	0.281	0.261	0.232	0.203	0.180	0.171	0.169	0.166	0.142
52	0.115	0.127	0.140	0.157	0.176	0.198	0.221	0.245	0.268	0.284	0.291	0.295	0.293	0.286	0.269	0.243	0.210	0.183	0.170	0.171
53	0.096	0.102	0.109	0.117	0.128	0.140	0.156	0.175	0.197	0.219	0.237	0.252	0.262	0.269	0.273	0.273	0.267	0.250	0.223	0.193
54	0.093	0.096	0.099	0.103	0.108	0.115	0.122	0.131	0.141	0.153	0.166	0.181	0.197	0.213	0.227	0.237	0.246	0.252	0.255	0.250
55	0.094	0.096	0.099	0.101	0.104	0.107	0.111	0.114	0.119	0.123	0.128	0.134	0.141	0.150	0.162	0.175	0.190	0.203	0.213	0.223
56	0.090	0.094	0.096	0.101	0.104	0.108	0.110	0.113	0.113	0.114	0.113	0.115	0.116	0.119	0.123	0.129	0.136	0.146	0.157	0.168
57	0.088	0.089	0.094	0.097	0.102	0.106	0.110	0.112	0.114	0.114	0.113	0.111	0.111	0.111	0.113	0.114	0.118	0.121	0.126	0.131
58	0.086	0.089	0.090	0.094	0.097	0.102	0.106	0.110	0.113	0.116	0.114	0.114	0.113	0.114	0.112	0.112	0.111	0.114	0.115	0.120
59	0.086	0.088	0.091	0.094	0.097	0.100	0.103	0.106	0.108	0.109	0.110	0.111	0.115	0.118	0.117	0.115	0.114	0.115	0.115	0.114
60	0.084	0.087	0.089	0.092	0.095	0.099	0.101	0.105	0.107	0.109	0.108	0.109	0.111	0.113	0.114	0.116	0.119	0.121	0.119	0.116
61	0.086	0.087	0.090	0.092	0.095	0.098	0.101	0.102	0.104	0.104	0.106	0.107	0.111	0.113	0.113	0.113	0.113	0.115	0.117	0.121
62	0.088	0.089	0.092	0.094	0.096	0.098	0.102	0.104	0.106	0.105	0.105	0.105	0.108	0.109	0.111	0.113	0.115	0.115	0.115	0.115
63	0.091	0.094	0.096	0.098	0.099	0.101	0.103	0.106	0.107	0.107	0.106	0.108	0.110	0.111	0.111	0.112	0.111	0.113	0.113	0.115

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 19.77 SEC
GROUP 18 HREF = 0.206E-01

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	0.009	0.009	0.009	0.009	0.009	0.010	0.009	0.010	0.008	0.008	0.006	0.006	0.004	0.005	0.003	0.003	0.001	0.001	0.000	0.000
30	0.009	0.010	0.006	0.009	0.005	0.006	0.003	0.005	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
31	0.004	0.003	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
32	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
42	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
43	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
46	0.002	0.003	0.001	0.002	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
47	0.005	0.004	0.005	0.004	0.004	0.004	0.004	0.003	0.002	0.003	0.003	0.002	0.002	0.005	0.003	0.002	0.001	0.001	0.001	0.001
48	0.009	0.008	0.006	0.006	0.004	0.004	0.003	0.004	0.003	0.004	0.002	0.003	0.002	0.002	0.003	0.003	0.002	0.002	0.002	0.003
49	0.022	0.013	0.009	0.006	0.006	0.005	0.005	0.004	0.004	0.003	0.003	0.003	0.003	0.002	0.003	0.002	0.003	0.001	0.002	0.002
50	0.042	0.025	0.017	0.015	0.009	0.009	0.006	0.006	0.005	0.005	0.004	0.004	0.003	0.004	0.004	0.004	0.003	0.003	0.003	0.003
51	0.099	0.055	0.027	0.015	0.015	0.013	0.011	0.007	0.006	0.005	0.006	0.003	0.004	0.003	0.004	0.004	0.004	0.003	0.003	0.003
52	0.168	0.140	0.092	0.051	0.023	0.015	0.012	0.009	0.006	0.004	0.001	0.003	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.003
53	0.175	0.176	0.169	0.123	0.068	0.033	0.016	0.011	0.010	0.004	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
54	0.233	0.209	0.189	0.168	0.127	0.074	0.037	0.017	0.011	0.009	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
55	0.231	0.234	0.227	0.211	0.189	0.149	0.094	0.047	0.022	0.011	0.009	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56	0.179	0.191	0.201	0.211	0.215	0.211	0.185	0.131	0.072	0.034	0.015	0.011	0.006	0.002	0.002	0.002	0.002	0.002	0.002	0.002
57	0.138	0.145	0.153	0.162	0.174	0.189	0.208	0.211	0.172	0.106	0.055	0.024	0.013	0.008	0.003	0.003	0.003	0.003	0.003	0.003
58	0.124	0.128	0.130	0.134	0.138	0.146	0.157	0.179	0.211	0.213	0.155	0.084	0.038	0.018	0.009	0.005	0.005	0.005	0.005	0.005
59	0.116	0.119	0.123	0.127	0.131	0.133	0.136	0.140	0.151	0.175	0.191	0.148	0.080	0.034	0.015	0.008	0.006	0.006	0.006	0.006
60	0.115	0.117	0.119	0.121	0.124	0.129	0.135	0.139	0.141	0.145	0.152	0.156	0.124	0.070	0.031	0.013	0.006	0.006	0.001	0.001
61	0.124	0.121	0.121	0.121	0.123	0.125	0.128	0.133	0.140	0.148	0.155	0.158	0.154	0.131	0.085	0.041	0.017	0.007	0.005	0.002
62	0.117	0.119	0.123	0.127	0.129	0.128	0.129	0.131	0.135	0.141	0.150	0.158	0.167	0.170	0.156	0.115	0.064	0.028	0.012	0.005
63	0.117	0.119	0.120	0.121	0.122	0.128	0.133	0.138	0.140	0.141	0.142	0.146	0.152	0.159	0.170	0.175	0.149	0.096	0.047	0.020

NASA/RI OH90 TRANSITION TEST
V41B-P4A
AKO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TU)/HRFR
IR SCAN TIME 19.77 SEC
GROUP 18 HRFR = 0.206E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
31	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
32	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
42	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
43	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
46	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
47	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48	0.000	0.001	0.000	0.002	0.000	0.002	0.002	0.002	0.000	0.001	0.001	0.001	0.001	0.001	0.000	0.001	0.001	0.000	0.000	0.001
49	0.002	0.002	0.003	0.002	0.002	0.001	0.001	0.001	0.002	0.001	0.002	0.001	0.001	0.000	0.001	0.000	0.002	0.001	0.001	0.000
50	0.003	0.003	0.002	0.003	0.002	0.003	0.002	0.003	0.001	0.002	0.002	0.003	0.001	0.003	0.001	0.002	0.000	0.002	0.001	0.003
51	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.003	0.003	0.003	0.002	0.002	0.002	0.003	0.002	0.003	0.002
52	0.003	0.003	0.000	0.002	0.000	0.003	0.003	0.003	0.002	0.003	0.002	0.003	0.003	0.003	0.001	0.003	0.002	0.003	0.001	0.002
53	0.002	0.000	0.002	0.002	0.003	0.002	0.003	0.001	0.003	0.001	0.003	0.000	0.003	0.001	0.003	0.001	0.003	0.000	0.003	0.000
54	0.005	0.005	0.001	0.002	0.003	0.003	0.003	0.002	0.003	0.003	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.002
55	0.000	0.000	0.001	0.001	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.004	0.004	0.003	0.004	0.003	0.003	0.002	0.003	0.002
56	0.002	0.001	0.000	0.002	0.001	0.003	0.003	0.003	0.003	0.004	0.002	0.003	0.002	0.003	0.002	0.003	0.002	0.003	0.000	0.001
57	0.003	0.003	0.000	0.001	0.002	0.000	0.001	0.000	0.001	0.000	0.002	0.001	0.002	0.000	0.001	0.001	0.000	0.000	0.000	0.000
58	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
59	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
60	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
61	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
62	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
63	0.007	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 19.77 SEC
HREF = 0.206E-01

GROUP 18

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
31	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
32	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
42	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
43	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
46	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
47	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000
48	0.000	0.000	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.001	0.001
49	0.001	0.000	0.002	0.001	0.002	0.001	0.001	0.000	0.001	0.001	0.002	0.000	0.000	0.000	0.001	0.000	0.001	0.000	0.001	0.000
50	0.002	0.002	0.000	0.002	0.001	0.003	0.001	0.002	0.002	0.002	0.000	0.002	0.000	0.002	0.000	0.001	0.000	0.002	0.000	0.001
51	0.002	0.003	0.002	0.000	0.002	0.001	0.002	0.001	0.001	0.001	0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.001	0.000	0.000
52	0.001	0.002	0.001	0.002	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
53	0.003	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54	0.002	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
55	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
56	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
59	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
60	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
61	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
62	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
63	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 19.77 SEC
HREF = 0.206E-01

GROUP 18

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
31	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
32	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
42	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
43	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
46	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
47	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000
49	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.001	0.001	0.001
50	0.001	0.000	0.000	0.002	0.000	0.001	0.001	0.000	0.000	0.001
51	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
53	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
55	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
59	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
60	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
61	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
62	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
63	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

IR HEAT TRANSFER COEFFICIENT - H(.9IO)/HRFR
IR SCAN TIME 19.77 SEC
HRFR = 0.206E-01

GROUP 18

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008	0.044	0.066	0.076	0.081	0.086	0.088
65	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.019	0.052	0.069	0.075	0.081	0.084	0.088
66	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.027	0.056	0.069	0.075	0.079	0.083	0.085
67	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.034	0.059	0.070	0.075	0.080	0.082	0.085
68	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.038	0.060	0.069	0.074	0.078	0.081	0.084
69	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.044	0.064	0.072	0.076	0.081	0.083	0.086
70	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.015	0.053	0.070	0.077	0.082	0.086	0.088	0.091
71	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.026	0.059	0.070	0.078	0.081	0.086	0.088	0.091
72	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.036	0.059	0.067	0.072	0.076	0.079	0.082	0.084
73	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.009	0.039	0.057	0.063	0.068	0.071	0.073	0.075	0.078
74	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.015	0.042	0.053	0.059	0.062	0.065	0.067	0.069	0.071
75	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.019	0.042	0.050	0.054	0.057	0.060	0.060	0.063	0.064
76	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.023	0.040	0.048	0.052	0.055	0.057	0.058	0.060	0.062
77	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.026	0.041	0.047	0.050	0.053	0.055	0.058	0.058	0.060
78	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.000	0.029	0.039	0.046	0.048	0.052	0.053	0.056	0.056	0.059
79	0.005	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.013	0.034	0.042	0.047	0.049	0.052	0.053	0.055	0.056	0.058
80	0.003	0.008	0.003	0.000	0.004	0.003	0.003	0.003	0.002	0.003	0.020	0.034	0.042	0.045	0.048	0.050	0.052	0.053	0.055	0.056
81	0.020	0.021	0.013	0.009	0.005	0.003	0.002	0.004	0.001	0.009	0.026	0.038	0.043	0.046	0.047	0.050	0.052	0.054	0.055	0.057
82	0.054	0.045	0.030	0.028	0.017	0.004	0.000	0.000	0.003	0.012	0.031	0.037	0.042	0.045	0.047	0.049	0.053	0.053	0.056	0.058
83	0.063	0.054	0.040	0.049	0.033	0.010	0.010	0.010	0.010	0.017	0.033	0.041	0.042	0.044	0.044	0.046	0.047	0.050	0.052	0.055
84	0.040	0.035	0.028	0.037	0.027	0.009	0.009	0.009	0.001	0.033	0.063	0.071	0.069	0.064	0.059	0.055	0.053	0.052	0.051	0.050
85	0.021	0.019	0.015	0.017	0.013	0.008	0.001	0.004	0.006	0.014	0.026	0.033	0.037	0.041	0.042	0.045	0.046	0.050	0.051	0.055
86	0.011	0.011	0.010	0.011	0.009	0.008	0.006	0.007	0.006	0.006	0.005	0.006	0.005	0.006	0.005	0.006	0.005	0.008	0.007	0.009
87	0.003	0.003	0.003	0.005	0.003	0.003	0.003	0.009	0.007	0.004	0.003	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.002	0.003
88	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.008	0.008	0.003	0.002	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000
89	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.006	0.005	0.003	0.001	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.004	0.003	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
91	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.003	0.004	0.003	0.003	0.002	0.002	0.002	0.000	0.000	0.000	0.000	0.000
92	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.002	0.003	0.002	0.003	0.000	0.002	0.002	0.001	0.001	0.001	0.001
93	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.003	0.005	0.003	0.004	0.004	0.005	0.002	0.003	0.001	0.001	0.001	0.001
94	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.001	0.004	0.005	0.005	0.006	0.006	0.006	0.006	0.006	0.004	0.003	0.000	0.000
95	0.004	0.003	0.003	0.003	0.003	0.002	0.002	0.005	0.006	0.007	0.006	0.007	0.008	0.009	0.009	0.009	0.006	0.005	0.001	0.001
96	0.010	0.011	0.010	0.009	0.009	0.006	0.006	0.008	0.010	0.009	0.008	0.009	0.011	0.011	0.012	0.011	0.009	0.006	0.003	0.000
97	0.013	0.012	0.013	0.012	0.011	0.009	0.007	0.009	0.010	0.011	0.010	0.013	0.011	0.013	0.013	0.014	0.011	0.009	0.004	0.003
98	0.013	0.013	0.013	0.013	0.012	0.009	0.009	0.009	0.009	0.008	0.009	0.011	0.014	0.014	0.015	0.013	0.012	0.009	0.007	0.006

NASA/RI OH90 TRANSITION TEST
V41B-P4A
AKO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 19.77 SEC
GROUP 18 HREF = 0.206E-01

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	0.090	0.092	0.095	0.096	0.100	0.103	0.106	0.109	0.112	0.111	0.113	0.114	0.116	0.115	0.115	0.115	0.115	0.116	0.117	0.116
65	0.090	0.093	0.096	0.099	0.102	0.105	0.107	0.110	0.110	0.113	0.112	0.117	0.120	0.120	0.118	0.119	0.117	0.118	0.116	0.117
66	0.087	0.090	0.092	0.095	0.097	0.100	0.103	0.106	0.110	0.113	0.114	0.115	0.116	0.116	0.115	0.115	0.117	0.117	0.117	0.117
67	0.087	0.090	0.092	0.094	0.096	0.099	0.101	0.104	0.105	0.108	0.109	0.110	0.111	0.113	0.116	0.119	0.122	0.123	0.124	0.124
68	0.087	0.089	0.092	0.095	0.099	0.101	0.104	0.107	0.111	0.114	0.117	0.119	0.120	0.120	0.121	0.124	0.126	0.127	0.129	0.133
69	0.088	0.091	0.094	0.097	0.100	0.103	0.105	0.108	0.111	0.116	0.120	0.123	0.125	0.127	0.127	0.128	0.128	0.130	0.131	0.132
70	0.093	0.096	0.098	0.101	0.103	0.106	0.106	0.108	0.109	0.112	0.114	0.116	0.117	0.117	0.117	0.118	0.119	0.121	0.123	0.126
71	0.092	0.095	0.097	0.100	0.101	0.104	0.106	0.108	0.108	0.110	0.111	0.112	0.113	0.113	0.112	0.112	0.113	0.114	0.114	0.115
72	0.087	0.089	0.091	0.093	0.096	0.097	0.100	0.101	0.104	0.105	0.107	0.107	0.108	0.108	0.108	0.107	0.109	0.109	0.110	0.109
73	0.079	0.082	0.083	0.085	0.088	0.090	0.091	0.092	0.093	0.094	0.095	0.097	0.098	0.098	0.097	0.098	0.097	0.099	0.100	0.101
74	0.073	0.074	0.076	0.077	0.079	0.080	0.082	0.084	0.083	0.084	0.085	0.087	0.089	0.089	0.088	0.088	0.088	0.089	0.090	0.092
75	0.066	0.068	0.070	0.071	0.072	0.073	0.074	0.075	0.076	0.077	0.078	0.079	0.080	0.080	0.081	0.081	0.082	0.082	0.083	0.083
76	0.062	0.065	0.065	0.068	0.069	0.071	0.071	0.071	0.072	0.073	0.074	0.075	0.075	0.075	0.075	0.076	0.076	0.078	0.078	0.079
77	0.061	0.063	0.064	0.065	0.067	0.069	0.069	0.070	0.070	0.071	0.071	0.072	0.072	0.073	0.073	0.074	0.074	0.075	0.075	0.076
78	0.059	0.062	0.062	0.064	0.065	0.067	0.067	0.069	0.068	0.069	0.069	0.070	0.070	0.071	0.071	0.072	0.072	0.073	0.073	0.073
79	0.059	0.061	0.062	0.064	0.062	0.065	0.065	0.067	0.066	0.069	0.067	0.069	0.067	0.069	0.069	0.070	0.069	0.071	0.070	0.072
80	0.058	0.060	0.061	0.062	0.063	0.064	0.065	0.065	0.067	0.067	0.068	0.068	0.069	0.068	0.068	0.068	0.069	0.069	0.069	0.070
81	0.058	0.060	0.061	0.062	0.064	0.064	0.065	0.065	0.066	0.068	0.067	0.068	0.067	0.068	0.068	0.069	0.068	0.069	0.069	0.070
82	0.060	0.061	0.064	0.065	0.067	0.069	0.069	0.070	0.071	0.072	0.072	0.072	0.072	0.072	0.073	0.072	0.073	0.073	0.073	0.073
83	0.056	0.060	0.061	0.064	0.065	0.068	0.069	0.071	0.071	0.073	0.073	0.074	0.075	0.077	0.077	0.079	0.079	0.081	0.081	0.084
84	0.052	0.054	0.057	0.059	0.062	0.064	0.066	0.067	0.069	0.069	0.071	0.071	0.072	0.073	0.073	0.074	0.075	0.075	0.077	0.078
85	0.054	0.053	0.054	0.058	0.061	0.064	0.064	0.065	0.065	0.066	0.068	0.071	0.072	0.072	0.071	0.072	0.071	0.073	0.073	0.075
86	0.009	0.013	0.013	0.018	0.018	0.021	0.019	0.019	0.018	0.021	0.024	0.028	0.028	0.031	0.030	0.031	0.028	0.031	0.031	0.033
87	0.003	0.004	0.003	0.004	0.003	0.004	0.004	0.005	0.003	0.003	0.002	0.003	0.002	0.003	0.002	0.003	0.002	0.003	0.002	0.003
88	0.001	0.001	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.001	0.002	0.001	0.002	0.000	0.001	0.001	0.000	0.000	0.001	0.001
89	0.001	0.000	0.000	0.001	0.001	0.001	0.001	0.002	0.001	0.002	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.003	0.003	0.003	0.003	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.001	0.001	0.002	0.003	0.009	0.010	0.007	0.001	0.001	0.001	0.001	0.001	0.001
92	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.001	0.007	0.022	0.031	0.023	0.009	0.002	0.001	0.001	0.001	0.001
93	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.003	0.003	0.005	0.006	0.008	0.000	0.001	0.001	0.001	0.001	0.000
94	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.004	0.003	0.005	0.003	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	0.001	0.000	0.000	0.003	0.001	0.004	0.005	0.006	0.006	0.007	0.006	0.006	0.003	0.002	0.000	0.001	0.001	0.000	0.000	0.000
96	0.000	0.001	0.003	0.003	0.005	0.005	0.007	0.008	0.009	0.008	0.009	0.006	0.006	0.004	0.003	0.001	0.001	0.001	0.001	0.001
97	0.001	0.003	0.003	0.006	0.007	0.009	0.009	0.010	0.009	0.010	0.009	0.010	0.008	0.009	0.006	0.004	0.001	0.000	0.000	0.000
98	0.007	0.006	0.007	0.006	0.008	0.008	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.007	0.006	0.005	0.004	0.002	0.001	0.001

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 19.77 SEC
HREF = 0.206E-01

GROUP 18

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	0.116	0.115	0.116	0.118	0.121	0.123	0.124	0.128	0.134	0.141	0.143	0.142	0.141	0.143	0.147	0.157	0.167	0.163	0.121	0.063
65	0.117	0.117	0.116	0.116	0.116	0.117	0.118	0.121	0.124	0.126	0.126	0.127	0.129	0.133	0.136	0.138	0.143	0.152	0.150	0.118
66	0.117	0.117	0.117	0.116	0.116	0.115	0.116	0.118	0.119	0.118	0.117	0.116	0.117	0.117	0.120	0.125	0.131	0.137	0.143	0.143
67	0.124	0.124	0.124	0.126	0.128	0.129	0.130	0.132	0.132	0.132	0.129	0.128	0.125	0.125	0.124	0.127	0.130	0.134	0.139	0.145
68	0.138	0.142	0.144	0.143	0.140	0.141	0.143	0.145	0.148	0.146	0.143	0.141	0.140	0.139	0.140	0.140	0.139	0.140	0.143	0.146
69	0.131	0.132	0.134	0.137	0.139	0.144	0.149	0.153	0.151	0.146	0.142	0.141	0.142	0.143	0.143	0.145	0.146	0.150	0.151	0.149
70	0.127	0.128	0.129	0.131	0.132	0.135	0.138	0.141	0.143	0.143	0.143	0.144	0.145	0.145	0.143	0.144	0.146	0.149	0.151	0.153
71	0.116	0.118	0.120	0.123	0.124	0.126	0.129	0.134	0.135	0.135	0.135	0.136	0.137	0.141	0.144	0.147	0.150	0.152	0.151	0.152
72	0.110	0.110	0.111	0.112	0.112	0.112	0.115	0.119	0.122	0.123	0.126	0.128	0.130	0.133	0.134	0.134	0.135	0.136	0.138	0.140
73	0.103	0.104	0.104	0.104	0.104	0.107	0.109	0.114	0.115	0.114	0.112	0.113	0.112	0.113	0.113	0.115	0.115	0.117	0.118	0.122
74	0.094	0.095	0.096	0.095	0.094	0.095	0.099	0.103	0.106	0.104	0.101	0.100	0.101	0.100	0.101	0.101	0.101	0.103	0.105	0.106
75	0.084	0.085	0.086	0.086	0.085	0.085	0.088	0.090	0.093	0.090	0.087	0.086	0.087	0.088	0.090	0.091	0.092	0.093	0.094
76	0.078	0.079	0.079	0.080	0.081	0.082	0.082	0.083	0.083	0.082	0.080	0.079	0.079	0.080	0.079	0.080	0.080	0.081	0.081	0.082
77	0.076	0.077	0.077	0.078	0.077	0.079	0.078	0.079	0.080	0.080	0.077	0.077	0.077	0.077	0.077	0.078	0.079	0.080	0.080	0.081
78	0.074	0.074	0.074	0.074	0.075	0.075	0.076	0.078	0.078	0.079	0.076	0.076	0.075	0.075	0.074	0.074	0.074	0.075	0.075	0.076
79	0.072	0.072	0.073	0.074	0.074	0.074	0.075	0.076	0.078	0.079	0.077	0.076	0.075	0.075	0.075	0.075	0.074	0.074	0.074	0.075
80	0.071	0.071	0.073	0.072	0.073	0.073	0.074	0.075	0.078	0.078	0.078	0.076	0.076	0.075	0.075	0.074	0.074	0.075	0.075	0.075
81	0.071	0.071	0.071	0.073	0.074	0.075	0.075	0.077	0.077	0.079	0.079	0.079	0.077	0.077	0.076	0.076	0.075	0.075	0.075	0.075
82	0.074	0.074	0.075	0.075	0.076	0.076	0.078	0.078	0.080	0.081	0.081	0.080	0.080	0.078	0.078	0.077	0.077	0.075	0.076	0.075
83	0.084	0.086	0.087	0.088	0.088	0.089	0.089	0.090	0.090	0.092	0.091	0.090	0.086	0.086	0.083	0.082	0.081	0.081	0.079	0.079
84	0.081	0.082	0.085	0.086	0.089	0.091	0.094	0.097	0.101	0.104	0.108	0.108	0.107	0.105	0.104	0.102	0.100	0.098	0.096	0.094
85	0.077	0.080	0.080	0.083	0.084	0.086	0.087	0.089	0.090	0.094	0.097	0.100	0.100	0.102	0.102	0.104	0.106	0.109	0.110	0.112
86	0.035	0.038	0.041	0.045	0.048	0.052	0.056	0.062	0.067	0.074	0.079	0.082	0.079	0.078	0.075	0.074	0.074	0.075	0.076	0.079
87	0.000	0.003	0.002	0.003	0.002	0.005	0.003	0.004	0.003	0.005	0.004	0.006	0.003	0.006	0.003	0.006	0.005	0.006	0.004	0.006
88	0.002	0.001	0.002	0.000	0.002	0.001	0.001	0.000	0.002	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
89	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.017	0.022	0.012	0.003	0.003	0.003	0.003	0.003	0.003
93	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.007	0.011	0.008	0.002	0.002	0.002	0.002	0.002	0.002
94	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
96	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
97	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
98	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 19.77 SEC
GROUP 18 HREF = 0.206E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.026	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65	0.066	0.028	0.010	0.005	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
66	0.125	0.080	0.037	0.013	0.005	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
67	0.150	0.144	0.108	0.058	0.022	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68	0.150	0.154	0.156	0.132	0.082	0.036	0.013	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
69	0.148	0.151	0.157	0.163	0.152	0.111	0.060	0.026	0.008	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
70	0.156	0.158	0.162	0.167	0.174	0.176	0.148	0.091	0.040	0.015	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
71	0.155	0.159	0.163	0.168	0.172	0.177	0.178	0.156	0.103	0.050	0.019	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
72	0.140	0.142	0.145	0.148	0.151	0.154	0.161	0.167	0.160	0.120	0.064	0.026	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73	0.124	0.127	0.129	0.131	0.134	0.140	0.147	0.155	0.161	0.160	0.129	0.076	0.033	0.011	0.000	0.000	0.000	0.000	0.000	0.000
74	0.109	0.111	0.115	0.117	0.121	0.128	0.134	0.140	0.147	0.155	0.157	0.137	0.089	0.042	0.015	0.003	0.003	0.003	0.003	0.003
75	0.096	0.098	0.102	0.105	0.108	0.112	0.116	0.119	0.124	0.131	0.139	0.144	0.136	0.102	0.055	0.021	0.005	0.005	0.005	0.005
76	0.083	0.085	0.087	0.090	0.093	0.097	0.100	0.104	0.108	0.112	0.117	0.122	0.126	0.127	0.107	0.067	0.028	0.009	0.009	0.009
77	0.081	0.082	0.082	0.083	0.083	0.085	0.086	0.089	0.092	0.095	0.097	0.102	0.107	0.113	0.117	0.110	0.080	0.042	0.014	0.002
78	0.076	0.078	0.080	0.082	0.083	0.085	0.087	0.088	0.089	0.091	0.092	0.095	0.097	0.101	0.105	0.108	0.106	0.088	0.053	0.023
79	0.076	0.077	0.077	0.078	0.078	0.080	0.081	0.084	0.086	0.089	0.091	0.094	0.096	0.099	0.103	0.107	0.111	0.112	0.099	0.069
80	0.076	0.075	0.076	0.076	0.077	0.076	0.078	0.079	0.082	0.083	0.085	0.086	0.088	0.091	0.094	0.098	0.102	0.107	0.112	0.110
81	0.073	0.074	0.073	0.074	0.074	0.075	0.074	0.076	0.076	0.079	0.080	0.084	0.083	0.085	0.086	0.089	0.090	0.094	0.097	0.101
82	0.075	0.073	0.074	0.073	0.073	0.073	0.073	0.074	0.074	0.075	0.076	0.077	0.079	0.080	0.082	0.085	0.088	0.087	0.088	0.088
83	0.077	0.076	0.075	0.074	0.072	0.073	0.073	0.074	0.074	0.074	0.075	0.076	0.076	0.078	0.077	0.079	0.080	0.082	0.082	0.084
84	0.092	0.090	0.087	0.085	0.083	0.081	0.080	0.079	0.079	0.077	0.078	0.078	0.078	0.079	0.080	0.080	0.081	0.081	0.082	0.083
85	0.114	0.115	0.116	0.116	0.115	0.115	0.113	0.111	0.108	0.106	0.103	0.102	0.101	0.101	0.100	0.099	0.098	0.096	0.095	0.094
86	0.082	0.086	0.090	0.095	0.101	0.108	0.114	0.121	0.130	0.142	0.158	0.178	0.197	0.213	0.223	0.227	0.223	0.216	0.205	0.193
87	0.006	0.006	0.008	0.009	0.010	0.012	0.015	0.018	0.020	0.028	0.036	0.053	0.067	0.083	0.096	0.106	0.112	0.114	0.113	0.110
88	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.004	0.006	0.007	0.009	0.009	0.011	0.009
89	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.003	0.001	0.003	0.001	0.002
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.006	0.015	0.013	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
93	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.009	0.011	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
94	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
96	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
97	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
98	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREFR
IR SCAN TIME 19.77 SEC
HREFR = 0.206E-01

GROUP 18

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
66	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
67	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
69	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
70	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
71	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
72	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
75	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
76	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
77	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
78	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
79	0.034	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80	0.090	0.053	0.021	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
81	0.098	0.081	0.048	0.020	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
82	0.091	0.089	0.077	0.049	0.022	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
83	0.085	0.087	0.085	0.078	0.057	0.032	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
84	0.084	0.085	0.087	0.085	0.079	0.064	0.040	0.015	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
85	0.094	0.095	0.095	0.096	0.095	0.090	0.078	0.058	0.031	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
86	0.182	0.175	0.167	0.157	0.143	0.125	0.104	0.086	0.062	0.033	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
87	0.106	0.104	0.101	0.095	0.082	0.068	0.052	0.041	0.028	0.016	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
88	0.009	0.007	0.008	0.006	0.005	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
89	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
93	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
94	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
96	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
97	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
98	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 19.77 SEC
HREF = 0.206E-01

GROUP 18

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
66	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
67	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
69	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
70	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
71	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
72	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
75	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
76	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
77	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
78	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
79	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
81	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
82	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
83	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
84	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
85	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
86	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
87	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
88	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
89	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
93	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
94	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
96	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
97	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
98	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

GROUP 19

TIME,SEC		TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
439	43	593.892	593.936	593.936	593.936	0.000	591.671
439	44	593.979	594.110	593.936	594.066	0.000	591.671
439	45	594.110	594.197	593.936	594.153	0.000	591.671
439	46	594.241	594.284	593.936	594.241	0.000	591.671
439	47	594.328	594.415	593.936	594.328	0.000	591.671
439	48	594.371	594.415	593.936	594.328	0.000	591.671
439	48	594.415	594.458	593.936	594.371	0.000	591.671
439	49	594.458	594.502	593.936	594.415	0.000	591.671
439	50	594.502	594.545	593.936	594.458	0.000	591.671
439	51	594.545	594.632	593.936	594.458	0.000	591.671
439	52	594.589	594.632	593.936	594.502	0.000	591.671
439	53	594.632	594.676	593.936	594.545	0.000	591.671
439	54	594.676	594.719	593.936	594.545	0.000	591.671
439	55	594.719	594.763	593.936	594.589	0.000	591.671
439	56	594.719	594.763	593.936	594.589	0.000	591.671
439	57	594.763	594.806	593.936	594.632	0.000	591.671
439	58	594.763	594.806	593.936	594.632	0.000	591.671
439	59	594.806	594.850	593.936	594.632	0.000	591.671
440	0	594.806	594.850	593.936	594.676	0.000	591.671
440	1	594.850	594.850	593.936	594.676	0.000	591.671
440	2	594.850	594.894	593.936	594.676	0.000	591.671
440	3	594.894	594.894	593.936	594.676	0.000	591.671
440	4	594.894	594.894	593.936	594.676	0.000	591.671
440	5	594.894	594.937	593.936	594.719	0.000	591.671
440	6	594.894	594.937	593.936	594.719	0.000	591.671
440	7	594.937	594.937	593.936	594.719	0.000	591.671
440	8	594.937	594.937	593.936	594.719	0.000	591.671
440	9	594.937	594.981	593.936	594.719	0.000	591.671
440	9	594.937	594.981	593.936	594.719	0.000	591.671
440	9	594.937	594.981	593.936	594.719	0.000	591.671
440	10	594.937	594.981	593.936	594.719	0.000	591.671
440	11	594.981	594.981	593.936	594.763	0.000	591.671
440	12	594.981	594.981	593.936	594.763	0.000	591.671
440	13	594.981	594.981	593.936	594.763	0.000	591.671

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

GROUP	* * * * TITLE TYPE	MODEL DESCRIPTION * * * * GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
19	RSI FORWARD	0.01	0.005	-10.11	40.11	0.053	4	39	30

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/F FT-1	HRFR BTU/FT2-SEC-R	INITIAL TEMP DEG R
7.94	210.83	1271.67	93.45	0.0227	3763.	0.204E-04	0.752E-07	0.102E+07	0.206E-01	537.7

IR CAMERA INFOPMATION

MOUNTING LOCATION	260
F STOP	1.8
LENS-DEG	15
SENSITIVITY	500
BLACK LEVEL VOLTAGE	1.3423
LINE SCAN PHI	90
MODEL EMISSIVITY	0.96
REF EMISSIVITY	0.94
WINDOW FACTOR	0.860

TIME RECORDS

LIFT OFF	0.00
CENTER LINE	1.99
IR SCAN TIME	25.58
DELTA TIME,SEC	24.46
PHOTO 1 TIME	440
PHOTO 2 TIME	0
PHOTO 3 TIME	0
PHOTO 4 TIME	0

REFERENCE TARGET INFORMATION

TCR5	500.47
TCR6	-228.49
POINT	0
LINE	-651

DIGITAL DATA AREA PRINTOUT LOCATION

LINE 29 THROUGH 98
POINT 1 THROUGH 110

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 19

IR SCAN TIME 24.46 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	1.026	1.028	1.028	1.021	1.027	1.027	1.026	1.027	1.027	1.028	1.024	1.018	1.024	1.028	1.026	1.023	1.030	1.026	1.027	1.023
30	1.027	1.028	1.028	1.027	1.026	1.023	1.023	1.023	1.024	1.026	1.024	1.026	1.026	1.026	1.026	1.026	1.024	1.026	1.023	1.024
31	1.028	1.028	1.026	1.026	1.024	1.024	1.027	1.026	1.026	1.024	1.026	1.024	1.027	1.026	1.027	1.024	1.024	1.020	1.020	1.017
32	1.028	1.026	1.027	1.027	1.026	1.026	1.024	1.026	1.024	1.026	1.026	1.026	1.023	1.021	1.020	1.020	1.018	1.018	1.017	1.020
33	1.027	1.028	1.030	1.026	1.024	1.024	1.026	1.024	1.024	1.023	1.021	1.018	1.018	1.015	1.017	1.017	1.017	1.018	1.021	1.020
34	1.027	1.027	1.027	1.024	1.026	1.026	1.023	1.017	1.018	1.015	1.018	1.014	1.017	1.018	1.018	1.018	1.021	1.021	1.023	1.024
35	1.026	1.024	1.024	1.015	1.018	1.011	1.017	1.011	1.017	1.012	1.018	1.012	1.018	1.015	1.021	1.021	1.024	1.021	1.021	1.018
36	1.023	1.018	1.018	1.015	1.017	1.015	1.017	1.015	1.018	1.018	1.021	1.020	1.021	1.020	1.021	1.020	1.020	1.011	1.011	0.994
37	1.017	1.017	1.018	1.015	1.018	1.015	1.020	1.018	1.021	1.018	1.020	1.020	1.023	1.018	1.017	1.007	1.002	0.994	0.992	0.986
38	1.015	1.017	1.015	1.017	1.015	1.017	1.018	1.018	1.018	1.018	1.018	1.014	1.009	1.002	0.994	0.988	0.986	0.986	0.986	0.982
39	1.018	1.020	1.018	1.017	1.018	1.017	1.021	1.020	1.018	1.012	1.007	0.997	0.994	0.986	0.986	0.984	0.988	0.986	0.988	0.984
40	1.020	1.018	1.020	1.020	1.020	1.020	1.017	1.012	1.002	0.995	0.988	0.988	0.988	0.988	0.984	0.986	0.986	0.988	0.988	0.986
41	1.021	1.023	1.024	1.020	1.015	1.006	1.001	0.990	0.992	0.988	0.988	0.988	0.988	0.988	0.988	0.990	0.990	0.986	0.988	0.986
42	1.024	1.023	1.017	1.001	0.997	0.984	0.988	0.982	0.990	0.982	0.988	0.982	0.990	0.986	0.988	0.988	0.992	0.988	0.990	0.988
43	1.017	1.006	0.999	0.990	0.992	0.988	0.992	0.988	0.992	0.988	0.988	0.986	0.988	0.988	0.992	0.986	0.994	0.986	0.990	0.984
44	1.001	0.997	0.995	0.992	0.995	0.992	0.994	0.992	0.994	0.992	0.992	0.990	0.994	0.992	0.994	0.992	0.997	0.995	1.002	1.009
45	1.001	0.999	1.001	0.995	0.997	0.995	0.997	0.995	0.997	0.995	0.997	0.995	0.997	0.995	0.999	0.997	1.004	1.020	1.071	1.119
46	1.004	0.999	1.002	0.997	0.999	0.999	0.995	1.001	0.999	1.001	1.001	1.002	1.001	1.001	1.002	1.001	1.009	1.038	1.116	1.192
47	1.004	1.004	1.006	1.004	1.006	1.002	1.006	1.002	1.006	1.002	1.006	1.004	1.004	1.002	1.006	1.006	1.014	1.044	1.123	1.192
48	1.004	1.006	1.004	1.006	1.004	1.006	1.002	1.004	1.002	1.004	1.004	1.006	1.005	1.006	1.006	1.007	1.014	1.056	1.138	1.201
49	1.007	1.007	1.007	1.002	1.004	1.002	1.007	1.001	1.009	1.001	1.006	1.006	1.007	1.006	1.009	1.009	1.020	1.074	1.155	1.206
50	1.006	1.004	1.007	1.004	1.007	1.004	1.004	1.002	1.006	1.004	1.007	1.002	1.007	1.002	1.009	1.006	1.026	1.086	1.168	1.209
51	1.002	1.002	1.004	1.002	1.002	1.001	1.004	1.002	1.002	1.001	1.002	1.001	1.004	1.004	1.007	1.006	1.034	1.108	1.178	1.210
52	0.997	0.994	0.999	0.994	0.997	0.995	0.995	0.994	0.997	0.995	0.999	0.994	0.997	0.995	1.002	1.002	1.043	1.121	1.181	1.207
53	0.990	0.990	0.986	0.984	0.982	0.984	0.984	0.984	0.982	0.980	0.984	0.986	0.986	0.986	0.988	0.997	1.043	1.129	1.183	1.207
54	0.982	0.980	0.980	0.978	0.978	0.978	0.978	0.978	0.980	0.978	0.978	0.980	0.982	0.982	0.984	0.992	1.052	1.136	1.186	1.205
55	0.980	0.978	0.976	0.978	0.978	0.978	0.976	0.978	0.976	0.979	0.980	0.980	0.982	0.984	0.984	0.995	1.057	1.141	1.186	1.205
56	0.982	0.986	0.982	0.967	0.978	0.967	0.978	0.969	0.980	0.980	0.982	0.980	0.980	0.980	0.986	1.001	1.072	1.148	1.187	1.202
57	0.984	0.982	0.980	0.980	0.974	0.980	0.980	0.982	0.980	0.982	0.980	0.982	0.978	0.984	0.982	1.015	1.094	1.164	1.191	1.204
58	0.984	0.984	0.980	0.982	0.982	0.984	0.984	0.986	0.984	0.984	0.984	0.984	0.986	0.988	0.994	1.033	1.114	1.171	1.194	1.205
59	0.988	0.984	0.982	0.984	0.984	0.990	0.986	0.988	0.988	0.988	0.986	0.990	0.990	0.994	1.002	1.052	1.134	1.179	1.195	1.204
60	0.988	0.986	0.984	0.984	0.984	0.986	0.986	0.988	0.988	0.990	0.990	0.992	0.994	0.999	1.009	1.070	1.145	1.183	1.197	1.207
61	0.984	0.984	0.984	0.990	0.984	0.982	0.982	0.986	0.986	0.990	0.992	0.995	0.995	0.999	1.011	1.079	1.151	1.184	1.197	1.206
62	0.982	0.978	0.982	0.976	0.980	0.982	0.982	0.984	0.988	0.988	0.992	0.994	0.997	1.002	1.021	1.091	1.157	1.183	1.197	1.204
63	0.974	0.974	0.969	0.972	0.967	0.974	0.972	0.976	0.980	0.980	0.982	0.986	0.990	0.999	1.020	1.096	1.156	1.181	1.191	1.199

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 19

IR SCAN TIME 24.46 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	1.027	1.021	1.027	1.020	1.024	1.017	1.020	1.015	1.017	1.015	1.018	1.014	1.020	1.014	1.020	1.020	1.021	1.021	1.023	1.024
30	1.023	1.023	1.020	1.020	1.017	1.017	1.017	1.018	1.018	1.021	1.021	1.021	1.021	1.023	1.024	1.026	1.026	1.028	1.021	1.024
31	1.018	1.015	1.018	1.018	1.020	1.018	1.021	1.020	1.023	1.023	1.027	1.027	1.028	1.026	1.026	1.020	1.017	1.014	1.011	1.007
32	1.020	1.020	1.020	1.020	1.021	1.026	1.024	1.027	1.026	1.026	1.021	1.020	1.014	1.012	1.006	1.004	0.997	0.992	0.986	0.982
33	1.021	1.020	1.021	1.023	1.026	1.024	1.020	1.015	1.011	1.006	1.002	0.995	0.992	0.982	0.980	0.974	0.978	0.974	0.980	0.976
34	1.024	1.026	1.020	1.015	1.012	1.006	1.001	0.994	0.988	0.980	0.980	0.974	0.976	0.976	0.978	0.976	0.978	0.976	0.976	0.974
35	1.015	1.009	1.004	0.995	0.988	0.980	0.978	0.978	0.980	0.978	0.980	0.978	0.978	0.976	0.980	0.980	0.980	0.978	0.978	0.978
36	0.994	0.980	0.984	0.976	0.982	0.974	0.980	0.976	0.982	0.974	0.980	0.974	0.980	0.980	0.980	0.980	0.982	0.978	0.980	0.980
37	0.984	0.982	0.984	0.982	0.984	0.976	0.984	0.982	0.984	0.980	0.982	0.980	0.984	0.984	0.984	0.972	0.984	0.972	0.984	0.972
38	0.982	0.982	0.984	0.984	0.982	0.984	0.982	0.984	0.984	0.984	0.982	0.982	0.984	0.982	0.982	0.982	0.982	0.982	0.984	0.984
39	0.986	0.984	0.990	0.986	0.986	0.984	0.988	0.986	0.988	0.984	0.986	0.984	0.988	0.968	0.990	0.986	0.986	0.984	0.988	0.986
40	0.984	0.986	0.984	0.990	0.988	0.988	0.986	0.988	0.986	0.990	0.988	0.990	0.986	0.988	0.988	0.990	0.988	0.988	0.986	0.988
41	0.988	0.990	0.990	0.992	0.990	0.988	0.990	0.988	0.992	0.990	0.992	0.988	0.988	0.988	0.990	0.988	0.992	0.988	0.990	0.986
42	0.990	0.990	0.990	0.990	0.994	0.992	0.994	0.990	0.992	0.990	0.992	0.990	0.994	0.990	0.994	0.990	0.990	0.990	0.992	0.988
43	0.990	0.986	0.994	0.990	0.995	0.990	0.995	0.988	0.994	0.988	0.992	0.992	0.995	0.995	0.995	0.994	0.994	0.988	0.994	0.992
44	1.015	1.012	1.014	1.009	1.009	1.002	1.004	0.999	1.001	0.999	0.999	0.997	1.001	0.994	0.999	0.992	0.995	0.990	0.995	0.990
45	1.144	1.151	1.149	1.139	1.126	1.109	1.093	1.070	1.051	1.031	1.018	1.011	1.009	1.004	1.007	1.004	1.004	1.001	1.002	0.999
46	1.235	1.257	1.272	1.285	1.297	1.303	1.299	1.285	1.258	1.216	1.166	1.117	1.077	1.047	1.023	1.017	1.012	1.002	1.006	1.007
47	1.230	1.249	1.264	1.280	1.297	1.314	1.333	1.348	1.359	1.360	1.345	1.316	1.277	1.228	1.170	1.112	1.061	1.028	1.018	1.012
48	1.232	1.249	1.261	1.272	1.285	1.299	1.313	1.327	1.339	1.350	1.356	1.353	1.351	1.358	1.347	1.288	1.198	1.115	1.057	1.030
49	1.231	1.246	1.260	1.270	1.281	1.291	1.302	1.310	1.318	1.328	1.338	1.346	1.349	1.353	1.364	1.363	1.311	1.221	1.138	1.078
50	1.230	1.240	1.250	1.259	1.271	1.281	1.291	1.297	1.304	1.312	1.322	1.333	1.343	1.350	1.354	1.360	1.367	1.330	1.242	1.153
51	1.225	1.236	1.245	1.253	1.261	1.269	1.277	1.285	1.292	1.295	1.298	1.302	1.312	1.323	1.334	1.340	1.348	1.361	1.344	1.266
52	1.221	1.229	1.238	1.245	1.255	1.263	1.270	1.276	1.280	1.281	1.283	1.287	1.292	1.299	1.310	1.322	1.333	1.340	1.353	1.354
53	1.218	1.225	1.233	1.241	1.248	1.257	1.265	1.272	1.278	1.282	1.281	1.281	1.283	1.290	1.298	1.308	1.322	1.337	1.348	1.358
54	1.216	1.222	1.229	1.236	1.245	1.253	1.260	1.266	1.271	1.274	1.278	1.281	1.283	1.285	1.289	1.295	1.305	1.317	1.334	1.354
55	1.214	1.222	1.227	1.233	1.239	1.247	1.253	1.259	1.264	1.267	1.268	1.269	1.271	1.276	1.281	1.285	1.289	1.295	1.303	1.316
56	1.211	1.217	1.223	1.229	1.238	1.246	1.253	1.259	1.262	1.262	1.261	1.262	1.263	1.264	1.268	1.274	1.281	1.287	1.291	1.297
57	1.209	1.216	1.220	1.226	1.234	1.242	1.249	1.256	1.261	1.264	1.263	1.262	1.263	1.267	1.268	1.270	1.272	1.277	1.284	1.292
58	1.211	1.216	1.221	1.228	1.234	1.242	1.248	1.254	1.258	1.259	1.258	1.262	1.266	1.270	1.268	1.269	1.271	1.274	1.277	1.283
59	1.210	1.214	1.219	1.226	1.233	1.241	1.248	1.253	1.258	1.259	1.258	1.259	1.264	1.268	1.268	1.272	1.276	1.277	1.275	1.280
60	1.212	1.217	1.221	1.227	1.231	1.239	1.245	1.252	1.256	1.258	1.258	1.262	1.266	1.268	1.266	1.268	1.273	1.277	1.280	1.282
61	1.211	1.215	1.220	1.227	1.233	1.241	1.247	1.252	1.256	1.255	1.255	1.258	1.263	1.267	1.269	1.271	1.271	1.271	1.274	1.280
62	1.211	1.215	1.221	1.224	1.231	1.236	1.243	1.250	1.257	1.258	1.258	1.259	1.263	1.265	1.268	1.270	1.274	1.274	1.275	1.278
63	1.206	1.208	1.213	1.220	1.225	1.233	1.239	1.247	1.253	1.255	1.256	1.260	1.266	1.270	1.272	1.272	1.273	1.276	1.276	1.279

222

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 19

IR SCAN TIME 24.46 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	1.028	1.027	1.026	1.021	1.023	1.021	1.021	1.020	1.018	1.012	1.011	1.007	1.006	1.002	1.002	0.999	1.001	0.995	0.997	0.992
30	1.018	1.018	1.011	1.014	1.006	1.009	1.001	1.004	0.992	0.992	0.982	0.984	0.980	0.982	0.980	0.980	0.980	0.978	0.978	0.976
31	1.006	1.001	0.995	0.988	0.980	0.978	0.980	0.978	0.978	0.976	0.978	0.976	0.974	0.974	0.976	0.969	0.976	0.972	0.976	0.969
32	0.978	0.978	0.976	0.978	0.980	0.980	0.978	0.974	0.974	0.976	0.974	0.976	0.976	0.976	0.980	0.978	0.974	0.972	0.974	0.976
33	0.978	0.978	0.978	0.978	0.978	0.974	0.976	0.976	0.976	0.976	0.978	0.976	0.976	0.972	0.974	0.972	0.974	0.974	0.976	0.974
34	0.978	0.976	0.978	0.974	0.978	0.978	0.976	0.974	0.978	0.976	0.978	0.976	0.976	0.972	0.974	0.974	0.976	0.974	0.976	0.972
35	0.976	0.978	0.982	0.980	0.978	0.978	0.978	0.978	0.980	0.978	0.980	0.976	0.976	0.976	0.978	0.976	0.978	0.974	0.976	0.972
36	0.982	0.980	0.980	0.978	0.982	0.980	0.982	0.978	0.980	0.982	0.980	0.980	0.980	0.978	0.980	0.980	0.980	0.980	0.980	0.974
37	0.986	0.972	0.984	0.974	0.982	0.969	0.982	0.974	0.982	0.969	0.982	0.980	0.982	0.980	0.980	0.978	0.982	0.980	0.980	0.978
38	0.980	0.982	0.982	0.984	0.984	0.982	0.980	0.980	0.984	0.982	0.980	0.978	0.980	0.982	0.976	0.982	0.972	0.980	0.974	0.980
39	0.986	0.982	0.984	0.984	0.986	0.984	0.986	0.982	0.986	0.984	0.986	0.982	0.984	0.982	0.986	0.984	0.982	0.980	0.982	0.980
40	0.988	0.990	0.986	0.986	0.984	0.986	0.988	0.988	0.986	0.984	0.984	0.986	0.986	0.986	0.984	0.984	0.982	0.984	0.982	0.986
41	0.988	0.988	0.990	0.988	0.990	0.990	0.988	0.986	0.988	0.986	0.988	0.986	0.988	0.982	0.986	0.984	0.988	0.984	0.988	0.986
42	0.992	0.990	0.990	0.988	0.988	0.986	0.990	0.988	0.992	0.988	0.988	0.986	0.988	0.984	0.986	0.984	0.990	0.988	0.988	0.984
43	0.994	0.992	0.994	0.990	0.994	0.986	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.986	0.988	0.988	0.988	0.986	0.988	0.986
44	0.995	0.992	0.997	0.988	0.994	0.986	0.992	0.988	0.994	0.992	0.995	0.992	0.994	0.990	0.992	0.988	0.992	0.990	0.992	0.990
45	1.001	0.997	1.001	0.999	1.001	0.997	0.999	0.995	0.997	0.997	0.999	0.994	0.997	0.994	0.997	0.986	0.995	0.988	0.995	0.990
46	1.006	1.006	1.004	1.007	1.004	1.004	1.002	1.001	0.999	1.001	1.001	0.999	1.002	1.001	1.001	0.999	0.999	0.999	0.999	0.999
47	1.014	1.011	1.012	1.007	1.007	1.004	1.009	1.006	1.007	1.004	1.006	1.002	1.004	1.001	1.004	1.002	1.006	1.002	1.004	1.001
48	1.017	1.015	1.011	1.012	1.007	1.009	1.007	1.009	1.007	1.006	1.004	1.006	1.004	1.004	1.004	1.004	1.004	1.004	1.001	1.004
49	1.044	1.023	1.018	1.012	1.014	1.011	1.012	1.007	1.009	1.006	1.009	1.007	1.009	1.004	1.006	1.004	1.007	1.004	1.006	1.004
50	1.091	1.055	1.036	1.021	1.018	1.014	1.012	1.011	1.011	1.009	1.011	1.009	1.011	1.007	1.007	1.006	1.007	1.007	1.007	1.004
51	1.171	1.093	1.054	1.028	1.021	1.009	1.012	1.007	1.009	1.007	1.009	1.006	1.007	1.004	1.007	1.006	1.006	1.002	1.006	1.002
52	1.300	1.203	1.116	1.055	1.028	1.014	1.009	1.004	1.004	0.997	1.001	0.995	1.001	0.995	0.999	0.992	0.999	0.995	1.001	0.995
53	1.361	1.311	1.208	1.114	1.054	1.027	1.009	1.001	0.994	0.994	0.990	0.992	0.986	0.988	0.986	0.988	0.988	0.988	0.988	0.994
54	1.367	1.363	1.317	1.223	1.128	1.061	1.030	1.009	0.999	0.988	0.990	0.984	0.988	0.984	0.984	0.984	0.984	0.984	0.990	0.992
55	1.336	1.362	1.375	1.350	1.269	1.165	1.083	1.039	1.015	1.002	0.992	0.990	0.986	0.986	0.982	0.982	0.982	0.986	0.990	0.995
56	1.306	1.319	1.344	1.375	1.380	1.320	1.213	1.117	1.055	1.023	1.009	0.995	0.990	0.988	0.986	0.984	0.986	0.988	0.994	0.994
57	1.297	1.302	1.311	1.330	1.365	1.399	1.370	1.269	1.157	1.079	1.034	1.012	0.997	0.992	0.988	0.988	0.988	0.990	0.994	0.995
58	1.289	1.298	1.304	1.310	1.320	1.346	1.391	1.396	1.311	1.187	1.093	1.042	1.012	1.001	0.994	0.994	0.992	0.994	0.994	0.999
59	1.285	1.290	1.297	1.308	1.316	1.322	1.335	1.362	1.353	1.264	1.146	1.068	1.026	1.011	0.997	0.997	0.990	0.997	0.990	0.995
60	1.285	1.289	1.294	1.299	1.307	1.317	1.327	1.334	1.340	1.312	1.224	1.123	1.052	1.023	1.009	1.002	0.999	0.997	0.995	0.994
61	1.285	1.291	1.295	1.299	1.302	1.308	1.317	1.329	1.340	1.340	1.311	1.235	1.136	1.064	1.026	1.012	1.002	1.001	0.997	0.995
62	1.281	1.284	1.290	1.299	1.306	1.310	1.315	1.323	1.331	1.339	1.347	1.332	1.267	1.167	1.085	1.035	1.017	1.004	1.001	0.997
63	1.283	1.287	1.290	1.292	1.296	1.307	1.318	1.327	1.329	1.331	1.336	1.343	1.347	1.315	1.227	1.128	1.057	1.024	1.007	1.002

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP COPP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 19

IR SCAN TIME 24.46 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.984	0.984	0.986	0.982	0.984	0.982	0.986	0.982	0.982	0.980	0.982	0.980	0.984	0.982	0.984	0.984	0.982	0.980	0.982	0.980
30	0.976	0.978	0.982	0.978	0.978	0.974	0.974	0.976	0.974	0.978	0.976	0.978	0.978	0.978	0.978	0.976	0.978	0.976	0.978	0.978
31	0.974	0.967	0.974	0.969	0.974	0.969	0.974	0.969	0.972	0.969	0.974	0.974	0.976	0.974	0.978	0.976	0.976	0.974	0.976	0.974
32	0.974	0.976	0.976	0.978	0.972	0.974	0.972	0.972	0.974	0.976	0.974	0.976	0.972	0.974	0.962	0.974	0.965	0.976	0.967	0.976
33	0.974	0.969	0.974	0.969	0.974	0.976	0.969	0.972	0.972	0.972	0.969	0.969	0.972	0.969	0.974	0.972	0.972	0.969	0.972	0.969
34	0.974	0.969	0.974	0.972	0.974	0.974	0.974	0.969	0.972	0.969	0.978	0.972	0.974	0.972	0.972	0.969	0.972	0.969	0.972	0.972
35	0.976	0.974	0.976	0.976	0.974	0.972	0.974	0.972	0.976	0.974	0.976	0.972	0.972	0.972	0.974	0.972	0.974	0.972	0.976	0.969
36	0.978	0.978	0.980	0.978	0.978	0.976	0.976	0.976	0.978	0.976	0.976	0.974	0.978	0.976	0.978	0.974	0.976	0.974	0.976	0.974
37	0.978	0.978	0.980	0.980	0.978	0.976	0.978	0.976	0.980	0.976	0.978	0.976	0.980	0.978	0.978	0.976	0.976	0.976	0.978	0.976
38	0.974	0.978	0.974	0.978	0.974	0.978	0.972	0.976	0.974	0.980	0.980	0.980	0.976	0.978	0.978	0.980	0.978	0.978	0.976	0.978
39	0.984	0.980	0.982	0.980	0.980	0.980	0.984	0.980	0.980	0.978	0.980	0.974	0.982	0.974	0.980	0.976	0.980	0.974	0.978	0.972
40	0.982	0.984	0.982	0.982	0.982	0.984	0.982	0.980	0.980	0.982	0.982	0.982	0.980	0.982	0.980	0.982	0.982	0.982	0.980	0.978
41	0.984	0.982	0.984	0.982	0.986	0.984	0.986	0.982	0.982	0.980	0.984	0.982	0.982	0.984	0.984	0.982	0.982	0.980	0.982	0.980
42	0.986	0.984	0.986	0.982	0.986	0.984	0.986	0.984	0.984	0.982	0.982	0.982	0.984	0.982	0.984	0.980	0.984	0.980	0.984	0.980
43	0.988	0.986	0.986	0.984	0.986	0.986	0.988	0.986	0.988	0.986	0.986	0.984	0.986	0.984	0.986	0.986	0.986	0.984	0.986	0.982
44	0.992	0.988	0.988	0.986	0.990	0.988	0.990	0.988	0.990	0.988	0.988	0.984	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.984
45	0.995	0.990	0.995	0.988	0.994	0.988	0.994	0.992	0.994	0.992	0.995	0.992	0.994	0.990	0.992	0.990	0.994	0.992	0.994	0.992
46	1.001	0.997	0.997	0.999	0.997	0.997	0.999	0.997	1.001	0.997	0.986	0.995	0.995	0.994	0.995	0.995	0.988	0.997	0.999	0.997
47	1.002	1.001	1.002	1.001	1.004	1.001	1.002	0.999	1.001	0.999	1.002	1.001	1.001	1.001	1.001	0.997	1.001	0.997	1.001	0.999
48	1.001	1.002	1.002	1.004	1.001	1.002	1.001	1.002	1.001	1.002	1.001	1.002	0.999	1.001	0.999	1.001	0.999	1.001	0.997	1.001
49	1.004	1.004	1.006	1.004	1.006	1.001	1.002	1.002	1.004	1.001	1.004	1.001	1.002	1.001	1.004	1.001	1.002	0.999	1.006	1.001
50	1.007	1.004	1.007	1.004	1.007	1.002	1.006	1.004	1.004	1.001	1.004	1.002	1.006	1.001	1.004	0.999	1.002	1.002	1.004	1.001
51	1.007	1.002	1.006	1.004	1.006	1.004	1.007	1.004	1.004	1.004	1.007	1.006	1.004	1.002	1.004	1.004	1.006	1.002	1.004	1.001
52	1.002	0.997	1.004	1.001	1.006	1.002	1.004	1.002	1.006	1.004	1.006	1.002	1.004	1.002	1.006	1.002	1.004	1.001	1.004	1.001
53	0.995	1.001	0.999	1.002	1.001	1.004	1.004	1.004	0.999	1.004	0.997	1.004	0.999	1.004	0.997	1.004	0.999	1.002	0.997	1.002
54	0.997	0.997	1.002	1.001	1.004	1.004	1.007	1.004	1.006	1.004	1.007	1.004	1.007	1.004	1.006	1.002	1.004	1.002	1.004	1.002
55	0.995	1.001	0.999	1.004	1.002	1.007	1.004	1.007	1.006	1.007	1.004	1.006	1.004	1.007	1.004	1.007	1.002	1.004	1.001	1.004
56	1.001	1.001	1.004	1.002	1.004	1.002	1.006	1.004	1.006	1.004	1.006	1.002	1.004	1.002	1.006	1.004	1.006	1.002	1.006	1.001
57	0.997	0.999	0.997	1.001	0.999	1.002	1.001	1.002	1.001	1.001	0.999	1.002	0.999	1.001	0.999	1.001	1.001	1.001	0.999	0.999
58	0.999	1.001	0.997	1.001	0.999	1.001	0.999	1.002	1.001	1.001	0.999	0.999	0.997	0.999	0.999	1.001	0.999	1.001	0.997	0.997
59	0.990	0.994	0.988	0.997	0.994	0.995	0.994	0.995	0.994	0.994	0.990	0.995	0.988	0.994	0.990	0.994	0.990	0.992	0.988	0.990
60	0.992	0.994	0.992	0.994	0.988	0.994	0.984	0.992	0.982	0.990	0.984	0.990	0.984	0.990	0.986	0.988	0.978	0.988	0.982	0.992
61	0.994	0.995	0.994	0.995	0.994	0.992	0.990	0.990	0.988	0.992	0.988	0.990	0.986	0.986	0.986	0.988	0.988	0.990	0.986	0.988
62	0.999	0.995	0.997	0.994	0.995	0.992	0.994	0.990	0.994	0.990	0.992	0.988	0.990	0.988	0.990	0.988	0.990	0.988	0.988	0.988
63	0.995	0.995	0.994	0.995	0.992	0.992	0.988	0.990	0.988	0.990	0.988	0.988	0.984	0.988	0.986	0.988	0.984	0.988	0.986	0.988

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 19

IR SCAN TIME 24.46 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.982	0.982	0.984	0.984	0.986	0.978	0.978	0.982	0.980	0.980	0.982	0.980	0.978	0.978	0.978	0.978	0.978	0.976	0.980	0.978
30	0.978	0.980	0.976	0.978	0.978	0.978	0.978	0.978	0.978	0.982	0.978	0.978	0.980	0.976	0.974	0.976	0.974	0.976	0.972	0.976
31	0.976	0.974	0.978	0.976	0.978	0.976	0.976	0.976	0.976	0.976	0.978	0.976	0.978	0.976	0.976	0.969	0.972	0.972	0.972	0.972
32	0.967	0.974	0.967	0.974	0.967	0.976	0.969	0.972	0.972	0.976	0.974	0.974	0.972	0.974	0.974	0.974	0.974	0.974	0.972	0.972
33	0.974	0.972	0.972	0.972	0.972	0.972	0.972	0.969	0.972	0.969	0.974	0.967	0.967	0.962	0.972	0.962	0.969	0.965	0.972	0.967
34	0.972	0.969	0.969	0.969	0.972	0.972	0.974	0.972	0.974	0.967	0.969	0.969	0.972	0.969	0.972	0.969	0.969	0.967	0.969	0.967
35	0.976	0.969	0.974	0.972	0.972	0.969	0.972	0.972	0.972	0.969	0.972	0.967	0.972	0.969	0.972	0.969	0.972	0.967	0.972	0.969
36	0.976	0.972	0.974	0.969	0.974	0.974	0.976	0.969	0.974	0.972	0.976	0.972	0.974	0.969	0.974	0.972	0.974	0.972	0.972	0.972
37	0.976	0.974	0.976	0.974	0.978	0.974	0.974	0.974	0.978	0.974	0.974	0.972	0.974	0.974	0.976	0.972	0.974	0.974	0.976	0.974
38	0.978	0.978	0.976	0.976	0.974	0.976	0.976	0.976	0.974	0.972	0.976	0.976	0.974	0.974	0.974	0.976	0.976	0.976	0.974	0.974
39	0.978	0.974	0.980	0.974	0.978	0.974	0.980	0.980	0.980	0.976	0.978	0.976	0.978	0.978	0.978	0.976	0.978	0.978	0.980	0.978
40	0.978	0.978	0.980	0.980	0.980	0.980	0.978	0.978	0.976	0.980	0.974	0.978	0.969	0.976	0.969	0.978	0.972	0.978	0.972	0.976
41	0.984	0.980	0.982	0.978	0.980	0.978	0.980	0.976	0.980	0.978	0.980	0.976	0.980	0.978	0.982	0.978	0.982	0.976	0.980	0.978
42	0.984	0.982	0.984	0.982	0.982	0.978	0.980	0.980	0.982	0.982	0.982	0.982	0.978	0.982	0.976	0.982	0.980	0.982	0.978
43	0.982	0.982	0.984	0.982	0.986	0.982	0.984	0.980	0.984	0.980	0.982	0.980	0.984	0.982	0.984	0.982	0.980	0.980	0.982	0.982
44	0.988	0.984	0.988	0.986	0.988	0.986	0.988	0.984	0.988	0.984	0.986	0.984	0.984	0.984	0.986	0.984	0.986	0.984	0.984	0.982
45	0.994	0.990	0.992	0.994	0.992	0.992	0.994	0.992	0.992	0.990	0.992	0.986	0.992	0.990	0.994	0.988	0.992	0.990	0.992	0.986
46	0.994	0.995	0.988	0.995	0.990	0.999	0.995	0.997	0.995	0.995	0.994	0.995	0.994	0.995	0.994	0.995	0.994	0.994	0.992	0.994
47	1.001	0.999	1.002	0.997	1.001	0.999	1.001	0.997	1.001	0.995	0.999	0.994	0.997	0.992	0.999	0.995	1.001	0.995	0.999	0.994
48	0.999	1.002	1.001	1.002	1.001	1.001	1.001	0.999	0.999	1.002	0.999	1.001	0.997	0.999	0.999	0.999	0.997	1.001	0.997	0.999
49	1.004	1.001	1.004	1.001	1.002	1.001	1.002	1.001	1.002	0.999	1.001	1.001	1.002	1.001	1.002	0.999	1.002	1.001	1.002	1.001
50	1.002	1.001	1.004	1.002	1.004	1.001	1.002	1.001	1.004	1.001	1.001	1.001	1.002	1.001	1.001	0.999	1.001	1.001	1.002	0.999
51	1.004	1.002	1.004	0.999	1.002	1.002	1.002	0.999	0.999	0.997	0.999	0.999	1.001	0.997	0.999	0.997	1.001	0.997	0.999	0.994
52	1.004	1.002	1.001	0.999	1.001	0.999	0.997	0.994	0.994	0.992	0.995	0.992	0.994	0.990	0.990	0.992	0.994	0.988	0.988	0.988
53	0.995	1.001	0.994	0.999	0.995	0.994	0.988	0.988	0.984	0.986	0.984	0.986	0.982	0.982	0.982	0.984	0.982	0.984	0.980	0.982
54	1.004	0.999	0.999	0.997	0.997	0.986	0.988	0.980	0.962	0.974	0.980	0.974	0.980	0.976	0.980	0.972	0.978	0.972	0.976	0.972
55	1.001	1.002	0.999	0.999	0.995	0.990	0.988	0.984	0.980	0.980	0.978	0.978	0.976	0.976	0.972	0.976	0.976	0.976	0.974	0.976
56	1.002	0.997	1.001	0.997	0.999	0.992	0.990	0.984	0.986	0.980	0.980	0.976	0.976	0.978	0.980	0.978	0.976	0.974	0.976	0.974
57	0.995	0.995	0.992	0.994	0.992	0.992	0.988	0.988	0.982	0.980	0.980	0.982	0.980	0.984	0.978	0.980	0.980	0.980	0.976	0.978
58	0.994	0.999	0.995	0.997	0.994	0.995	0.992	0.990	0.986	0.986	0.990	0.986	0.984	0.990	0.986	0.988	0.984	0.986	0.984	0.986
59	0.992	0.992	0.990	0.992	0.990	0.988	0.988	0.988	0.986	0.988	0.986	0.986	0.986	0.986	0.984	0.984	0.984	0.986	0.986	0.986
60	0.984	0.992	0.990	0.988	0.986	0.986	0.986	0.988	0.984	0.988	0.984	0.984	0.982	0.986	0.982	0.986	0.984	0.986	0.984	0.984
61	0.986	0.986	0.986	0.988	0.982	0.988	0.982	0.986	0.980	0.988	0.980	0.988	0.982	0.988	0.982	0.986	0.980	0.984	0.982	0.988
62	0.992	0.990	0.992	0.986	0.990	0.988	0.990	0.988	0.990	0.988	0.988	0.986	0.988	0.986	0.988	0.984	0.988	0.984	0.988	0.984
63	0.988	0.988	0.986	0.988	0.986	0.988	0.986	0.986	0.986	0.988	0.986	0.986	0.984	0.984	0.984	0.984	0.984	0.966	0.982	0.984

225

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 19

IR SCAN TIME 24.46 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.978	0.976	0.976	0.974	0.976	0.974	0.978	0.976	0.978	0.974
30	0.972	0.972	0.974	0.972	0.972	0.974	0.972	0.974	0.972	0.972
31	0.972	0.972	0.972	0.972	0.969	0.967	0.969	0.967	0.976	0.969
32	0.969	0.972	0.969	0.969	0.972	0.972	0.969	0.969	0.969	0.972
33	0.969	0.962	0.967	0.965	0.969	0.965	0.969	0.969	0.969	0.967
34	0.969	0.967	0.972	0.967	0.969	0.965	0.967	0.967	0.972	0.962
35	0.972	0.969	0.972	0.969	0.965	0.967	0.972	0.972	0.969	0.967
36	0.976	0.972	0.972	0.969	0.974	0.972	0.974	0.969	0.972	0.969
37	0.974	0.972	0.976	0.972	0.976	0.974	0.974	0.972	0.974	0.972
38	0.974	0.976	0.974	0.974	0.972	0.976	0.974	0.976	0.974	0.974
39	0.978	0.974	0.978	0.978	0.980	0.976	0.978	0.978	0.980	0.978
40	0.972	0.978	0.974	0.978	0.972	0.978	0.976	0.980	0.982	0.982
41	0.980	0.978	0.980	0.978	0.980	0.978	0.978	0.972	0.978	0.972
42	0.980	0.978	0.980	0.978	0.982	0.980	0.982	0.980	0.982	0.980
43	0.984	0.982	0.982	0.982	0.984	0.982	0.982	0.980	0.982	0.982
44	0.986	0.984	0.988	0.984	0.986	0.982	0.984	0.982	0.986	0.982
45	0.990	0.988	0.990	0.990	0.992	0.988	0.990	0.988	0.988	0.986
46	0.992	0.994	0.994	0.994	0.994	0.994	0.992	0.992	0.992	0.992
47	0.997	0.994	0.999	0.999	1.001	0.997	0.997	0.995	0.999	0.995
48	0.997	0.999	0.997	0.999	0.997	0.997	0.990	0.997	0.992	0.999
49	1.001	0.999	1.001	0.999	1.002	0.999	1.001	0.997	1.001	0.997
50	1.002	0.997	1.001	0.997	1.002	0.997	1.001	0.999	1.002	0.995
51	0.997	0.995	0.999	0.995	0.997	0.994	0.997	0.994	0.997	0.994
52	0.992	0.988	0.990	0.986	0.988	0.986	0.990	0.986	0.988	0.986
53	0.982	0.982	0.982	0.982	0.982	0.980	0.980	0.980	0.980	0.980
54	0.980	0.976	0.976	0.974	0.976	0.974	0.978	0.974	0.976	0.972
55	0.972	0.974	0.969	0.974	0.960	0.976	0.962	0.974	0.960	0.972
56	0.976	0.974	0.978	0.974	0.976	0.969	0.974	0.972	0.974	0.972
57	0.978	0.978	0.978	0.980	0.976	0.978	0.976	0.976	0.976	0.978
58	0.984	0.988	0.986	0.986	0.984	0.984	0.982	0.984	0.982	0.986
59	0.984	0.986	0.982	0.984	0.982	0.984	0.982	0.986	0.984	0.984
60	0.984	0.984	0.986	0.986	0.988	0.986	0.984	0.984	0.982	0.984
61	0.986	0.986	0.982	0.986	0.984	0.988	0.986	0.986	0.984	0.986
62	0.990	0.982	0.984	0.980	0.986	0.980	0.988	0.980	0.986	0.980
63	0.982	0.984	0.982	0.984	0.980	0.984	0.982	0.984	0.980	0.980

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 19

IR SCAN TIME 24.46 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.974	0.969	0.967	0.967	0.972	0.969	0.976	0.972	0.978	0.974	0.982	0.982	0.990	0.992	1.034	1.111	1.165	1.182	1.194	1.199
65	0.967	0.965	0.962	0.962	0.965	0.969	0.969	0.969	0.972	0.976	0.978	0.984	0.986	0.999	1.052	1.132	1.169	1.183	1.192	1.199
66	0.962	0.960	0.962	0.962	0.962	0.965	0.969	0.972	0.972	0.976	0.976	0.982	0.986	1.006	1.075	1.144	1.172	1.185	1.192	1.198
67	0.965	0.960	0.962	0.962	0.965	0.967	0.967	0.972	0.972	0.976	0.978	0.982	0.984	1.017	1.096	1.157	1.178	1.188	1.194	1.198
68	0.967	0.962	0.962	0.962	0.965	0.969	0.969	0.972	0.969	0.974	0.976	0.982	0.990	1.034	1.116	1.162	1.178	1.188	1.193	1.198
69	0.969	0.965	0.962	0.962	0.965	0.967	0.969	0.974	0.974	0.976	0.976	0.980	0.990	1.043	1.126	1.167	1.179	1.187	1.191	1.194
70	0.969	0.969	0.967	0.962	0.965	0.965	0.967	0.969	0.974	0.974	0.976	0.980	0.992	1.056	1.138	1.174	1.187	1.194	1.197	1.199
71	0.967	0.962	0.962	0.962	0.965	0.965	0.969	0.969	0.967	0.974	0.967	0.978	0.988	1.067	1.146	1.182	1.194	1.202	1.206	1.209
72	0.967	0.965	0.967	0.965	0.967	0.969	0.972	0.969	0.974	0.974	0.978	0.980	1.006	1.088	1.163	1.190	1.202	1.209	1.214	1.218
73	0.962	0.962	0.962	0.967	0.965	0.978	0.974	0.972	0.972	0.976	0.978	0.982	1.021	1.114	1.174	1.196	1.207	1.214	1.219	1.222
74	0.967	0.962	0.965	0.960	0.965	0.965	0.974	0.972	0.978	0.974	0.978	0.984	1.040	1.128	1.177	1.195	1.206	1.212	1.218	1.222
75	0.962	0.965	0.962	0.962	0.967	0.969	0.972	0.972	0.974	0.974	0.980	0.994	1.065	1.142	1.177	1.190	1.199	1.205	1.212	1.216
76	0.965	0.962	0.965	0.965	0.969	0.972	0.972	0.974	0.978	0.978	0.982	1.006	1.084	1.150	1.175	1.186	1.194	1.199	1.204	1.207
77	0.969	0.974	0.976	0.974	0.976	0.978	0.988	0.982	0.978	0.976	0.984	1.012	1.092	1.149	1.169	1.179	1.186	1.190	1.194	1.198
78	0.982	0.982	0.990	0.999	1.002	0.995	0.992	0.986	0.992	0.980	0.988	1.014	1.097	1.145	1.164	1.172	1.179	1.181	1.186	1.188
79	0.997	1.002	1.002	1.014	1.009	1.014	1.004	0.997	0.988	0.994	0.995	1.031	1.103	1.145	1.160	1.169	1.174	1.178	1.180	1.184
80	1.006	1.011	1.026	1.039	1.027	1.014	1.007	1.001	1.004	1.001	1.007	1.044	1.110	1.145	1.159	1.167	1.173	1.175	1.180	1.183
81	1.047	1.047	1.060	1.072	1.062	1.034	1.011	1.004	0.999	1.004	1.014	1.059	1.114	1.142	1.152	1.159	1.163	1.167	1.171	1.177
82	1.146	1.085	1.079	1.101	1.104	1.060	1.027	1.012	0.999	1.001	1.017	1.071	1.116	1.136	1.143	1.148	1.152	1.156	1.159	1.164
83	1.169	1.099	1.086	1.093	1.105	1.065	1.028	1.002	0.994	1.001	1.040	1.116	1.157	1.163	1.160	1.156	1.152	1.152	1.151	1.155
84	1.132	1.071	1.058	1.054	1.057	1.047	1.026	1.007	1.001	1.018	1.058	1.145	1.204	1.223	1.224	1.218	1.209	1.200	1.189	1.178
85	1.060	1.044	1.036	1.038	1.034	1.042	1.038	1.030	1.020	1.034	1.036	1.045	1.059	1.073	1.081	1.091	1.103	1.119	1.133	1.147
86	1.034	1.021	1.020	1.021	1.026	1.030	1.026	1.023	1.021	1.030	1.030	1.023	1.020	1.020	1.018	1.020	1.020	1.021	1.020	1.023
87	1.014	1.011	1.011	1.006	1.009	1.009	1.011	1.011	1.018	1.028	1.035	1.020	1.018	1.012	1.015	1.014	1.015	1.014	1.015	1.011
88	0.999	0.995	0.994	0.995	0.994	0.999	1.001	1.007	1.017	1.030	1.030	1.018	1.011	1.012	1.009	1.009	1.004	1.007	1.006	1.007
89	0.990	0.992	0.995	0.994	0.999	0.997	1.001	1.001	1.015	1.027	1.028	1.015	1.014	1.009	1.009	1.007	1.007	1.004	1.007	1.004
90	0.988	0.992	0.990	0.992	0.994	0.994	0.997	0.995	1.006	1.021	1.023	1.015	1.014	1.007	1.009	1.004	1.007	1.004	1.007	1.002
91	0.986	0.990	0.990	0.988	0.990	0.986	0.990	0.990	1.004	1.015	1.017	1.009	1.011	1.009	1.009	1.007	1.006	1.006	1.004	1.004
92	0.988	0.988	0.990	0.984	0.988	0.982	0.992	0.988	1.001	1.002	1.014	1.007	1.012	1.007	1.011	1.004	1.007	1.004	1.006	1.001
93	0.997	0.997	0.995	0.990	0.994	0.994	1.001	1.002	1.002	1.004	1.014	1.011	1.014	1.009	1.011	1.007	1.007	1.004	1.006	0.995
94	1.009	1.004	1.007	1.002	1.006	1.006	1.007	1.006	1.009	1.012	1.018	1.014	1.012	1.011	1.014	1.011	1.011	1.007	1.007	1.004
95	1.014	1.012	1.011	1.015	1.012	1.015	1.012	1.015	1.014	1.020	1.021	1.020	1.015	1.017	1.015	1.015	1.012	1.014	1.012	1.012
96	1.015	1.014	1.015	1.015	1.018	1.015	1.018	1.014	1.020	1.027	1.028	1.021	1.020	1.018	1.020	1.020	1.023	1.018	1.020	1.014
97	1.014	1.017	1.018	1.018	1.020	1.018	1.015	1.015	1.020	1.028	1.031	1.024	1.020	1.023	1.024	1.028	1.028	1.030	1.024	1.021
98	1.014	1.014	1.018	1.018	1.023	1.020	1.018	1.014	1.020	1.028	1.034	1.024	1.024	1.026	1.031	1.033	1.034	1.031	1.028	1.023

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 19

IR SCAN TIME 24.46 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	1.205	1.207	1.213	1.217	1.222	1.227	1.234	1.239	1.247	1.251	1.255	1.264	1.273	1.271	1.270	1.272	1.277	1.281	1.283	1.283
65	1.203	1.207	1.213	1.219	1.223	1.230	1.236	1.241	1.244	1.250	1.249	1.255	1.260	1.261	1.261	1.268	1.271	1.275	1.276	1.282
66	1.202	1.206	1.210	1.216	1.222	1.227	1.233	1.238	1.244	1.251	1.253	1.252	1.252	1.254	1.255	1.257	1.260	1.261	1.266	1.272
67	1.202	1.206	1.210	1.215	1.219	1.223	1.228	1.233	1.238	1.242	1.245	1.247	1.247	1.249	1.253	1.256	1.257	1.257	1.260	1.263
68	1.202	1.206	1.209	1.214	1.219	1.222	1.225	1.229	1.232	1.236	1.239	1.242	1.241	1.241	1.243	1.247	1.250	1.255	1.258	1.262
69	1.197	1.200	1.203	1.208	1.212	1.218	1.221	1.224	1.229	1.234	1.237	1.240	1.239	1.238	1.238	1.237	1.238	1.241	1.244	1.247
70	1.202	1.203	1.204	1.207	1.209	1.212	1.216	1.217	1.219	1.222	1.227	1.229	1.233	1.233	1.234	1.235	1.236	1.237	1.239	1.240
71	1.210	1.212	1.212	1.216	1.218	1.218	1.220	1.221	1.221	1.221	1.222	1.221	1.221	1.220	1.218	1.219	1.221	1.225	1.227	1.231
72	1.221	1.222	1.224	1.225	1.228	1.229	1.233	1.233	1.234	1.233	1.233	1.230	1.228	1.222	1.220	1.215	1.215	1.214	1.215	1.214
73	1.228	1.231	1.232	1.236	1.239	1.244	1.246	1.249	1.250	1.250	1.248	1.247	1.246	1.242	1.235	1.227	1.221	1.219	1.216	1.216
74	1.228	1.232	1.237	1.241	1.246	1.250	1.256	1.259	1.263	1.265	1.266	1.266	1.267	1.263	1.256	1.247	1.239	1.232	1.227	1.222
75	1.221	1.225	1.231	1.236	1.243	1.249	1.255	1.260	1.266	1.270	1.274	1.276	1.275	1.273	1.271	1.266	1.262	1.256	1.248	1.241
76	1.213	1.218	1.222	1.228	1.233	1.239	1.246	1.251	1.257	1.261	1.267	1.271	1.274	1.276	1.277	1.277	1.275	1.272	1.270	1.265
77	1.202	1.206	1.211	1.214	1.219	1.224	1.231	1.236	1.241	1.245	1.249	1.253	1.257	1.260	1.263	1.265	1.267	1.268	1.270	1.271
78	1.194	1.197	1.200	1.204	1.207	1.211	1.216	1.219	1.223	1.227	1.229	1.230	1.232	1.233	1.236	1.237	1.241	1.244	1.246	1.249
79	1.187	1.192	1.195	1.198	1.199	1.203	1.204	1.209	1.208	1.212	1.210	1.212	1.210	1.211	1.208	1.210	1.210	1.212	1.212	1.215
80	1.188	1.192	1.197	1.199	1.203	1.205	1.208	1.210	1.213	1.214	1.216	1.214	1.213	1.210	1.207	1.204	1.203	1.202	1.201	1.200
81	1.181	1.187	1.191	1.196	1.199	1.205	1.208	1.213	1.215	1.219	1.221	1.221	1.222	1.222	1.221	1.219	1.217	1.216	1.213	1.212
82	1.168	1.174	1.178	1.184	1.188	1.194	1.197	1.201	1.204	1.207	1.208	1.211	1.212	1.214	1.215	1.216	1.217	1.219	1.220	1.221
83	1.157	1.163	1.168	1.174	1.179	1.184	1.188	1.192	1.194	1.197	1.198	1.201	1.202	1.205	1.204	1.202	1.202	1.204	1.205	1.207
84	1.171	1.167	1.164	1.167	1.171	1.176	1.179	1.184	1.186	1.189	1.191	1.193	1.194	1.196	1.196	1.197	1.197	1.197	1.197	1.199
85	1.160	1.164	1.160	1.163	1.174	1.184	1.189	1.189	1.187	1.189	1.196	1.209	1.214	1.211	1.203	1.197	1.192	1.189	1.187	1.189
86	1.023	1.026	1.023	1.031	1.033	1.043	1.044	1.049	1.042	1.045	1.049	1.064	1.077	1.085	1.084	1.087	1.083	1.084	1.083	1.086
87	1.012	1.009	1.011	1.009	1.011	1.011	1.012	1.012	1.012	1.009	1.011	1.011	1.012	1.007	1.014	1.011	1.012	1.009	1.011	1.009
88	1.001	1.006	1.002	1.004	1.001	1.004	1.002	1.006	1.006	1.007	1.006	1.007	1.004	1.004	1.002	1.006	1.007	1.006	1.002	1.004
89	1.004	0.999	1.002	0.999	1.001	1.001	1.001	0.999	1.001	1.001	1.004	1.002	1.006	1.001	1.002	0.997	1.002	1.001	1.002	0.999
90	1.004	1.001	1.002	1.001	1.001	0.999	1.001	0.997	1.001	1.001	1.002	0.999	1.002	1.001	1.002	1.001	1.002	0.999	1.001	1.001
91	1.004	1.002	1.002	1.001	1.002	0.997	0.999	0.997	1.001	1.001	1.004	1.021	1.057	1.055	1.028	1.006	1.001	1.001	1.002	0.999
92	1.002	1.001	1.002	0.999	1.002	0.994	0.999	0.995	1.001	0.997	1.002	1.023	1.068	1.070	1.039	1.011	1.002	0.999	1.001	0.999
93	1.004	0.995	1.004	0.994	1.001	0.988	0.999	0.990	0.997	0.990	0.997	0.990	1.001	0.995	1.002	0.997	0.999	0.995	1.001	0.999
94	1.007	1.006	1.007	1.002	1.002	0.995	0.999	0.995	0.999	0.995	0.997	0.994	0.997	0.994	0.999	0.997	0.999	0.994	0.997	0.994
95	1.009	1.012	1.007	1.006	1.004	1.006	1.002	1.004	0.999	0.999	0.995	0.999	0.997	0.999	1.001	1.002	1.001	1.001	1.001	1.001
96	1.014	1.009	1.012	1.009	1.011	1.006	1.004	1.001	1.002	1.001	1.004	0.999	1.002	0.997	1.001	0.997	1.002	0.999	1.004	1.002
97	1.015	1.015	1.012	1.012	1.011	1.011	1.007	1.009	1.007	1.007	1.004	1.004	1.001	1.002	1.001	1.002	1.002	1.004	1.002	1.004
98	1.024	1.023	1.021	1.020	1.020	1.017	1.018	1.018	1.020	1.017	1.017	1.012	1.011	1.006	1.004	1.004	1.007	1.007	1.012	1.011

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 19

IR SCAN TIME 24.46 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	1.283	1.285	1.288	1.294	1.299	1.304	1.310	1.316	1.323	1.328	1.332	1.335	1.341	1.349	1.337	1.268	1.162	1.075	1.034	1.011
65	1.285	1.289	1.288	1.290	1.294	1.300	1.307	1.311	1.312	1.313	1.318	1.329	1.339	1.347	1.354	1.340	1.268	1.160	1.076	1.031
66	1.276	1.279	1.282	1.287	1.292	1.297	1.300	1.303	1.304	1.306	1.308	1.313	1.320	1.334	1.349	1.361	1.354	1.297	1.190	1.096
67	1.264	1.267	1.272	1.278	1.284	1.290	1.297	1.300	1.300	1.300	1.301	1.305	1.310	1.319	1.328	1.342	1.360	1.367	1.325	1.222
68	1.266	1.268	1.266	1.268	1.274	1.280	1.284	1.287	1.287	1.291	1.295	1.301	1.308	1.314	1.323	1.333	1.341	1.353	1.365	1.338
69	1.251	1.258	1.262	1.267	1.273	1.280	1.282	1.278	1.276	1.279	1.284	1.289	1.297	1.308	1.321	1.330	1.333	1.339	1.348	1.354
70	1.243	1.246	1.248	1.253	1.259	1.266	1.272	1.272	1.272	1.272	1.276	1.280	1.286	1.293	1.299	1.304	1.311	1.318	1.326	1.334
71	1.233	1.237	1.239	1.240	1.242	1.247	1.253	1.253	1.252	1.256	1.262	1.269	1.274	1.278	1.281	1.285	1.288	1.294	1.301	1.310
72	1.217	1.218	1.220	1.221	1.225	1.230	1.237	1.236	1.236	1.237	1.240	1.243	1.246	1.250	1.256	1.263	1.273	1.279	1.288	1.298
73	1.215	1.211	1.208	1.208	1.209	1.214	1.221	1.220	1.218	1.218	1.221	1.222	1.226	1.231	1.234	1.242	1.247	1.255	1.263	1.272
74	1.220	1.213	1.208	1.204	1.207	1.213	1.223	1.224	1.216	1.208	1.208	1.207	1.210	1.214	1.219	1.223	1.229	1.234	1.241	1.248
75	1.234	1.229	1.221	1.213	1.208	1.207	1.210	1.208	1.203	1.200	1.202	1.204	1.207	1.208	1.210	1.211	1.213	1.215	1.221	1.226
76	1.260	1.255	1.248	1.241	1.234	1.226	1.221	1.212	1.202	1.195	1.194	1.194	1.195	1.197	1.201	1.204	1.207	1.210	1.214	1.217
77	1.272	1.271	1.269	1.265	1.260	1.254	1.249	1.241	1.229	1.215	1.205	1.197	1.193	1.190	1.192	1.192	1.196	1.199	1.204	1.207
78	1.252	1.255	1.257	1.258	1.260	1.263	1.266	1.266	1.260	1.249	1.239	1.227	1.216	1.204	1.195	1.189	1.186	1.186	1.189	1.193
79	1.217	1.219	1.222	1.226	1.229	1.233	1.238	1.245	1.247	1.248	1.247	1.246	1.242	1.236	1.227	1.218	1.207	1.200	1.195	1.192
80	1.200	1.199	1.201	1.200	1.202	1.201	1.207	1.209	1.214	1.213	1.216	1.217	1.221	1.221	1.227	1.227	1.229	1.227	1.221	1.214
81	1.210	1.210	1.207	1.207	1.206	1.207	1.207	1.209	1.208	1.205	1.202	1.200	1.199	1.200	1.202	1.205	1.208	1.212	1.214	1.217
82	1.222	1.223	1.223	1.224	1.223	1.223	1.223	1.225	1.226	1.225	1.221	1.219	1.216	1.213	1.210	1.207	1.205	1.204	1.202	1.202
83	1.209	1.211	1.213	1.216	1.220	1.223	1.228	1.234	1.240	1.242	1.241	1.239	1.237	1.236	1.236	1.234	1.233	1.229	1.223	1.219
84	1.198	1.199	1.199	1.201	1.202	1.203	1.206	1.211	1.217	1.222	1.226	1.230	1.234	1.240	1.245	1.249	1.253	1.256	1.256	1.255
85	1.192	1.196	1.199	1.202	1.204	1.205	1.206	1.206	1.209	1.210	1.208	1.207	1.205	1.207	1.209	1.215	1.223	1.234	1.246	1.260
86	1.093	1.105	1.114	1.125	1.134	1.144	1.155	1.170	1.185	1.194	1.193	1.186	1.178	1.173	1.169	1.170	1.173	1.178	1.184	1.193
87	1.012	1.007	1.015	1.014	1.017	1.014	1.020	1.018	1.026	1.024	1.027	1.023	1.027	1.021	1.028	1.028	1.033	1.033	1.042	1.043
88	1.002	1.004	1.006	1.009	1.007	1.011	1.009	1.011	1.012	1.015	1.011	1.011	1.009	1.011	1.007	1.009	1.009	1.012	1.006	1.014
89	1.002	0.999	1.004	1.002	1.004	1.002	1.004	1.002	1.006	1.004	1.007	1.007	1.007	1.004	1.004	1.006	1.007	1.006	1.009	1.004
90	1.002	0.999	1.001	0.997	1.002	1.001	1.004	0.999	1.004	1.002	1.006	1.004	1.004	1.001	1.006	1.002	1.007	1.004	1.006	1.002
91	1.001	0.997	0.999	0.997	1.002	0.999	1.002	1.002	1.007	1.011	1.018	1.015	1.011	1.006	1.007	1.004	1.004	1.002	1.006	1.002
92	1.001	0.995	1.001	0.997	1.001	1.001	1.001	1.001	1.011	1.036	1.064	1.055	1.031	1.012	1.009	1.004	1.006	1.002	1.006	1.004
93	1.002	0.999	1.001	0.999	1.004	1.001	1.004	1.001	1.006	1.007	1.020	1.020	1.014	1.007	1.009	1.007	1.009	1.006	1.007	1.007
94	0.999	0.994	1.001	0.995	1.002	1.001	1.006	0.999	1.004	0.997	1.006	1.002	1.007	1.006	1.007	1.002	1.007	1.007	1.011	1.011
95	0.999	1.001	1.001	1.004	1.002	1.004	1.004	1.007	1.004	1.007	1.006	1.007	1.006	1.007	1.006	1.009	1.004	1.011	1.006	1.012
96	1.006	1.004	1.002	1.001	1.006	1.006	1.009	1.007	1.011	1.007	1.009	1.006	1.009	1.009	1.011	1.009	1.014	1.011	1.014	1.012
97	1.002	1.004	1.002	1.006	1.006	1.011	1.009	1.011	1.009	1.011	1.011	1.012	1.011	1.014	1.012	1.014	1.012	1.015	1.014	1.018
98	1.012	1.009	1.009	1.007	1.011	1.011	1.014	1.012	1.015	1.014	1.017	1.014	1.015	1.017	1.018	1.017	1.020	1.021	1.023	1.023

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 19

IR SCAN TIME 24.46 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	1.004	0.997	0.997	0.994	0.994	0.992	0.992	0.988	0.990	0.988	0.990	0.986	0.988	0.986	0.986	0.988	0.992	0.986	0.988	0.986
65	1.007	1.001	0.994	0.994	0.988	0.988	0.986	0.984	0.984	0.984	0.982	0.982	0.984	0.984	0.984	0.982	0.980	0.982	0.982	0.984
66	1.035	1.015	0.999	0.992	0.986	0.984	0.982	0.982	0.980	0.978	0.978	0.978	0.978	0.980	0.976	0.978	0.978	0.978	0.980	0.978
67	1.117	1.049	1.015	0.999	0.980	0.982	0.969	0.976	0.969	0.976	0.967	0.974	0.965	0.972	0.967	0.974	0.967	0.969	0.965	0.972
68	1.244	1.131	1.056	1.018	0.995	0.980	0.976	0.974	0.969	0.972	0.969	0.969	0.967	0.965	0.967	0.967	0.965	0.967	0.965	0.965
69	1.330	1.248	1.143	1.067	1.023	0.999	0.978	0.974	0.965	0.965	0.965	0.967	0.962	0.965	0.960	0.962	0.957	0.962	0.960	0.962
70	1.342	1.332	1.273	1.168	1.081	1.027	1.002	0.980	0.974	0.969	0.967	0.962	0.962	0.957	0.960	0.960	0.960	0.960	0.960	0.957
71	1.321	1.333	1.334	1.293	1.198	1.103	1.042	1.011	0.984	0.972	0.962	0.960	0.957	0.960	0.960	0.960	0.960	0.957	0.957	0.957
72	1.308	1.315	1.324	1.331	1.307	1.228	1.128	1.054	1.015	0.990	0.976	0.965	0.965	0.962	0.962	0.957	0.957	0.957	0.957	0.957
73	1.280	1.291	1.305	1.321	1.333	1.319	1.250	1.146	1.067	1.020	0.995	0.974	0.967	0.962	0.962	0.960	0.957	0.957	0.960	0.957
74	1.256	1.265	1.279	1.291	1.309	1.323	1.321	1.262	1.164	1.076	1.031	0.992	0.978	0.955	0.962	0.950	0.962	0.960	0.960	0.957
75	1.234	1.243	1.253	1.261	1.271	1.285	1.302	1.307	1.268	1.177	1.087	1.030	1.002	0.980	0.969	0.960	0.962	0.957	0.957	0.952
76	1.222	1.226	1.233	1.239	1.246	1.255	1.267	1.279	1.283	1.249	1.168	1.083	1.034	1.004	0.986	0.972	0.967	0.962	0.962	0.957
77	1.212	1.217	1.223	1.229	1.236	1.238	1.243	1.251	1.261	1.265	1.243	1.174	1.092	1.035	1.011	0.990	0.976	0.967	0.965	0.962
78	1.199	1.204	1.210	1.214	1.221	1.229	1.238	1.244	1.252	1.258	1.260	1.244	1.188	1.107	1.045	1.009	0.999	0.982	0.976	0.965
79	1.191	1.192	1.195	1.201	1.207	1.211	1.216	1.223	1.232	1.244	1.257	1.267	1.262	1.219	1.142	1.071	1.024	1.004	0.988	0.984
80	1.208	1.199	1.195	1.194	1.198	1.202	1.206	1.207	1.213	1.219	1.227	1.239	1.253	1.264	1.246	1.183	1.103	1.042	1.011	0.994
81	1.218	1.220	1.214	1.209	1.203	1.203	1.202	1.205	1.204	1.208	1.212	1.219	1.223	1.235	1.241	1.222	1.156	1.081	1.027	1.002
82	1.203	1.206	1.210	1.213	1.214	1.216	1.216	1.215	1.213	1.210	1.210	1.215	1.216	1.218	1.221	1.220	1.197	1.140	1.070	1.026
83	1.212	1.207	1.206	1.207	1.209	1.212	1.215	1.219	1.222	1.223	1.221	1.221	1.218	1.214	1.213	1.213	1.208	1.185	1.134	1.073
84	1.252	1.247	1.242	1.238	1.234	1.229	1.225	1.222	1.223	1.225	1.227	1.231	1.233	1.233	1.231	1.227	1.222	1.213	1.187	1.139
85	1.271	1.280	1.285	1.288	1.287	1.285	1.283	1.281	1.276	1.270	1.263	1.257	1.251	1.249	1.249	1.251	1.253	1.254	1.246	1.222
86	1.204	1.219	1.238	1.260	1.287	1.318	1.352	1.383	1.407	1.421	1.426	1.421	1.410	1.394	1.377	1.361	1.347	1.336	1.321	1.299
87	1.049	1.052	1.061	1.071	1.088	1.115	1.157	1.208	1.260	1.304	1.338	1.358	1.367	1.368	1.361	1.354	1.349	1.344	1.321	1.278
88	1.009	1.015	1.011	1.018	1.014	1.023	1.021	1.031	1.031	1.043	1.051	1.064	1.071	1.082	1.083	1.085	1.086	1.089	1.087	1.080
89	1.009	1.007	1.011	1.009	1.012	1.012	1.017	1.017	1.021	1.024	1.033	1.034	1.039	1.038	1.040	1.035	1.035	1.028	1.031	1.026
90	1.007	1.006	1.009	1.006	1.007	1.006	1.009	1.009	1.012	1.011	1.020	1.021	1.028	1.028	1.030	1.027	1.028	1.024	1.026	1.021
91	1.007	1.004	1.006	1.006	1.011	1.009	1.012	1.009	1.009	1.009	1.017	1.020	1.023	1.021	1.027	1.026	1.026	1.017	1.017	1.014
92	1.007	1.004	1.007	1.007	1.012	1.028	1.052	1.051	1.034	1.020	1.018	1.018	1.023	1.021	1.027	1.024	1.027	1.021	1.020	1.017
93	1.011	1.009	1.011	1.009	1.012	1.018	1.035	1.035	1.028	1.020	1.021	1.020	1.027	1.028	1.031	1.031	1.033	1.028	1.026	1.021
94	1.012	1.011	1.014	1.012	1.015	1.015	1.020	1.015	1.018	1.020	1.024	1.028	1.034	1.035	1.039	1.039	1.042	1.038	1.038	1.035
95	1.007	1.015	1.011	1.018	1.015	1.020	1.017	1.021	1.018	1.023	1.023	1.034	1.038	1.044	1.047	1.051	1.050	1.049	1.047	1.047
96	1.017	1.017	1.020	1.020	1.024	1.024	1.027	1.026	1.027	1.027	1.033	1.036	1.047	1.049	1.055	1.055	1.057	1.051	1.054	1.050
97	1.018	1.023	1.021	1.026	1.026	1.027	1.028	1.031	1.031	1.034	1.036	1.044	1.052	1.058	1.062	1.067	1.061	1.060	1.058	1.058
98	1.024	1.026	1.030	1.028	1.033	1.033	1.035	1.031	1.034	1.031	1.042	1.048	1.057	1.062	1.072	1.071	1.069	1.066	1.062	1.061

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
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VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 19

IR SCAN TIME 24.46 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.990	0.988	0.988	0.984	0.988	0.988	0.990	0.986	0.986	0.984	0.988	0.984	0.988	0.982	0.986	0.984	0.986	0.984	0.984	0.980
65	0.982	0.980	0.982	0.982	0.984	0.982	0.980	0.980	0.980	0.982	0.978	0.978	0.976	0.980	0.980	0.980	0.978	0.976	0.976	0.978
66	0.978	0.978	0.978	0.978	0.976	0.976	0.974	0.976	0.976	0.976	0.974	0.974	0.974	0.974	0.974	0.974	0.972	0.972	0.969	0.972
67	0.969	0.974	0.972	0.972	0.969	0.972	0.969	0.972	0.972	0.969	0.967	0.967	0.965	0.969	0.969	0.969	0.967	0.965	0.965	0.967
68	0.962	0.962	0.957	0.965	0.957	0.965	0.957	0.962	0.952	0.962	0.957	0.962	0.957	0.962	0.950	0.960	0.952	0.962	0.962	0.962
69	0.962	0.960	0.960	0.960	0.960	0.960	0.957	0.960	0.957	0.960	0.957	0.957	0.955	0.957	0.955	0.957	0.957	0.960	0.957	0.957
70	0.960	0.955	0.957	0.955	0.960	0.955	0.957	0.955	0.957	0.955	0.957	0.952	0.957	0.955	0.955	0.955	0.955	0.952	0.955	0.952
71	0.955	0.957	0.952	0.955	0.955	0.960	0.955	0.955	0.952	0.952	0.952	0.955	0.952	0.955	0.952	0.955	0.950	0.952	0.950	0.952
72	0.957	0.957	0.960	0.955	0.957	0.952	0.955	0.952	0.957	0.955	0.957	0.952	0.955	0.950	0.952	0.950	0.952	0.950	0.955	0.950
73	0.957	0.957	0.960	0.952	0.955	0.955	0.955	0.955	0.957	0.955	0.957	0.952	0.952	0.950	0.955	0.952	0.955	0.952	0.955	0.955
74	0.957	0.955	0.955	0.955	0.957	0.955	0.957	0.952	0.955	0.952	0.955	0.952	0.955	0.955	0.952	0.952	0.952	0.950	0.952	0.950
75	0.957	0.952	0.957	0.950	0.957	0.944	0.955	0.950	0.957	0.950	0.955	0.947	0.955	0.947	0.955	0.955	0.957	0.952	0.955	0.950
76	0.960	0.960	0.960	0.957	0.960	0.955	0.957	0.952	0.960	0.955	0.957	0.952	0.957	0.952	0.957	0.952	0.955	0.947	0.955	0.947
77	0.960	0.957	0.960	0.957	0.960	0.955	0.957	0.952	0.960	0.955	0.957	0.952	0.957	0.955	0.957	0.952	0.955	0.952	0.957	0.952
78	0.962	0.960	0.960	0.960	0.960	0.957	0.960	0.957	0.960	0.955	0.957	0.952	0.957	0.955	0.957	0.952	0.955	0.952	0.957	0.955
79	0.974	0.967	0.960	0.960	0.957	0.957	0.957	0.957	0.955	0.957	0.955	0.957	0.957	0.957	0.950	0.955	0.952	0.955	0.955	0.955
80	0.990	0.984	0.980	0.972	0.969	0.960	0.960	0.960	0.960	0.957	0.957	0.952	0.957	0.955	0.957	0.955	0.957	0.952	0.957	0.952
81	0.992	0.990	0.988	0.984	0.978	0.976	0.967	0.967	0.962	0.960	0.957	0.957	0.955	0.957	0.957	0.957	0.957	0.955	0.952	0.955
82	0.994	0.992	0.984	0.988	0.980	0.984	0.980	0.982	0.974	0.976	0.969	0.967	0.957	0.962	0.960	0.960	0.955	0.960	0.952	0.957
83	1.027	1.004	0.995	0.994	0.990	0.988	0.986	0.988	0.986	0.988	0.984	0.988	0.982	0.980	0.974	0.976	0.957	0.969	0.952	0.962
84	1.080	1.036	1.014	1.004	0.995	0.992	0.990	0.990	0.988	0.988	0.986	0.988	0.988	0.986	0.988	0.990	0.986	0.984	0.980	0.976
85	1.175	1.114	1.058	1.026	1.004	0.995	0.992	0.990	0.988	0.988	0.986	0.988	0.990	0.994	0.994	0.999	0.997	0.999	0.995	0.994
86	1.265	1.216	1.146	1.079	1.028	1.007	0.995	0.992	0.990	0.992	0.990	0.994	0.992	0.994	0.992	0.997	0.997	1.001	1.001	1.002
87	1.226	1.184	1.139	1.084	1.044	1.017	1.009	1.004	1.002	1.001	1.002	1.001	1.001	0.997	1.001	0.999	1.004	1.001	1.007	1.004
88	1.064	1.054	1.042	1.031	1.018	1.015	1.009	1.009	1.004	1.004	1.002	1.002	1.001	1.002	1.002	1.002	1.002	1.002	1.002	1.004
89	1.033	1.026	1.024	1.015	1.014	1.006	1.009	1.004	1.009	1.004	1.007	1.004	1.004	1.004	1.004	1.002	1.006	1.001	1.006	1.001
90	1.020	1.017	1.015	1.011	1.011	1.007	1.009	1.011	1.014	1.011	1.011	1.007	1.009	1.002	1.007	1.001	1.006	0.999	1.007	1.001
91	1.015	1.014	1.012	1.009	1.011	1.009	1.014	1.012	1.014	1.012	1.015	1.014	1.014	1.009	1.011	1.009	1.011	1.007	1.009	1.004
92	1.018	1.015	1.017	1.012	1.015	1.012	1.017	1.015	1.017	1.014	1.018	1.015	1.018	1.014	1.015	1.014	1.015	1.012	1.014	1.009
93	1.024	1.021	1.024	1.024	1.024	1.023	1.026	1.024	1.026	1.023	1.026	1.024	1.026	1.023	1.024	1.021	1.023	1.020	1.023	1.018
94	1.035	1.034	1.036	1.036	1.039	1.036	1.036	1.034	1.038	1.035	1.036	1.035	1.036	1.034	1.035	1.034	1.034	1.031	1.031	1.028
95	1.047	1.049	1.048	1.049	1.049	1.051	1.051	1.051	1.050	1.050	1.049	1.049	1.050	1.050	1.050	1.050	1.048	1.047	1.047	1.047
96	1.055	1.054	1.058	1.056	1.059	1.057	1.061	1.059	1.064	1.066	1.068	1.067	1.070	1.068	1.069	1.069	1.072	1.072	1.074	1.072
97	1.057	1.060	1.060	1.062	1.066	1.070	1.074	1.079	1.083	1.087	1.089	1.093	1.093	1.097	1.095	1.099	1.098	1.102	1.099	1.099
98	1.062	1.065	1.070	1.070	1.075	1.079	1.084	1.087	1.093	1.097	1.103	1.104	1.107	1.108	1.108	1.106	1.108	1.108	1.108	1.108

231

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 19

IR SCAN TIME 24.46 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.986	0.982	0.984	0.982	0.984	0.982	0.984	0.984	0.984	0.980
65	0.978	0.978	0.976	0.978	0.976	0.978	0.974	0.976	0.974	0.976
66	0.969	0.972	0.967	0.969	0.969	0.972	0.969	0.969	0.969	0.969
67	0.967	0.967	0.965	0.965	0.962	0.962	0.965	0.965	0.965	0.962
68	0.962	0.962	0.960	0.960	0.957	0.960	0.960	0.960	0.960	0.962
69	0.938	0.952	0.947	0.957	0.944	0.957	0.944	0.957	0.944	0.955
70	0.952	0.952	0.952	0.952	0.957	0.952	0.952	0.947	0.950	0.952
71	0.947	0.952	0.952	0.952	0.950	0.947	0.947	0.947	0.947	0.952
72	0.955	0.950	0.952	0.947	0.950	0.950	0.950	0.950	0.950	0.950
73	0.952	0.947	0.950	0.947	0.952	0.950	0.952	0.950	0.952	0.944
74	0.952	0.950	0.952	0.947	0.950	0.947	0.952	0.947	0.952	0.947
75	0.955	0.952	0.952	0.952	0.952	0.950	0.952	0.947	0.952	0.950
76	0.955	0.944	0.952	0.941	0.952	0.947	0.955	0.944	0.952	0.944
77	0.955	0.950	0.955	0.952	0.955	0.950	0.952	0.950	0.952	0.952
78	0.957	0.952	0.952	0.952	0.957	0.952	0.952	0.947	0.952	0.950
79	0.952	0.952	0.952	0.957	0.952	0.952	0.950	0.955	0.952	0.955
80	0.957	0.955	0.957	0.952	0.957	0.952	0.957	0.955	0.957	0.950
81	0.952	0.957	0.952	0.955	0.952	0.952	0.950	0.955	0.952	0.952
82	0.950	0.955	0.950	0.955	0.952	0.955	0.952	0.955	0.950	0.952
83	0.950	0.957	0.944	0.955	0.944	0.955	0.944	0.955	0.944	0.950
84	0.974	0.969	0.967	0.965	0.960	0.960	0.955	0.952	0.952	0.952
85	0.992	0.990	0.986	0.986	0.982	0.978	0.972	0.967	0.965	0.962
86	0.999	1.001	1.001	1.001	0.997	0.994	0.988	0.986	0.984	0.980
87	1.006	1.001	1.004	1.004	1.002	1.001	1.001	0.994	0.994	0.990
88	1.001	1.001	1.001	1.002	1.001	1.001	0.997	0.997	0.994	0.995
89	1.004	1.002	1.006	1.002	1.006	1.002	1.004	1.002	1.001	0.999
90	1.004	0.999	1.004	1.002	1.011	1.004	1.006	1.001	1.006	1.002
91	1.006	1.006	1.007	1.006	1.011	1.009	1.011	1.009	1.011	1.007
92	1.011	1.009	1.012	1.011	1.012	1.011	1.015	1.014	1.018	1.017
93	1.020	1.017	1.018	1.017	1.020	1.020	1.023	1.021	1.026	1.024
94	1.028	1.028	1.030	1.028	1.033	1.030	1.034	1.033	1.038	1.035
95	1.047	1.049	1.050	1.050	1.051	1.052	1.051	1.054	1.054	1.055
96	1.074	1.074	1.076	1.076	1.078	1.078	1.079	1.078	1.079	1.077
97	1.096	1.098	1.096	1.099	1.096	1.099	1.097	1.101	1.102	1.102
98	1.108	1.108	1.109	1.109	1.111	1.111	1.114	1.120	1.130	1.136

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IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 24.46 SEC
HRFR = 0.206E-01

GROUP 19

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	0.011	0.012	0.012	0.009	0.011	0.011	0.011	0.011	0.011	0.012	0.010	0.008	0.010	0.012	0.011	0.009	0.012	0.011	0.011	0.009
30	0.011	0.012	0.012	0.011	0.011	0.009	0.009	0.009	0.010	0.011	0.010	0.011	0.011	0.011	0.011	0.011	0.010	0.011	0.009	0.010
31	0.012	0.012	0.011	0.011	0.010	0.010	0.011	0.011	0.011	0.010	0.011	0.010	0.011	0.011	0.011	0.010	0.010	0.008	0.008	0.007
32	0.012	0.011	0.011	0.011	0.011	0.011	0.010	0.011	0.010	0.011	0.011	0.011	0.009	0.009	0.008	0.008	0.008	0.008	0.007	0.008
33	0.011	0.012	0.012	0.011	0.010	0.010	0.011	0.010	0.010	0.009	0.009	0.008	0.008	0.006	0.007	0.007	0.007	0.008	0.009	0.008
34	0.011	0.011	0.011	0.010	0.011	0.011	0.009	0.007	0.008	0.006	0.008	0.006	0.007	0.008	0.008	0.008	0.009	0.009	0.009	0.010
35	0.011	0.010	0.010	0.006	0.008	0.004	0.007	0.004	0.007	0.005	0.008	0.005	0.008	0.006	0.009	0.009	0.010	0.009	0.009	0.008
36	0.009	0.008	0.008	0.006	0.007	0.006	0.007	0.006	0.008	0.008	0.009	0.008	0.009	0.008	0.009	0.008	0.008	0.004	0.004	0.004
37	0.007	0.007	0.008	0.006	0.008	0.006	0.008	0.008	0.009	0.008	0.008	0.008	0.009	0.008	0.007	0.003	0.001	0.001	0.001	0.001
38	0.006	0.007	0.006	0.007	0.006	0.007	0.008	0.008	0.008	0.008	0.008	0.006	0.004	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.008	0.008	0.008	0.007	0.008	0.007	0.009	0.008	0.008	0.005	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
40	0.008	0.008	0.008	0.008	0.008	0.008	0.007	0.005	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
41	0.009	0.009	0.010	0.008	0.006	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	0.010	0.009	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	0.007	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.004
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.008	0.031	0.053
46	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.000	0.004	0.016	0.052	0.091
47	0.002	0.002	0.002	0.002	0.002	0.001	0.002	0.001	0.002	0.001	0.002	0.002	0.002	0.001	0.002	0.002	0.006	0.019	0.055	0.091
48	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.002	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.006	0.024	0.063	0.096
49	0.003	0.003	0.003	0.001	0.002	0.001	0.003	0.000	0.004	0.000	0.002	0.002	0.003	0.002	0.004	0.004	0.008	0.032	0.072	0.099
50	0.002	0.002	0.003	0.002	0.003	0.002	0.002	0.001	0.002	0.002	0.003	0.001	0.003	0.001	0.004	0.002	0.011	0.038	0.078	0.101
51	0.001	0.001	0.002	0.001	0.001	0.000	0.002	0.001	0.001	0.000	0.001	0.000	0.002	0.002	0.003	0.002	0.014	0.048	0.084	0.101
52	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.010	0.054	0.085	0.100
53	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.018	0.058	0.086	0.099
54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.022	0.062	0.088	0.099
55	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.024	0.064	0.088	0.099
56	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.031	0.068	0.089	0.097
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.041	0.076	0.091	0.098
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.014	0.051	0.080	0.092	0.098
59	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.022	0.061	0.084	0.093	0.098
60	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.030	0.067	0.086	0.094	0.099
61	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.004	0.034	0.069	0.087	0.094	0.099
62	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.009	0.040	0.073	0.087	0.094	0.098
63	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008	0.042	0.072	0.085	0.091	0.095

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 24.46 SEC
HRFR = 0.206E-01

GROUP 19

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	0.011	0.009	0.011	0.008	0.010	0.007	0.008	0.006	0.007	0.006	0.008	0.006	0.008	0.006	0.008	0.008	0.009	0.009	0.009	0.010
30	0.009	0.009	0.008	0.008	0.007	0.007	0.007	0.008	0.008	0.009	0.009	0.009	0.009	0.009	0.010	0.011	0.011	0.012	0.009	0.010
31	0.008	0.006	0.008	0.008	0.008	0.008	0.009	0.008	0.008	0.009	0.011	0.011	0.012	0.011	0.011	0.008	0.007	0.006	0.004	0.003
32	0.008	0.008	0.008	0.008	0.009	0.011	0.010	0.011	0.011	0.011	0.009	0.008	0.006	0.005	0.002	0.002	0.002	0.002	0.002	0.002
33	0.009	0.008	0.009	0.009	0.011	0.010	0.008	0.006	0.004	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.010	0.011	0.008	0.006	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.006	0.004	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
36	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
40	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
41	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
44	0.006	0.005	0.006	0.004	0.004	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.066	0.069	0.068	0.063	0.057	0.048	0.041	0.030	0.022	0.013	0.008	0.004	0.004	0.002	0.003	0.002	0.002	0.000	0.001	0.001
46	0.116	0.129	0.139	0.147	0.155	0.159	0.157	0.147	0.130	0.105	0.077	0.053	0.033	0.020	0.009	0.007	0.005	0.001	0.002	0.003
47	0.113	0.124	0.134	0.144	0.155	0.166	0.180	0.191	0.199	0.200	0.189	0.168	0.142	0.112	0.080	0.050	0.026	0.012	0.008	0.005
48	0.114	0.124	0.132	0.139	0.147	0.156	0.166	0.176	0.185	0.193	0.197	0.195	0.193	0.199	0.190	0.149	0.095	0.051	0.024	0.012
49	0.114	0.123	0.131	0.137	0.144	0.151	0.158	0.164	0.169	0.176	0.184	0.189	0.192	0.194	0.203	0.202	0.164	0.108	0.063	0.034
50	0.113	0.119	0.125	0.131	0.138	0.144	0.151	0.155	0.160	0.165	0.172	0.180	0.188	0.193	0.195	0.200	0.205	0.178	0.120	0.070
51	0.110	0.116	0.122	0.127	0.132	0.137	0.142	0.147	0.152	0.154	0.155	0.159	0.166	0.173	0.180	0.185	0.191	0.201	0.188	0.135
52	0.107	0.112	0.117	0.122	0.128	0.133	0.138	0.141	0.144	0.145	0.146	0.148	0.152	0.157	0.164	0.172	0.180	0.185	0.195	0.195
53	0.106	0.110	0.114	0.119	0.124	0.129	0.134	0.139	0.143	0.145	0.144	0.144	0.146	0.151	0.156	0.163	0.172	0.183	0.191	0.199
54	0.105	0.108	0.112	0.116	0.122	0.127	0.131	0.135	0.138	0.140	0.143	0.144	0.146	0.147	0.150	0.154	0.160	0.168	0.181	0.195
55	0.104	0.108	0.111	0.115	0.119	0.123	0.127	0.131	0.134	0.136	0.136	0.137	0.138	0.141	0.144	0.147	0.150	0.153	0.159	0.168
56	0.102	0.105	0.109	0.113	0.118	0.122	0.127	0.130	0.133	0.132	0.132	0.132	0.133	0.134	0.136	0.140	0.144	0.149	0.151	0.155
57	0.101	0.105	0.107	0.111	0.115	0.120	0.124	0.129	0.132	0.134	0.133	0.133	0.133	0.136	0.136	0.137	0.139	0.142	0.147	0.152
58	0.102	0.105	0.107	0.112	0.116	0.120	0.124	0.127	0.130	0.131	0.130	0.132	0.135	0.137	0.136	0.137	0.138	0.140	0.142	0.146
59	0.101	0.104	0.107	0.111	0.115	0.119	0.124	0.127	0.130	0.130	0.130	0.131	0.133	0.136	0.136	0.139	0.141	0.142	0.141	0.144
60	0.103	0.105	0.108	0.111	0.114	0.118	0.122	0.126	0.129	0.130	0.130	0.132	0.135	0.136	0.135	0.136	0.139	0.142	0.144	0.145
61	0.102	0.104	0.107	0.111	0.115	0.119	0.123	0.126	0.128	0.128	0.128	0.130	0.133	0.136	0.137	0.138	0.138	0.138	0.140	0.144
62	0.102	0.104	0.107	0.110	0.114	0.116	0.121	0.125	0.129	0.130	0.130	0.130	0.133	0.134	0.136	0.138	0.140	0.140	0.141	0.143
63	0.098	0.100	0.103	0.107	0.110	0.114	0.118	0.123	0.127	0.128	0.128	0.131	0.135	0.138	0.139	0.139	0.140	0.141	0.141	0.143

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 24.46 SEC
HRFR = 0.206E-01

GROUP 19

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	0.012	0.011	0.011	0.009	0.009	0.009	0.009	0.008	0.008	0.005	0.004	0.003	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000
30	0.008	0.008	0.004	0.006	0.002	0.004	0.000	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
31	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
33	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
36	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
40	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
41	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
46	0.002	0.002	0.002	0.003	0.002	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
47	0.006	0.004	0.005	0.003	0.003	0.002	0.004	0.002	0.003	0.002	0.002	0.001	0.002	0.000	0.002	0.001	0.002	0.001	0.002	0.000
48	0.007	0.006	0.004	0.005	0.003	0.004	0.003	0.004	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.000	0.002
49	0.019	0.009	0.008	0.005	0.006	0.004	0.005	0.003	0.004	0.002	0.004	0.003	0.004	0.002	0.002	0.002	0.003	0.002	0.002	0.002
50	0.040	0.023	0.015	0.009	0.008	0.006	0.005	0.004	0.004	0.004	0.004	0.004	0.004	0.003	0.003	0.002	0.003	0.003	0.003	0.002
51	0.080	0.041	0.023	0.012	0.009	0.004	0.005	0.003	0.004	0.003	0.004	0.002	0.003	0.002	0.002	0.002	0.002	0.001	0.002	0.001
52	0.157	0.098	0.052	0.023	0.012	0.006	0.004	0.002	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
53	0.201	0.164	0.100	0.051	0.023	0.011	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54	0.205	0.202	0.169	0.109	0.058	0.026	0.012	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
55	0.182	0.201	0.212	0.193	0.137	0.077	0.036	0.016	0.006	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
56	0.161	0.170	0.188	0.212	0.216	0.170	0.103	0.053	0.023	0.009	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
57	0.155	0.159	0.164	0.178	0.204	0.231	0.208	0.137	0.072	0.034	0.014	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
58	0.150	0.156	0.160	0.164	0.171	0.190	0.224	0.228	0.165	0.088	0.041	0.018	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59	0.147	0.150	0.155	0.162	0.168	0.172	0.181	0.201	0.195	0.134	0.067	0.029	0.011	0.004	0.004	0.004	0.004	0.004	0.004	0.004
60	0.147	0.150	0.153	0.156	0.162	0.169	0.176	0.181	0.185	0.166	0.109	0.055	0.022	0.009	0.004	0.001	0.001	0.001	0.001	0.001
61	0.147	0.151	0.154	0.156	0.159	0.162	0.168	0.177	0.185	0.185	0.164	0.116	0.062	0.027	0.011	0.005	0.001	0.000	0.000	0.000
62	0.144	0.146	0.151	0.156	0.161	0.164	0.168	0.173	0.179	0.184	0.190	0.179	0.136	0.078	0.037	0.015	0.007	0.002	0.000	0.000
63	0.146	0.149	0.150	0.152	0.155	0.162	0.170	0.176	0.177	0.179	0.182	0.188	0.191	0.167	0.111	0.058	0.024	0.010	0.003	0.001

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 24.46 SEC
HRFR = 0.205E-01

GROUP 19

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
33	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
36	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
40	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
41	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
46	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
47	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.001	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48	0.000	0.001	0.001	0.002	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
49	0.002	0.002	0.002	0.002	0.002	0.000	0.001	0.001	0.002	0.000	0.002	0.000	0.001	0.000	0.002	0.000	0.001	0.001	0.002	0.000
50	0.003	0.002	0.003	0.002	0.003	0.001	0.002	0.002	0.002	0.000	0.002	0.001	0.002	0.000	0.002	0.002	0.001	0.001	0.002	0.000
51	0.003	0.001	0.002	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.003	0.002	0.002	0.001	0.002	0.002	0.002	0.001	0.002	0.000
52	0.001	0.001	0.002	0.000	0.002	0.001	0.002	0.001	0.002	0.002	0.002	0.001	0.002	0.001	0.002	0.001	0.002	0.000	0.002	0.000
53	0.000	0.000	0.000	0.001	0.000	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.001
54	0.004	0.004	0.001	0.000	0.002	0.002	0.003	0.002	0.002	0.002	0.003	0.002	0.003	0.002	0.002	0.001	0.002	0.001	0.002	0.001
55	0.001	0.000	0.000	0.002	0.001	0.003	0.002	0.003	0.002	0.003	0.002	0.002	0.002	0.003	0.002	0.003	0.001	0.002	0.000	0.002
56	0.000	0.000	0.002	0.001	0.002	0.001	0.002	0.002	0.002	0.002	0.002	0.001	0.002	0.001	0.002	0.002	0.002	0.001	0.002	0.000
57	0.005	0.005	0.005	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
60	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
61	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
62	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
63	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 24.46 SEC
GROUP 19 HRFR = 0.206E-01

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
33	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
36	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
40	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
41	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
46	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
47	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
49	0.002	0.000	0.002	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.000	0.000	0.001	0.000	0.001	0.001	0.001	0.000	0.001	0.000
50	0.001	0.000	0.002	0.001	0.002	0.000	0.001	0.000	0.002	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.001
51	0.002	0.001	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
53	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
55	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
56	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
60	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
61	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
62	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
63	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 24.46 SEC
HRFR = 0.206E-01

GROUP 19

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
33	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
36	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
40	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
41	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
46	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
47	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
49	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000
50	0.001	0.001	0.000	0.000	0.001	0.001	0.000	0.000	0.001	0.001
51	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
53	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
55	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
60	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
61	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
62	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
63	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 24.46 SEC
HRFR = 0.206E-01

GROUP 19

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.014	0.049	0.077	0.086	0.092	0.095
65	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.022	0.060	0.079	0.087	0.091	0.095
66	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.032	0.066	0.080	0.087	0.091	0.095
67	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.007	0.042	0.073	0.084	0.089	0.092	0.095
68	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.014	0.052	0.075	0.084	0.089	0.092	0.095
69	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.018	0.057	0.078	0.084	0.088	0.091	0.092
70	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.024	0.063	0.082	0.089	0.092	0.094	0.095
71	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.029	0.067	0.086	0.092	0.097	0.099	0.101
72	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.002	0.039	0.075	0.090	0.097	0.101	0.104	0.106
73	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.009	0.051	0.082	0.093	0.100	0.104	0.106	0.108
74	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.017	0.058	0.083	0.093	0.099	0.102	0.106	0.108
75	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.028	0.065	0.083	0.090	0.095	0.099	0.102	0.105
76	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.037	0.069	0.082	0.088	0.092	0.095	0.098	0.100
77	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.005	0.040	0.068	0.079	0.084	0.088	0.090	0.092	0.095
78	0.004	0.004	0.004	0.004	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.006	0.043	0.067	0.076	0.080	0.084	0.085	0.088	0.089
79	0.004	0.001	0.001	0.006	0.004	0.006	0.002	0.002	0.002	0.002	0.002	0.013	0.045	0.067	0.074	0.079	0.082	0.084	0.085	0.087
80	0.002	0.004	0.011	0.016	0.011	0.006	0.003	0.000	0.002	0.000	0.003	0.019	0.049	0.066	0.074	0.078	0.081	0.082	0.085	0.087
81	0.020	0.020	0.026	0.031	0.027	0.014	0.004	0.002	0.002	0.002	0.006	0.025	0.051	0.065	0.070	0.073	0.076	0.078	0.080	0.083
82	0.067	0.037	0.034	0.045	0.046	0.026	0.011	0.005	0.005	0.000	0.007	0.031	0.052	0.062	0.065	0.068	0.070	0.072	0.074	0.076
83	0.090	0.044	0.038	0.041	0.047	0.028	0.012	0.001	0.001	0.000	0.017	0.052	0.073	0.075	0.074	0.072	0.070	0.070	0.069	0.071
84	0.060	0.031	0.025	0.023	0.024	0.020	0.011	0.003	0.000	0.008	0.025	0.066	0.098	0.109	0.109	0.106	0.101	0.096	0.090	0.084
85	0.026	0.019	0.015	0.016	0.014	0.018	0.016	0.012	0.008	0.014	0.015	0.019	0.025	0.032	0.035	0.040	0.045	0.053	0.060	0.067
86	0.014	0.009	0.008	0.009	0.011	0.012	0.011	0.009	0.009	0.012	0.012	0.009	0.008	0.008	0.008	0.008	0.008	0.009	0.008	0.009
87	0.006	0.004	0.004	0.002	0.004	0.004	0.004	0.004	0.008	0.012	0.015	0.008	0.008	0.005	0.006	0.006	0.006	0.006	0.006	0.004
88	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.007	0.012	0.012	0.008	0.004	0.005	0.004	0.004	0.002	0.003	0.002	0.003
89	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.011	0.012	0.006	0.006	0.004	0.004	0.003	0.003	0.002	0.003	0.002
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.009	0.009	0.006	0.006	0.003	0.004	0.002	0.003	0.002	0.003	0.001
91	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.006	0.007	0.004	0.004	0.004	0.004	0.003	0.002	0.002	0.002	0.002
92	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.000	0.001	0.006	0.003	0.005	0.003	0.004	0.002	0.003	0.002	0.002	0.000
93	0.007	0.007	0.007	0.007	0.007	0.007	0.000	0.001	0.001	0.002	0.006	0.004	0.006	0.004	0.004	0.003	0.003	0.002	0.002	0.002
94	0.004	0.002	0.003	0.001	0.002	0.002	0.003	0.002	0.004	0.005	0.008	0.006	0.005	0.004	0.006	0.004	0.004	0.003	0.003	0.002
95	0.006	0.005	0.004	0.006	0.005	0.006	0.005	0.006	0.006	0.008	0.009	0.008	0.006	0.007	0.006	0.006	0.005	0.006	0.005	0.005
96	0.006	0.006	0.006	0.006	0.008	0.006	0.008	0.006	0.008	0.011	0.012	0.009	0.008	0.008	0.008	0.008	0.009	0.008	0.008	0.006
97	0.006	0.007	0.008	0.008	0.008	0.008	0.006	0.006	0.008	0.012	0.013	0.010	0.008	0.009	0.010	0.012	0.012	0.012	0.010	0.009
98	0.006	0.006	0.008	0.008	0.009	0.008	0.008	0.006	0.008	0.012	0.014	0.010	0.010	0.011	0.013	0.014	0.014	0.013	0.012	0.009

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 24.46 SEC
GROUP 19 HRFR = 0.206E-01

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	0.098	0.099	0.103	0.105	0.108	0.111	0.115	0.119	0.123	0.125	0.128	0.134	0.139	0.138	0.138	0.139	0.142	0.144	0.146	0.146
65	0.097	0.100	0.103	0.107	0.109	0.113	0.116	0.120	0.121	0.125	0.124	0.128	0.131	0.132	0.132	0.136	0.138	0.141	0.141	0.145
66	0.097	0.099	0.101	0.105	0.108	0.111	0.114	0.118	0.121	0.125	0.127	0.126	0.126	0.127	0.128	0.129	0.131	0.132	0.135	0.139
67	0.097	0.099	0.101	0.104	0.107	0.109	0.112	0.115	0.117	0.120	0.122	0.123	0.123	0.124	0.127	0.129	0.129	0.129	0.131	0.133
68	0.097	0.099	0.101	0.104	0.106	0.108	0.110	0.112	0.114	0.117	0.119	0.120	0.119	0.120	0.121	0.123	0.125	0.128	0.130	0.133
69	0.094	0.096	0.097	0.100	0.103	0.106	0.108	0.110	0.112	0.115	0.117	0.119	0.118	0.118	0.117	0.117	0.118	0.119	0.121	0.123
70	0.097	0.097	0.098	0.099	0.101	0.102	0.105	0.105	0.106	0.108	0.111	0.113	0.114	0.115	0.116	0.116	0.117	0.117	0.119	0.119
71	0.101	0.103	0.103	0.105	0.106	0.106	0.107	0.108	0.108	0.108	0.108	0.108	0.108	0.107	0.106	0.106	0.108	0.110	0.111	0.114
72	0.107	0.108	0.110	0.110	0.112	0.112	0.114	0.115	0.115	0.114	0.115	0.113	0.112	0.108	0.107	0.104	0.104	0.104	0.104	0.104
73	0.112	0.114	0.114	0.117	0.119	0.121	0.123	0.124	0.125	0.125	0.124	0.123	0.123	0.120	0.116	0.111	0.108	0.106	0.105	0.105
74	0.112	0.114	0.117	0.119	0.122	0.125	0.128	0.130	0.133	0.134	0.135	0.135	0.136	0.133	0.128	0.123	0.119	0.114	0.111	0.108
75	0.108	0.110	0.113	0.117	0.121	0.124	0.128	0.131	0.135	0.137	0.140	0.141	0.141	0.139	0.138	0.135	0.133	0.128	0.124	0.119
76	0.103	0.106	0.108	0.112	0.115	0.118	0.122	0.126	0.129	0.132	0.136	0.138	0.140	0.141	0.142	0.142	0.141	0.139	0.137	0.134
77	0.097	0.099	0.102	0.104	0.107	0.109	0.114	0.116	0.120	0.122	0.124	0.127	0.129	0.131	0.133	0.134	0.136	0.136	0.138	0.138
78	0.092	0.094	0.096	0.098	0.100	0.102	0.105	0.106	0.109	0.111	0.113	0.113	0.114	0.114	0.116	0.117	0.119	0.121	0.123	0.124
79	0.089	0.091	0.093	0.095	0.095	0.098	0.098	0.101	0.100	0.103	0.102	0.103	0.101	0.102	0.100	0.101	0.101	0.102	0.103	0.104
80	0.089	0.091	0.094	0.095	0.097	0.099	0.100	0.102	0.103	0.104	0.105	0.104	0.103	0.101	0.100	0.098	0.098	0.097	0.096	0.096
81	0.085	0.088	0.091	0.093	0.095	0.098	0.100	0.103	0.104	0.106	0.107	0.108	0.108	0.108	0.107	0.106	0.105	0.105	0.103	0.102
82	0.078	0.082	0.084	0.087	0.089	0.092	0.094	0.096	0.098	0.100	0.100	0.102	0.102	0.104	0.104	0.105	0.105	0.107	0.107	0.108
83	0.072	0.076	0.078	0.081	0.084	0.087	0.089	0.091	0.092	0.094	0.095	0.096	0.097	0.098	0.098	0.097	0.097	0.098	0.098	0.100
84	0.080	0.078	0.076	0.078	0.080	0.082	0.084	0.087	0.088	0.090	0.091	0.092	0.092	0.093	0.093	0.094	0.094	0.094	0.094	0.095
85	0.074	0.076	0.074	0.076	0.081	0.087	0.090	0.090	0.089	0.090	0.093	0.101	0.104	0.102	0.098	0.094	0.091	0.090	0.088	0.090
86	0.009	0.011	0.009	0.013	0.014	0.018	0.019	0.021	0.018	0.019	0.021	0.027	0.033	0.037	0.037	0.038	0.036	0.037	0.036	0.038
87	0.005	0.004	0.004	0.004	0.004	0.004	0.005	0.005	0.005	0.004	0.004	0.004	0.005	0.003	0.006	0.004	0.005	0.004	0.004	0.004
88	0.000	0.002	0.001	0.002	0.000	0.002	0.001	0.002	0.002	0.003	0.002	0.003	0.002	0.002	0.001	0.002	0.003	0.002	0.001	0.002
89	0.002	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.001	0.002	0.000	0.001	0.001	0.001	0.000	0.001	0.001
90	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.000	0.000
91	0.002	0.001	0.001	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.002	0.009	0.024	0.023	0.012	0.002	0.000	0.000	0.001	0.001
92	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.001	0.009	0.029	0.030	0.016	0.004	0.001	0.001	0.000	0.000
93	0.002	0.002	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000
94	0.003	0.002	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
95	0.004	0.005	0.003	0.002	0.002	0.002	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000
96	0.006	0.004	0.005	0.004	0.004	0.002	0.002	0.000	0.001	0.000	0.002	0.002	0.001	0.001	0.000	0.000	0.001	0.001	0.002	0.001
97	0.006	0.006	0.005	0.005	0.004	0.004	0.003	0.004	0.003	0.003	0.002	0.002	0.000	0.001	0.000	0.001	0.001	0.002	0.001	0.002
98	0.010	0.009	0.009	0.008	0.008	0.007	0.008	0.008	0.008	0.007	0.007	0.005	0.004	0.002	0.002	0.002	0.003	0.003	0.005	0.004

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 24.46 SEC
HRFR = 0.206E-01

GROUP 19

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	0.146	0.147	0.149	0.153	0.156	0.160	0.164	0.168	0.173	0.177	0.179	0.181	0.186	0.192	0.183	0.136	0.075	0.032	0.014	0.004
65	0.147	0.150	0.149	0.151	0.153	0.157	0.162	0.164	0.166	0.166	0.169	0.177	0.184	0.190	0.195	0.185	0.136	0.074	0.033	0.013
66	0.141	0.143	0.145	0.149	0.151	0.155	0.157	0.159	0.159	0.161	0.163	0.166	0.171	0.181	0.192	0.201	0.195	0.155	0.090	0.042
67	0.134	0.136	0.138	0.143	0.146	0.151	0.155	0.157	0.157	0.157	0.158	0.160	0.164	0.170	0.177	0.187	0.200	0.205	0.174	0.108
68	0.135	0.136	0.135	0.136	0.140	0.144	0.147	0.148	0.149	0.151	0.154	0.158	0.162	0.167	0.173	0.180	0.186	0.195	0.204	0.184
69	0.126	0.130	0.133	0.136	0.140	0.144	0.145	0.142	0.141	0.143	0.147	0.150	0.155	0.163	0.172	0.178	0.180	0.184	0.191	0.196
70	0.121	0.122	0.124	0.127	0.130	0.135	0.139	0.138	0.138	0.139	0.141	0.144	0.148	0.152	0.156	0.160	0.165	0.170	0.175	0.181
71	0.115	0.117	0.119	0.119	0.120	0.123	0.127	0.127	0.126	0.129	0.132	0.137	0.140	0.142	0.145	0.147	0.149	0.153	0.158	0.164
72	0.105	0.106	0.107	0.108	0.110	0.113	0.117	0.117	0.116	0.117	0.119	0.121	0.123	0.125	0.128	0.133	0.139	0.143	0.149	0.156
73	0.104	0.102	0.100	0.100	0.101	0.104	0.107	0.107	0.105	0.106	0.107	0.108	0.111	0.114	0.116	0.120	0.123	0.128	0.133	0.139
74	0.107	0.103	0.100	0.098	0.099	0.103	0.109	0.110	0.105	0.100	0.100	0.100	0.101	0.104	0.106	0.109	0.113	0.115	0.119	0.124
75	0.116	0.112	0.108	0.103	0.100	0.100	0.102	0.100	0.098	0.096	0.097	0.098	0.100	0.100	0.102	0.102	0.103	0.104	0.107	0.110
76	0.131	0.128	0.124	0.119	0.115	0.111	0.107	0.102	0.097	0.093	0.092	0.092	0.093	0.094	0.096	0.098	0.100	0.101	0.104	0.105
77	0.139	0.138	0.137	0.134	0.131	0.128	0.124	0.119	0.112	0.104	0.099	0.094	0.092	0.090	0.091	0.091	0.093	0.095	0.098	0.100
78	0.126	0.128	0.129	0.130	0.131	0.133	0.135	0.135	0.131	0.124	0.119	0.111	0.105	0.098	0.093	0.090	0.088	0.088	0.090	0.092
79	0.105	0.107	0.108	0.111	0.112	0.114	0.118	0.122	0.123	0.124	0.123	0.123	0.120	0.116	0.111	0.106	0.100	0.096	0.093	0.091
80	0.096	0.095	0.096	0.096	0.097	0.096	0.099	0.101	0.104	0.103	0.105	0.105	0.107	0.108	0.111	0.111	0.113	0.111	0.108	0.104
81	0.101	0.101	0.100	0.100	0.099	0.100	0.100	0.101	0.100	0.098	0.097	0.096	0.095	0.096	0.097	0.099	0.100	0.102	0.104	0.105
82	0.108	0.109	0.109	0.109	0.109	0.109	0.109	0.110	0.110	0.110	0.108	0.106	0.105	0.103	0.101	0.100	0.099	0.098	0.097	0.097
83	0.101	0.102	0.103	0.105	0.107	0.109	0.112	0.115	0.119	0.120	0.119	0.119	0.117	0.117	0.116	0.116	0.114	0.112	0.109	0.106
84	0.095	0.095	0.095	0.096	0.097	0.098	0.099	0.102	0.105	0.108	0.111	0.113	0.115	0.119	0.122	0.124	0.127	0.129	0.129	0.128
85	0.091	0.093	0.095	0.097	0.098	0.099	0.099	0.099	0.101	0.101	0.100	0.100	0.099	0.100	0.101	0.104	0.109	0.115	0.123	0.131
86	0.041	0.047	0.051	0.056	0.061	0.066	0.072	0.080	0.087	0.092	0.092	0.088	0.084	0.081	0.079	0.079	0.081	0.084	0.087	0.092
87	0.005	0.003	0.006	0.006	0.007	0.006	0.008	0.008	0.011	0.010	0.011	0.009	0.011	0.009	0.012	0.012	0.014	0.014	0.018	0.018
88	0.001	0.002	0.002	0.004	0.003	0.004	0.004	0.004	0.005	0.006	0.004	0.004	0.004	0.004	0.003	0.004	0.004	0.005	0.002	0.006
89	0.001	0.001	0.002	0.001	0.002	0.001	0.002	0.001	0.002	0.002	0.003	0.003	0.003	0.002	0.002	0.002	0.003	0.002	0.004	0.002
90	0.001	0.001	0.000	0.000	0.001	0.000	0.002	0.002	0.002	0.001	0.002	0.002	0.002	0.000	0.002	0.001	0.003	0.002	0.002	0.001
91	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.003	0.004	0.008	0.006	0.004	0.002	0.003	0.002	0.002	0.001	0.002	0.001
92	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.015	0.027	0.023	0.013	0.005	0.004	0.002	0.002	0.001	0.002	0.002
93	0.001	0.001	0.000	0.000	0.002	0.000	0.002	0.000	0.002	0.003	0.008	0.008	0.006	0.003	0.004	0.003	0.004	0.002	0.003	0.003
94	0.001	0.001	0.000	0.000	0.001	0.000	0.002	0.002	0.002	0.002	0.002	0.001	0.003	0.002	0.003	0.001	0.003	0.003	0.004	0.004
95	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.003	0.002	0.003	0.002	0.003	0.002	0.003	0.002	0.004	0.002	0.004	0.002	0.005
96	0.002	0.002	0.001	0.000	0.002	0.002	0.004	0.003	0.004	0.003	0.004	0.002	0.004	0.004	0.004	0.004	0.006	0.004	0.006	0.005
97	0.001	0.002	0.001	0.002	0.002	0.004	0.004	0.004	0.004	0.004	0.004	0.005	0.004	0.006	0.005	0.006	0.005	0.006	0.006	0.008
98	0.005	0.004	0.004	0.003	0.004	0.004	0.006	0.005	0.006	0.006	0.007	0.006	0.006	0.007	0.008	0.007	0.009	0.009	0.009	0.009

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREFR
IR SCAN TIME 24.46 SEC
GROUP 19 HREFR = 0.206E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
65	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
66	0.015	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
67	0.053	0.021	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.005	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
68	0.121	0.059	0.024	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
69	0.178	0.124	0.065	0.029	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
70	0.186	0.179	0.139	0.078	0.035	0.011	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
71	0.172	0.180	0.181	0.152	0.095	0.045	0.018	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
72	0.162	0.167	0.174	0.179	0.162	0.112	0.058	0.023	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
73	0.144	0.151	0.160	0.172	0.180	0.170	0.125	0.067	0.029	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
74	0.129	0.134	0.143	0.151	0.163	0.173	0.171	0.132	0.076	0.033	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
75	0.115	0.121	0.127	0.132	0.138	0.147	0.158	0.162	0.136	0.083	0.038	0.012	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
76	0.108	0.110	0.114	0.118	0.122	0.128	0.136	0.143	0.146	0.124	0.078	0.036	0.014	0.002	0.002	0.002	0.002	0.002	0.002	0.002
77	0.103	0.105	0.109	0.113	0.116	0.118	0.121	0.126	0.132	0.134	0.121	0.081	0.040	0.015	0.004	0.004	0.004	0.004	0.004	0.004
78	0.095	0.098	0.101	0.104	0.108	0.112	0.117	0.121	0.126	0.130	0.131	0.121	0.089	0.047	0.019	0.004	0.004	0.004	0.004	0.004
79	0.091	0.091	0.093	0.096	0.099	0.102	0.105	0.109	0.114	0.121	0.129	0.136	0.132	0.106	0.065	0.031	0.010	0.002	0.002	0.002
80	0.100	0.095	0.093	0.092	0.095	0.097	0.099	0.100	0.103	0.106	0.111	0.118	0.127	0.134	0.123	0.087	0.045	0.018	0.004	0.004
81	0.106	0.107	0.104	0.101	0.098	0.098	0.097	0.099	0.098	0.100	0.102	0.106	0.109	0.116	0.120	0.108	0.072	0.035	0.011	0.001
82	0.097	0.099	0.101	0.103	0.104	0.105	0.105	0.104	0.103	0.101	0.101	0.104	0.105	0.106	0.108	0.107	0.094	0.064	0.030	0.011
83	0.102	0.100	0.099	0.100	0.101	0.103	0.104	0.107	0.108	0.109	0.108	0.108	0.106	0.104	0.103	0.103	0.100	0.087	0.061	0.032
84	0.126	0.123	0.120	0.118	0.115	0.112	0.110	0.108	0.109	0.110	0.111	0.114	0.114	0.114	0.113	0.111	0.108	0.103	0.088	0.063
85	0.138	0.144	0.147	0.149	0.148	0.147	0.146	0.144	0.141	0.138	0.133	0.129	0.126	0.124	0.124	0.125	0.127	0.128	0.123	0.108
86	0.098	0.106	0.118	0.131	0.149	0.170	0.194	0.218	0.238	0.250	0.254	0.250	0.240	0.227	0.213	0.200	0.190	0.182	0.172	0.156
87	0.021	0.022	0.026	0.031	0.039	0.051	0.073	0.100	0.131	0.160	0.184	0.199	0.206	0.206	0.201	0.195	0.192	0.188	0.172	0.143
88	0.004	0.006	0.004	0.008	0.006	0.009	0.009	0.013	0.013	0.018	0.022	0.027	0.031	0.036	0.036	0.037	0.038	0.039	0.038	0.035
89	0.004	0.003	0.004	0.004	0.005	0.005	0.007	0.007	0.009	0.010	0.014	0.014	0.016	0.016	0.017	0.015	0.015	0.012	0.013	0.011
90	0.003	0.002	0.004	0.002	0.003	0.002	0.004	0.004	0.005	0.004	0.008	0.009	0.012	0.012	0.012	0.011	0.012	0.010	0.011	0.009
91	0.003	0.002	0.002	0.002	0.004	0.004	0.005	0.004	0.004	0.004	0.007	0.008	0.009	0.009	0.011	0.011	0.011	0.007	0.007	0.006
92	0.003	0.002	0.003	0.003	0.005	0.012	0.022	0.022	0.014	0.008	0.008	0.008	0.009	0.009	0.011	0.010	0.011	0.009	0.008	0.007
93	0.004	0.004	0.004	0.004	0.005	0.008	0.015	0.015	0.012	0.008	0.009	0.008	0.011	0.012	0.013	0.013	0.014	0.012	0.011	0.009
94	0.005	0.004	0.006	0.005	0.006	0.006	0.008	0.006	0.008	0.008	0.010	0.012	0.014	0.015	0.016	0.016	0.018	0.016	0.016	0.015
95	0.003	0.006	0.004	0.009	0.006	0.008	0.007	0.009	0.008	0.009	0.009	0.014	0.016	0.019	0.020	0.022	0.021	0.021	0.020	0.020
96	0.007	0.007	0.008	0.008	0.010	0.010	0.011	0.011	0.011	0.011	0.014	0.015	0.020	0.021	0.023	0.023	0.024	0.022	0.023	0.021
97	0.008	0.009	0.009	0.011	0.011	0.011	0.012	0.013	0.013	0.014	0.015	0.019	0.022	0.025	0.027	0.029	0.026	0.026	0.025	0.025
98	0.010	0.011	0.012	0.012	0.014	0.014	0.015	0.013	0.014	0.013	0.018	0.020	0.024	0.027	0.031	0.031	0.030	0.028	0.027	0.026

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 4,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 24.46 SEC
HRFR = 0.206E-01

GROUP 19

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
65	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
66	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
67	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
68	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
69	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
70	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
71	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
72	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
73	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
74	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
75	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
76	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
77	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
78	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
79	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
80	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
81	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
82	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
83	0.011	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
84	0.035	0.015	0.006	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
85	0.082	0.051	0.025	0.011	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
86	0.134	0.105	0.067	0.034	0.012	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.000	0.000	0.001
87	0.112	0.087	0.063	0.037	0.019	0.007	0.004	0.002	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.003	0.002
88	0.027	0.023	0.018	0.013	0.008	0.006	0.004	0.004	0.002	0.002	0.001	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.002
89	0.014	0.011	0.010	0.006	0.006	0.002	0.004	0.002	0.004	0.002	0.003	0.002	0.002	0.002	0.002	0.001	0.002	0.000	0.002	0.000
90	0.008	0.007	0.006	0.004	0.004	0.003	0.004	0.004	0.006	0.004	0.004	0.003	0.004	0.001	0.003	0.000	0.002	0.002	0.003	0.000
91	0.006	0.006	0.005	0.004	0.004	0.004	0.006	0.005	0.006	0.005	0.006	0.006	0.006	0.004	0.004	0.004	0.004	0.003	0.004	0.002
92	0.008	0.006	0.007	0.005	0.006	0.005	0.007	0.006	0.007	0.006	0.008	0.006	0.008	0.006	0.006	0.006	0.006	0.005	0.006	0.004
93	0.010	0.009	0.010	0.010	0.010	0.009	0.011	0.010	0.011	0.009	0.011	0.010	0.011	0.009	0.010	0.009	0.009	0.008	0.009	0.008
94	0.015	0.014	0.015	0.015	0.016	0.015	0.015	0.014	0.016	0.015	0.015	0.015	0.015	0.014	0.015	0.014	0.014	0.013	0.013	0.012
95	0.020	0.021	0.020	0.021	0.021	0.022	0.022	0.022	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.020	0.020	0.020	0.020
96	0.023	0.023	0.025	0.024	0.025	0.024	0.026	0.025	0.027	0.028	0.029	0.029	0.030	0.029	0.030	0.030	0.031	0.031	0.032	0.031
97	0.024	0.026	0.026	0.027	0.028	0.030	0.032	0.034	0.036	0.038	0.039	0.041	0.041	0.043	0.042	0.043	0.043	0.045	0.043	0.044
98	0.027	0.028	0.030	0.030	0.032	0.034	0.037	0.038	0.041	0.043	0.045	0.046	0.047	0.048	0.048	0.047	0.048	0.048	0.048	0.048

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 24.46 SEC
GROUP 19 HRFR = 0.206E-01

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
65	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
66	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
67	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
68	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
69	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
70	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
71	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
72	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
73	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
74	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
75	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
76	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
77	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
78	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
79	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
80	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
81	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
82	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
83	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
84	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
85	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
86	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
87	0.002	0.000	0.002	0.002	0.001	0.000	0.000	0.000	0.000	0.000
88	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000
89	0.002	0.001	0.002	0.001	0.002	0.001	0.002	0.001	0.000	0.000
90	0.002	0.002	0.002	0.001	0.004	0.002	0.002	0.000	0.002	0.001
91	0.002	0.002	0.003	0.002	0.004	0.004	0.004	0.004	0.004	0.003
92	0.004	0.004	0.005	0.004	0.005	0.004	0.006	0.006	0.008	0.007
93	0.008	0.007	0.008	0.007	0.008	0.008	0.009	0.009	0.011	0.010
94	0.012	0.012	0.012	0.012	0.014	0.012	0.014	0.014	0.016	0.015
95	0.020	0.021	0.021	0.021	0.022	0.022	0.022	0.023	0.023	0.023
96	0.032	0.032	0.033	0.033	0.034	0.034	0.034	0.034	0.034	0.033
97	0.042	0.043	0.042	0.043	0.042	0.043	0.043	0.045	0.045	0.045
98	0.048	0.048	0.048	0.048	0.049	0.049	0.051	0.054	0.059	0.062

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

GROUP 24 REF -1385. TEMP REF PLATE 500.837

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

GROUP 24

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
2033 22	593.892	593.936	593.936	593.936	0.000	591.671
2033 22	593.892	593.892	593.936	593.936	0.000	591.671
2033 22	593.892	593.892	593.936	593.936	0.000	591.671
2033 22	593.892	593.892	593.936	593.936	0.000	591.671
2033 22	593.892	593.892	593.936	593.936	0.000	591.671
2033 22	593.892	593.892	593.936	593.936	0.000	591.671
2033 22	593.892	593.892	593.936	593.936	0.000	591.671
2033 22	593.892	593.892	593.936	593.936	0.000	591.671
2033 22	593.892	593.892	593.936	593.936	0.000	591.671
2033 22	593.892	593.892	593.936	593.936	0.000	591.671
2033 22	593.892	593.892	593.936	593.936	0.000	591.671
2033 22	593.892	593.892	593.936	593.936	0.000	591.671
2033 22	593.892	593.892	593.936	593.936	0.000	591.671
2033 22	593.892	593.892	593.936	593.936	0.000	591.671
2033 22	593.892	593.892	593.936	593.936	0.000	591.671
2033 22	593.892	593.892	593.936	593.936	0.000	591.671
2033 22	593.892	593.892	593.936	593.936	0.000	591.671
2033 22	593.892	593.892	593.936	593.936	0.000	591.671
2033 22	593.892	593.892	593.936	593.936	0.000	591.671
2033 22	593.892	593.892	593.936	593.936	0.000	591.671
2033 22	593.892	593.892	593.936	593.936	0.000	591.671
2033 22	593.892	593.892	593.936	593.936	0.000	591.671
2033 22	593.892	593.892	593.936	593.936	0.000	591.671
2033 22	593.892	593.892	593.936	593.936	0.000	591.671
2033 22	593.892	593.892	593.936	593.936	0.000	591.671
2033 22	593.892	593.892	593.936	593.936	0.000	591.671
2033 22	593.892	593.892	593.936	593.936	0.000	591.671
2033 22	593.892	593.892	593.936	593.936	0.000	591.671
2033 22	593.892	593.892	593.936	593.936	0.000	591.671
2033 22	593.892	593.892	593.936	593.936	0.000	591.671
2033 22	593.892	593.892	593.936	593.936	0.000	591.671

NASA/RI OH90 TRANSITION TEST
V41B-P4A
APO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

GROUP	* * * * MODEL DESCRIPTION * * * *		ALPHA-SECTOR	ALPHA-MODEL	PCK1/2	HR	MIN	SEC
	TITLE TYPE	GAP HEIGHT	DEG	DEG				
24	RSI FORWARD	0.00 0.000	-0.05	30.05	0.053	20	32	26

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/F FT-1	HRFR BTU/FT2-SEC-R	INITIAL TEMP DEG R
8.00	800.97	1339.67	97.08	0.0820	3864.	0.709E-04	0.782E-07	0.351E+07	0.398E-01	523.7

IR CAMERA INFORMATION

MOUNTING LOCATION	260
F STOP	2.5
LENS-DEG	15
SENSITIVITY	1000.
BLACK LEVEL VOLTAGE	2.3787
LINE SCAN PHI	90
MODEL EMISSIVITY	0.96
REF EMISSIVITY	0.94
WINDOW FACTOR	0.840

TIME RECORDS

LIFT OFF	0.00
CENTER LINE	1.79
IR SCAN TIME	12.62
DELTA TIME,SEC	11.62
PHOTO 1 TIME	2033
PHOTO 2 TIME	0
PHOTO 3 TIME	0
PHOTO 4 TIME	0

REFERENCE TARGET INFORMATION

TCR5	1033.62
TCR6	-228.49

DIGITAL DATA AREA PRINTOUT LOCATION

LINE 29 THROUGH 98
POINT 1 THROUGH 110

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 24

IR SCAN TIME 11.62 SEC
INITIAL TEMP 523.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	1.226	1.232	1.234	1.233	1.233	1.232	1.230	1.231	1.232	1.234	1.233	1.231	1.233	1.237	1.236	1.236	1.238	1.240	1.241	1.239
30	1.234	1.236	1.236	1.234	1.231	1.230	1.231	1.233	1.235	1.236	1.237	1.239	1.238	1.239	1.239	1.240	1.240	1.242	1.240	1.239
31	1.235	1.232	1.231	1.232	1.232	1.234	1.237	1.238	1.239	1.238	1.239	1.240	1.241	1.243	1.243	1.242	1.238	1.236	1.232	1.231
32	1.233	1.232	1.234	1.237	1.239	1.241	1.242	1.241	1.240	1.239	1.240	1.240	1.240	1.238	1.236	1.232	1.229	1.227	1.226	1.226
33	1.237	1.238	1.239	1.240	1.240	1.239	1.240	1.240	1.238	1.239	1.237	1.232	1.229	1.227	1.226	1.227	1.229	1.231	1.231	1.232
34	1.243	1.242	1.240	1.237	1.237	1.238	1.236	1.233	1.232	1.230	1.225	1.223	1.224	1.226	1.228	1.231	1.233	1.233	1.234	1.237
35	1.241	1.241	1.237	1.236	1.232	1.231	1.226	1.225	1.221	1.225	1.223	1.227	1.226	1.230	1.228	1.233	1.235	1.237	1.237	1.236
36	1.236	1.231	1.230	1.227	1.224	1.223	1.222	1.225	1.226	1.228	1.228	1.231	1.231	1.233	1.233	1.234	1.234	1.233	1.224	1.219
37	1.229	1.225	1.222	1.222	1.222	1.225	1.226	1.228	1.229	1.231	1.231	1.232	1.233	1.235	1.231	1.226	1.217	1.212	1.203	1.200
38	1.222	1.223	1.225	1.226	1.228	1.226	1.230	1.230	1.231	1.232	1.233	1.231	1.228	1.221	1.212	1.203	1.202	1.199	1.199	1.199
39	1.223	1.225	1.226	1.227	1.228	1.230	1.231	1.232	1.233	1.229	1.222	1.214	1.207	1.201	1.199	1.200	1.200	1.199	1.200	1.199
40	1.228	1.227	1.229	1.231	1.231	1.231	1.229	1.224	1.215	1.208	1.202	1.200	1.200	1.200	1.200	1.200	1.200	1.200	1.201	1.201
41	1.232	1.231	1.234	1.233	1.231	1.220	1.214	1.204	1.204	1.200	1.201	1.200	1.200	1.202	1.201	1.201	1.203	1.201	1.202	1.204
42	1.240	1.239	1.233	1.222	1.207	1.204	1.198	1.201	1.198	1.202	1.199	1.202	1.200	1.203	1.203	1.204	1.203	1.204	1.204	1.207
43	1.233	1.220	1.210	1.204	1.202	1.202	1.201	1.202	1.202	1.203	1.202	1.204	1.203	1.204	1.203	1.206	1.202	1.207	1.202	1.208
44	1.210	1.204	1.203	1.202	1.202	1.202	1.202	1.202	1.203	1.203	1.204	1.204	1.206	1.206	1.207	1.208	1.209	1.210	1.210	1.211
45	1.207	1.207	1.206	1.207	1.207	1.208	1.208	1.208	1.208	1.209	1.208	1.210	1.210	1.210	1.211	1.213	1.212	1.216	1.220	1.229
46	1.209	1.210	1.209	1.210	1.211	1.211	1.212	1.211	1.212	1.212	1.213	1.213	1.214	1.215	1.217	1.217	1.220	1.232	1.320	1.417
47	1.210	1.210	1.211	1.213	1.214	1.214	1.214	1.214	1.215	1.215	1.215	1.215	1.217	1.217	1.219	1.220	1.224	1.253	1.374	1.476
48	1.211	1.211	1.212	1.215	1.215	1.216	1.215	1.217	1.216	1.218	1.217	1.218	1.219	1.221	1.221	1.225	1.229	1.291	1.436	1.523
49	1.214	1.213	1.215	1.214	1.216	1.215	1.217	1.215	1.218	1.216	1.220	1.220	1.222	1.222	1.225	1.227	1.238	1.332	1.474	1.543
50	1.215	1.214	1.216	1.216	1.216	1.218	1.217	1.219	1.219	1.221	1.221	1.223	1.224	1.227	1.225	1.230	1.251	1.377	1.501	1.554
51	1.216	1.217	1.216	1.216	1.217	1.218	1.219	1.221	1.222	1.222	1.223	1.224	1.226	1.227	1.230	1.233	1.277	1.416	1.518	1.558
52	1.212	1.213	1.213	1.215	1.215	1.217	1.216	1.219	1.218	1.220	1.220	1.222	1.222	1.226	1.227	1.233	1.295	1.440	1.525	1.558
53	1.204	1.206	1.208	1.208	1.208	1.208	1.210	1.210	1.210	1.212	1.215	1.214	1.218	1.219	1.221	1.229	1.318	1.461	1.530	1.558
54	1.200	1.200	1.201	1.202	1.203	1.204	1.206	1.208	1.208	1.209	1.210	1.213	1.214	1.216	1.218	1.232	1.336	1.473	1.531	1.558
55	1.199	1.200	1.200	1.201	1.203	1.204	1.206	1.207	1.209	1.209	1.211	1.212	1.215	1.217	1.220	1.246	1.376	1.493	1.538	1.561
56	1.200	1.201	1.203	1.199	1.206	1.201	1.207	1.203	1.211	1.210	1.212	1.213	1.216	1.217	1.224	1.277	1.423	1.513	1.548	1.566
57	1.199	1.201	1.201	1.202	1.203	1.203	1.207	1.207	1.209	1.210	1.212	1.212	1.216	1.216	1.228	1.306	1.449	1.518	1.549	1.568
58	1.198	1.199	1.198	1.199	1.200	1.201	1.203	1.204	1.206	1.209	1.210	1.210	1.213	1.218	1.232	1.345	1.473	1.528	1.554	1.570
59	1.197	1.196	1.198	1.197	1.199	1.200	1.202	1.203	1.204	1.207	1.209	1.209	1.213	1.216	1.246	1.380	1.489	1.532	1.555	1.570
60	1.197	1.198	1.198	1.198	1.200	1.201	1.202	1.203	1.204	1.206	1.208	1.209	1.212	1.216	1.258	1.397	1.493	1.531	1.553	1.569
61	1.197	1.198	1.199	1.199	1.200	1.202	1.203	1.204	1.206	1.209	1.210	1.212	1.212	1.220	1.278	1.418	1.496	1.531	1.553	1.568
62	1.197	1.199	1.199	1.200	1.201	1.202	1.203	1.204	1.208	1.208	1.210	1.212	1.214	1.221	1.295	1.428	1.495	1.526	1.546	1.560
63	1.198	1.196	1.200	1.198	1.201	1.200	1.206	1.206	1.208	1.208	1.210	1.210	1.215	1.226	1.327	1.447	1.500	1.527	1.545	1.558

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 24

IR SCAN TIME 11.62 SEC
INITIAL TEMP 523.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	1.241	1.241	1.241	1.236	1.236	1.230	1.230	1.227	1.229	1.227	1.228	1.226	1.228	1.227	1.230	1.231	1.233	1.233	1.235	1.236
30	1.236	1.233	1.231	1.230	1.229	1.229	1.227	1.228	1.229	1.233	1.234	1.236	1.237	1.237	1.237	1.240	1.240	1.241	1.235	1.237
31	1.228	1.227	1.226	1.230	1.231	1.233	1.232	1.233	1.234	1.238	1.239	1.242	1.242	1.241	1.239	1.236	1.232	1.228	1.222	1.219
32	1.229	1.229	1.231	1.234	1.237	1.238	1.238	1.237	1.241	1.241	1.239	1.237	1.231	1.225	1.218	1.212	1.207	1.200	1.198	1.194
33	1.233	1.235	1.235	1.237	1.239	1.240	1.235	1.232	1.228	1.223	1.216	1.212	1.202	1.199	1.194	1.193	1.194	1.196	1.193	1.196
34	1.238	1.237	1.236	1.232	1.229	1.222	1.215	1.208	1.202	1.196	1.196	1.193	1.196	1.194	1.194	1.193	1.196	1.194	1.196	1.194
35	1.231	1.225	1.217	1.210	1.203	1.199	1.196	1.197	1.196	1.196	1.193	1.197	1.196	1.197	1.196	1.197	1.196	1.197	1.194	1.197
36	1.208	1.204	1.196	1.198	1.193	1.198	1.194	1.197	1.194	1.197	1.193	1.197	1.193	1.197	1.196	1.198	1.197	1.199	1.196	1.198
37	1.197	1.199	1.197	1.199	1.198	1.199	1.198	1.198	1.198	1.199	1.198	1.199	1.198	1.199	1.197	1.199	1.193	1.199	1.194	1.200
38	1.199	1.199	1.200	1.199	1.200	1.199	1.199	1.199	1.199	1.199	1.199	1.199	1.200	1.200	1.200	1.200	1.201	1.201	1.200	1.199
39	1.200	1.200	1.202	1.201	1.202	1.201	1.201	1.201	1.201	1.200	1.201	1.201	1.201	1.200	1.201	1.201	1.201	1.200	1.202	1.201
40	1.202	1.201	1.203	1.203	1.203	1.203	1.204	1.202	1.204	1.203	1.204	1.204	1.201	1.201	1.204	1.208	1.204	1.208	1.204	1.204
41	1.203	1.206	1.203	1.204	1.206	1.207	1.206	1.206	1.206	1.207	1.206	1.207	1.206	1.207	1.204	1.207	1.206	1.207	1.206	1.207
42	1.206	1.207	1.206	1.207	1.208	1.209	1.208	1.209	1.208	1.209	1.208	1.209	1.209	1.209	1.209	1.210	1.209	1.210	1.208	1.209
43	1.204	1.210	1.207	1.210	1.208	1.211	1.209	1.212	1.209	1.211	1.209	1.211	1.211	1.212	1.212	1.213	1.211	1.212	1.210	1.211
44	1.212	1.212	1.214	1.214	1.215	1.215	1.216	1.215	1.216	1.215	1.215	1.215	1.216	1.214	1.215	1.213	1.214	1.211	1.214	1.210
45	1.231	1.233	1.231	1.231	1.228	1.229	1.227	1.226	1.226	1.226	1.224	1.225	1.223	1.224	1.222	1.223	1.221	1.222	1.220	1.221
46	1.458	1.476	1.486	1.491	1.492	1.484	1.468	1.436	1.396	1.347	1.301	1.267	1.250	1.240	1.234	1.231	1.230	1.228	1.227	1.226
47	1.515	1.534	1.549	1.565	1.583	1.602	1.626	1.644	1.655	1.658	1.649	1.619	1.566	1.488	1.392	1.308	1.262	1.241	1.235	1.231
48	1.554	1.569	1.578	1.591	1.603	1.616	1.630	1.649	1.665	1.676	1.683	1.684	1.680	1.677	1.664	1.609	1.493	1.355	1.280	1.253
49	1.576	1.598	1.614	1.626	1.635	1.647	1.658	1.668	1.670	1.672	1.676	1.679	1.679	1.681	1.686	1.682	1.658	1.567	1.415	1.305
50	1.582	1.605	1.623	1.641	1.660	1.679	1.693	1.702	1.702	1.705	1.706	1.704	1.702	1.702	1.703	1.702	1.694	1.673	1.598	1.451
51	1.582	1.598	1.617	1.639	1.659	1.681	1.704	1.727	1.746	1.753	1.747	1.735	1.722	1.710	1.706	1.706	1.706	1.702	1.688	1.632
52	1.580	1.597	1.612	1.632	1.652	1.675	1.696	1.721	1.747	1.765	1.771	1.775	1.771	1.759	1.746	1.730	1.719	1.714	1.710	1.700
53	1.578	1.593	1.607	1.624	1.643	1.664	1.689	1.713	1.737	1.756	1.767	1.776	1.785	1.793	1.796	1.791	1.784	1.774	1.765	1.750
54	1.575	1.588	1.601	1.617	1.636	1.660	1.682	1.705	1.727	1.749	1.764	1.774	1.780	1.785	1.794	1.801	1.807	1.809	1.803	1.789
55	1.577	1.589	1.601	1.616	1.637	1.659	1.680	1.703	1.725	1.745	1.759	1.770	1.777	1.785	1.793	1.797	1.803	1.814	1.822	1.830
56	1.581	1.593	1.604	1.619	1.637	1.659	1.682	1.706	1.729	1.746	1.756	1.765	1.770	1.774	1.781	1.788	1.798	1.808	1.817	1.824
57	1.581	1.591	1.605	1.619	1.638	1.657	1.680	1.701	1.720	1.739	1.753	1.761	1.768	1.777	1.783	1.784	1.785	1.790	1.797	1.807
58	1.582	1.592	1.606	1.623	1.641	1.661	1.682	1.706	1.726	1.742	1.749	1.758	1.770	1.782	1.784	1.784	1.788	1.791	1.790	1.793
59	1.582	1.590	1.604	1.622	1.639	1.659	1.680	1.703	1.725	1.739	1.747	1.755	1.767	1.776	1.778	1.777	1.785	1.792	1.793	1.790
60	1.580	1.589	1.603	1.615	1.630	1.651	1.672	1.693	1.716	1.731	1.741	1.755	1.771	1.783	1.784	1.782	1.787	1.793	1.795	1.796
61	1.578	1.587	1.600	1.615	1.627	1.646	1.666	1.687	1.707	1.719	1.729	1.742	1.760	1.771	1.777	1.785	1.788	1.789	1.789	1.794
62	1.569	1.577	1.591	1.605	1.620	1.636	1.658	1.680	1.701	1.715	1.725	1.738	1.754	1.764	1.772	1.777	1.779	1.779	1.775	1.776
63	1.569	1.579	1.593	1.605	1.619	1.633	1.654	1.678	1.700	1.714	1.725	1.740	1.757	1.766	1.770	1.772	1.772	1.777	1.778	1.771

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 24

IR SCAN TIME 11.62 SEC
INITIAL TEMP 523.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	1.238	1.238	1.237	1.236	1.236	1.234	1.233	1.231	1.227	1.223	1.221	1.219	1.216	1.214	1.211	1.208	1.208	1.204	1.204	1.201
30	1.233	1.234	1.226	1.225	1.218	1.217	1.211	1.210	1.203	1.202	1.196	1.196	1.192	1.194	1.192	1.193	1.192	1.193	1.192	1.194
31	1.214	1.210	1.206	1.200	1.198	1.196	1.193	1.194	1.192	1.193	1.191	1.193	1.191	1.193	1.191	1.192	1.189	1.192	1.188	1.192
32	1.196	1.193	1.194	1.193	1.194	1.192	1.192	1.192	1.192	1.192	1.192	1.192	1.193	1.191	1.192	1.190	1.191	1.191	1.191	1.191
33	1.193	1.196	1.193	1.194	1.193	1.196	1.193	1.193	1.192	1.193	1.191	1.193	1.191	1.193	1.190	1.192	1.191	1.192	1.190	1.191
34	1.196	1.196	1.196	1.196	1.196	1.194	1.194	1.193	1.193	1.192	1.193	1.192	1.193	1.191	1.193	1.191	1.191	1.191	1.191	1.191
35	1.197	1.198	1.198	1.197	1.194	1.196	1.193	1.196	1.194	1.196	1.193	1.193	1.192	1.193	1.191	1.193	1.192	1.193	1.191	1.193
36	1.196	1.198	1.197	1.199	1.198	1.199	1.197	1.198	1.196	1.197	1.196	1.197	1.196	1.196	1.196	1.194	1.192	1.194	1.192	1.193
37	1.193	1.199	1.193	1.199	1.194	1.199	1.194	1.199	1.194	1.198	1.193	1.198	1.196	1.198	1.196	1.196	1.196	1.196	1.196	1.196
38	1.200	1.199	1.200	1.199	1.199	1.199	1.199	1.198	1.199	1.197	1.198	1.197	1.198	1.194	1.197	1.193	1.196	1.193	1.196	1.193
39	1.201	1.201	1.200	1.200	1.200	1.199	1.201	1.200	1.200	1.200	1.200	1.199	1.199	1.199	1.199	1.198	1.197	1.196	1.196	1.196
40	1.204	1.204	1.203	1.204	1.202	1.203	1.199	1.201	1.202	1.202	1.202	1.202	1.200	1.199	1.199	1.199	1.198	1.199	1.199	1.196
41	1.206	1.207	1.204	1.206	1.203	1.206	1.202	1.206	1.203	1.203	1.202	1.202	1.201	1.202	1.200	1.201	1.199	1.200	1.198	1.200
42	1.208	1.208	1.208	1.208	1.208	1.207	1.206	1.206	1.206	1.206	1.203	1.204	1.202	1.203	1.201	1.201	1.200	1.201	1.199	1.200
43	1.210	1.211	1.210	1.210	1.208	1.209	1.208	1.207	1.207	1.207	1.204	1.204	1.203	1.204	1.202	1.203	1.201	1.201	1.201	1.202
44	1.213	1.210	1.212	1.209	1.211	1.208	1.209	1.208	1.209	1.208	1.208	1.208	1.207	1.206	1.207	1.204	1.206	1.203	1.202	1.201
45	1.218	1.218	1.216	1.217	1.215	1.216	1.214	1.215	1.212	1.212	1.210	1.212	1.208	1.210	1.207	1.210	1.206	1.208	1.204	1.208
46	1.226	1.225	1.225	1.222	1.222	1.219	1.219	1.217	1.219	1.216	1.216	1.215	1.215	1.214	1.214	1.212	1.213	1.211	1.212	1.210
47	1.231	1.230	1.230	1.228	1.227	1.225	1.224	1.222	1.221	1.219	1.220	1.218	1.218	1.216	1.217	1.216	1.215	1.215	1.215	1.213
48	1.239	1.236	1.239	1.233	1.231	1.229	1.226	1.227	1.224	1.224	1.222	1.223	1.220	1.220	1.219	1.219	1.217	1.218	1.216	1.217
49	1.266	1.247	1.240	1.236	1.234	1.231	1.231	1.228	1.228	1.226	1.226	1.224	1.224	1.222	1.222	1.220	1.221	1.219	1.218	1.217
50	1.320	1.271	1.251	1.246	1.239	1.237	1.234	1.232	1.231	1.231	1.228	1.228	1.226	1.225	1.224	1.224	1.222	1.222	1.222	1.221
51	1.503	1.351	1.281	1.252	1.246	1.241	1.241	1.236	1.234	1.232	1.231	1.230	1.229	1.228	1.226	1.226	1.225	1.223	1.223	1.222
52	1.665	1.570	1.417	1.310	1.266	1.248	1.241	1.241	1.234	1.233	1.231	1.231	1.228	1.229	1.225	1.227	1.222	1.225	1.222	1.223
53	1.724	1.692	1.629	1.485	1.338	1.277	1.253	1.243	1.239	1.231	1.227	1.224	1.222	1.220	1.219	1.217	1.217	1.215	1.215	1.216
54	1.770	1.750	1.724	1.677	1.557	1.391	1.297	1.262	1.246	1.242	1.232	1.228	1.223	1.222	1.218	1.219	1.216	1.216	1.216	1.219
55	1.828	1.815	1.796	1.770	1.726	1.631	1.465	1.330	1.275	1.254	1.245	1.239	1.230	1.227	1.224	1.224	1.221	1.222	1.223	1.226
56	1.833	1.841	1.843	1.833	1.813	1.778	1.703	1.545	1.372	1.295	1.262	1.248	1.244	1.232	1.229	1.225	1.226	1.225	1.227	1.228
57	1.817	1.822	1.824	1.833	1.846	1.847	1.828	1.774	1.646	1.451	1.325	1.275	1.255	1.246	1.238	1.230	1.227	1.226	1.228	1.228
58	1.796	1.800	1.806	1.812	1.816	1.824	1.835	1.835	1.810	1.730	1.563	1.385	1.300	1.263	1.249	1.241	1.231	1.228	1.226	1.227
59	1.792	1.793	1.788	1.785	1.788	1.796	1.803	1.804	1.803	1.810	1.796	1.660	1.441	1.319	1.271	1.248	1.241	1.229	1.224	1.220
60	1.799	1.804	1.806	1.802	1.786	1.764	1.747	1.748	1.762	1.774	1.783	1.798	1.743	1.531	1.351	1.284	1.254	1.242	1.232	1.226
61	1.798	1.798	1.801	1.807	1.806	1.796	1.766	1.711	1.654	1.637	1.678	1.735	1.698	1.590	1.476	1.336	1.274	1.253	1.241	1.234
62	1.787	1.791	1.793	1.794	1.799	1.805	1.806	1.789	1.747	1.688	1.639	1.581	1.536	1.542	1.543	1.490	1.373	1.283	1.256	1.242
63	1.768	1.764	1.766	1.769	1.774	1.777	1.779	1.780	1.783	1.782	1.727	1.609	1.560	1.549	1.542	1.533	1.495	1.393	1.295	1.259

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NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP, CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 24

IR SCAN TIME 11.62 SEC
INITIAL TEMP 523.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	1.198	1.196	1.196	1.194	1.193	1.193	1.194	1.192	1.193	1.191	1.192	1.191	1.193	1.192	1.193	1.192	1.193	1.192	1.193	1.193
30	1.191	1.193	1.192	1.193	1.191	1.191	1.191	1.191	1.191	1.191	1.191	1.191	1.191	1.192	1.191	1.192	1.191	1.192	1.191	1.192
31	1.188	1.192	1.188	1.192	1.189	1.191	1.188	1.190	1.186	1.190	1.188	1.190	1.189	1.191	1.190	1.191	1.191	1.192	1.191	1.192
32	1.191	1.190	1.191	1.189	1.190	1.189	1.190	1.189	1.190	1.189	1.189	1.188	1.189	1.184	1.190	1.185	1.191	1.186	1.190	1.186
33	1.189	1.191	1.190	1.191	1.189	1.190	1.189	1.190	1.189	1.189	1.188	1.190	1.188	1.190	1.189	1.189	1.189	1.189	1.189	1.189
34	1.192	1.191	1.191	1.190	1.191	1.189	1.190	1.190	1.190	1.190	1.191	1.189	1.190	1.190	1.190	1.189	1.189	1.188	1.189	1.186
35	1.191	1.192	1.191	1.192	1.191	1.192	1.191	1.191	1.191	1.192	1.191	1.191	1.189	1.191	1.189	1.190	1.188	1.190	1.188	1.189
36	1.191	1.193	1.191	1.193	1.191	1.192	1.191	1.193	1.191	1.192	1.191	1.191	1.190	1.191	1.190	1.192	1.190	1.191	1.190	1.191
37	1.193	1.194	1.193	1.196	1.192	1.193	1.190	1.193	1.192	1.193	1.192	1.193	1.191	1.192	1.191	1.191	1.191	1.191	1.190	1.191
38	1.196	1.194	1.196	1.193	1.194	1.193	1.196	1.192	1.194	1.191	1.194	1.192	1.193	1.192	1.193	1.191	1.192	1.191	1.191	1.191
39	1.196	1.194	1.196	1.196	1.196	1.193	1.194	1.193	1.193	1.193	1.193	1.191	1.196	1.191	1.193	1.191	1.193	1.190	1.193	1.190
40	1.197	1.198	1.197	1.197	1.196	1.196	1.196	1.197	1.196	1.194	1.200	1.193	1.196	1.193	1.194	1.193	1.193	1.194	1.194	1.193
41	1.197	1.199	1.197	1.197	1.196	1.198	1.196	1.197	1.196	1.197	1.194	1.197	1.194	1.196	1.194	1.196	1.194	1.196	1.193	1.196
42	1.198	1.200	1.199	1.199	1.198	1.199	1.197	1.199	1.198	1.198	1.198	1.199	1.196	1.198	1.196	1.197	1.196	1.197	1.196	1.197
43	1.200	1.201	1.200	1.200	1.199	1.199	1.198	1.200	1.199	1.199	1.199	1.199	1.199	1.200	1.197	1.197	1.196	1.197	1.196	1.197
44	1.202	1.202	1.201	1.201	1.202	1.201	1.201	1.199	1.200	1.200	1.200	1.199	1.199	1.198	1.199	1.198	1.199	1.199	1.199	1.199
45	1.206	1.208	1.204	1.207	1.203	1.206	1.202	1.206	1.204	1.204	1.203	1.204	1.203	1.204	1.201	1.203	1.201	1.203	1.201	1.202
46	1.211	1.210	1.210	1.208	1.209	1.208	1.208	1.208	1.208	1.201	1.209	1.201	1.208	1.201	1.207	1.201	1.207	1.200	1.207	1.200
47	1.214	1.212	1.212	1.211	1.211	1.210	1.210	1.209	1.210	1.210	1.210	1.208	1.210	1.209	1.208	1.207	1.208	1.207	1.207	1.207
48	1.215	1.216	1.214	1.215	1.213	1.213	1.212	1.212	1.210	1.211	1.210	1.211	1.209	1.210	1.210	1.210	1.209	1.210	1.208	1.209
49	1.217	1.216	1.216	1.216	1.215	1.215	1.214	1.213	1.214	1.212	1.212	1.212	1.212	1.210	1.212	1.210	1.212	1.210	1.212	1.210
50	1.218	1.220	1.217	1.218	1.216	1.217	1.215	1.216	1.214	1.215	1.213	1.215	1.212	1.215	1.214	1.214	1.212	1.213	1.212	1.213
51	1.222	1.221	1.221	1.220	1.219	1.218	1.218	1.217	1.219	1.219	1.218	1.216	1.216	1.216	1.216	1.215	1.216	1.214	1.215	1.213
52	1.221	1.222	1.220	1.222	1.220	1.222	1.220	1.221	1.219	1.221	1.217	1.220	1.217	1.219	1.215	1.218	1.216	1.219	1.216	1.217
53	1.218	1.220	1.222	1.222	1.223	1.223	1.223	1.221	1.224	1.221	1.224	1.221	1.223	1.220	1.221	1.220	1.220	1.217	1.218	1.216
54	1.221	1.224	1.224	1.225	1.225	1.226	1.225	1.227	1.226	1.227	1.226	1.227	1.226	1.227	1.225	1.225	1.223	1.222	1.221	1.221
55	1.226	1.229	1.228	1.230	1.228	1.231	1.229	1.230	1.228	1.229	1.228	1.230	1.228	1.228	1.226	1.227	1.224	1.226	1.224	1.224
56	1.231	1.231	1.232	1.231	1.232	1.231	1.231	1.231	1.231	1.231	1.231	1.229	1.230	1.228	1.228	1.227	1.227	1.226	1.226	1.224
57	1.230	1.229	1.229	1.228	1.228	1.226	1.227	1.226	1.226	1.226	1.225	1.223	1.224	1.222	1.222	1.221	1.221	1.219	1.220	1.218
58	1.225	1.225	1.224	1.224	1.223	1.224	1.222	1.223	1.222	1.223	1.221	1.223	1.221	1.221	1.220	1.221	1.219	1.220	1.218	1.219
59	1.220	1.216	1.218	1.216	1.216	1.214	1.215	1.213	1.213	1.212	1.212	1.210	1.211	1.208	1.210	1.208	1.207	1.207	1.208	1.206
60	1.223	1.220	1.219	1.216	1.217	1.213	1.216	1.212	1.214	1.210	1.212	1.208	1.210	1.207	1.209	1.206	1.208	1.203	1.207	1.203
61	1.226	1.222	1.219	1.220	1.217	1.218	1.216	1.217	1.214	1.214	1.212	1.212	1.211	1.211	1.210	1.210	1.208	1.208	1.206	1.207
62	1.236	1.228	1.223	1.219	1.219	1.216	1.217	1.215	1.216	1.213	1.214	1.212	1.212	1.210	1.210	1.208	1.209	1.208	1.208	1.208
63	1.246	1.238	1.232	1.224	1.220	1.218	1.218	1.216	1.216	1.213	1.213	1.211	1.211	1.209	1.210	1.208	1.209	1.208	1.207	1.204

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 24

IR SCAN TIME 11.62 SEC
INITIAL TEMP 523.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	1.193	1.191	1.193	1.192	1.193	1.192	1.193	1.191	1.193	1.191	1.192	1.191	1.191	1.191	1.191	1.189	1.189	1.188	1.189	1.188
30	1.191	1.192	1.191	1.192	1.192	1.193	1.191	1.193	1.191	1.192	1.191	1.192	1.191	1.191	1.190	1.190	1.189	1.188	1.188	1.188
31	1.191	1.192	1.192	1.191	1.191	1.192	1.191	1.191	1.190	1.191	1.190	1.191	1.190	1.190	1.189	1.190	1.188	1.189	1.188	1.188
32	1.190	1.186	1.190	1.186	1.190	1.188	1.190	1.186	1.190	1.189	1.190	1.188	1.189	1.188	1.189	1.186	1.188	1.186	1.186	1.185
33	1.189	1.189	1.188	1.188	1.188	1.188	1.188	1.189	1.186	1.189	1.186	1.188	1.183	1.186	1.183	1.186	1.183	1.186	1.183	1.185
34	1.188	1.188	1.188	1.188	1.188	1.185	1.188	1.186	1.186	1.185	1.186	1.186	1.186	1.186	1.186	1.185	1.186	1.185	1.186	1.184
35	1.188	1.190	1.188	1.188	1.186	1.189	1.186	1.189	1.186	1.188	1.185	1.188	1.186	1.188	1.185	1.186	1.185	1.188	1.185	1.188
36	1.189	1.190	1.190	1.190	1.186	1.189	1.188	1.189	1.188	1.189	1.185	1.188	1.186	1.188	1.186	1.188	1.186	1.188	1.186	1.188
37	1.190	1.190	1.189	1.191	1.189	1.191	1.190	1.191	1.189	1.190	1.189	1.190	1.189	1.190	1.189	1.189	1.188	1.190	1.188	1.189
38	1.191	1.191	1.192	1.190	1.191	1.191	1.191	1.191	1.191	1.190	1.191	1.190	1.191	1.190	1.190	1.190	1.191	1.191	1.190	1.189
39	1.193	1.190	1.192	1.190	1.191	1.190	1.193	1.191	1.191	1.191	1.191	1.190	1.192	1.190	1.191	1.189	1.191	1.190	1.191	1.190
40	1.193	1.193	1.193	1.192	1.192	1.193	1.193	1.190	1.193	1.191	1.192	1.193	1.189	1.193	1.191	1.191	1.192	1.191	1.188	1.191
41	1.194	1.196	1.193	1.194	1.193	1.194	1.196	1.194	1.191	1.194	1.191	1.193	1.191	1.193	1.191	1.192	1.191	1.193	1.191	1.192
42	1.196	1.197	1.194	1.196	1.193	1.196	1.193	1.194	1.192	1.194	1.192	1.193	1.191	1.193	1.191	1.192	1.192	1.193	1.191	1.193
43	1.196	1.197	1.194	1.193	1.193	1.197	1.193	1.196	1.193	1.194	1.193	1.194	1.192	1.196	1.194	1.196	1.193	1.194	1.192	1.194
44	1.199	1.198	1.197	1.198	1.198	1.198	1.197	1.197	1.196	1.196	1.196	1.196	1.196	1.196	1.196	1.196	1.196	1.196	1.194	1.194
45	1.201	1.202	1.201	1.202	1.201	1.202	1.201	1.202	1.201	1.201	1.201	1.201	1.200	1.200	1.201	1.201	1.200	1.201	1.200	1.201
46	1.206	1.201	1.207	1.202	1.208	1.206	1.206	1.204	1.206	1.203	1.206	1.204	1.206	1.204	1.206	1.204	1.204	1.204	1.204	1.203
47	1.208	1.209	1.211	1.210	1.210	1.208	1.208	1.206	1.208	1.206	1.208	1.204	1.207	1.203	1.207	1.203	1.206	1.203	1.204	1.203
48	1.209	1.211	1.210	1.213	1.211	1.211	1.210	1.210	1.209	1.210	1.208	1.208	1.208	1.208	1.206	1.208	1.206	1.207	1.206	1.207
49	1.210	1.210	1.212	1.211	1.211	1.210	1.210	1.209	1.210	1.208	1.210	1.208	1.208	1.208	1.209	1.208	1.208	1.207	1.208	1.206
50	1.212	1.213	1.212	1.212	1.210	1.211	1.210	1.211	1.211	1.211	1.209	1.210	1.208	1.210	1.209	1.209	1.208	1.209	1.208	1.209
51	1.214	1.212	1.213	1.213	1.213	1.212	1.212	1.212	1.212	1.211	1.211	1.210	1.211	1.209	1.211	1.210	1.211	1.210	1.210	1.208
52	1.215	1.216	1.215	1.215	1.213	1.213	1.211	1.211	1.210	1.211	1.210	1.210	1.208	1.209	1.208	1.209	1.208	1.208	1.206	1.207
53	1.217	1.214	1.216	1.213	1.212	1.209	1.208	1.204	1.206	1.203	1.203	1.201	1.201	1.201	1.201	1.201	1.201	1.200	1.200	1.200
54	1.217	1.219	1.216	1.216	1.213	1.210	1.206	1.204	1.201	1.201	1.198	1.201	1.198	1.199	1.200	1.200	1.196	1.198	1.194	1.197
55	1.222	1.222	1.218	1.219	1.215	1.214	1.210	1.208	1.204	1.206	1.203	1.203	1.201	1.202	1.201	1.201	1.199	1.199	1.197	1.198
56	1.223	1.221	1.220	1.218	1.217	1.215	1.212	1.208	1.206	1.204	1.204	1.203	1.203	1.201	1.201	1.200	1.200	1.198	1.197	1.196
57	1.218	1.215	1.215	1.214	1.214	1.212	1.210	1.210	1.206	1.204	1.206	1.203	1.203	1.200	1.201	1.199	1.200	1.198	1.199	1.197
58	1.217	1.219	1.215	1.217	1.216	1.218	1.215	1.216	1.212	1.213	1.210	1.212	1.208	1.210	1.208	1.212	1.208	1.210	1.208	1.208
59	1.206	1.204	1.203	1.202	1.201	1.201	1.201	1.199	1.199	1.198	1.198	1.197	1.196	1.196	1.196	1.196	1.194	1.192	1.193	1.192
60	1.206	1.203	1.204	1.202	1.201	1.201	1.200	1.199	1.200	1.199	1.199	1.198	1.198	1.196	1.196	1.193	1.196	1.193	1.194	1.193
61	1.204	1.206	1.203	1.204	1.199	1.201	1.198	1.200	1.196	1.200	1.196	1.198	1.194	1.196	1.196	1.197	1.193	1.196	1.191	1.196
62	1.207	1.203	1.204	1.203	1.203	1.201	1.201	1.200	1.200	1.198	1.198	1.197	1.196	1.196	1.196	1.194	1.193	1.192	1.193	1.191
63	1.207	1.204	1.206	1.203	1.203	1.201	1.201	1.200	1.200	1.199	1.199	1.198	1.199	1.197	1.197	1.196	1.196	1.196	1.194	1.193

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NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 24

IR SCAN TIME 11.62 SEC
INITIAL TEMP 523.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	1.188	1.186	1.188	1.186	1.188	1.186	1.186	1.185	1.186	1.184
30	1.186	1.186	1.186	1.186	1.185	1.186	1.185	1.186	1.185	1.188
31	1.186	1.188	1.186	1.186	1.185	1.186	1.184	1.186	1.185	1.185
32	1.185	1.185	1.185	1.185	1.185	1.184	1.185	1.185	1.185	1.185
33	1.183	1.185	1.183	1.185	1.181	1.185	1.183	1.186	1.185	1.185
34	1.185	1.185	1.185	1.184	1.185	1.184	1.185	1.185	1.185	1.180
35	1.185	1.188	1.185	1.186	1.184	1.185	1.183	1.185	1.184	1.185
36	1.185	1.188	1.185	1.188	1.186	1.188	1.186	1.188	1.185	1.186
37	1.188	1.189	1.186	1.189	1.166	1.188	1.188	1.188	1.186	1.188
38	1.190	1.189	1.190	1.189	1.189	1.188	1.189	1.188	1.189	1.190
39	1.190	1.190	1.191	1.190	1.190	1.190	1.190	1.190	1.190	1.190
40	1.192	1.192	1.192	1.192	1.191	1.190	1.189	1.190	1.190	1.190
41	1.191	1.192	1.191	1.193	1.190	1.192	1.191	1.193	1.189	1.193
42	1.191	1.193	1.191	1.193	1.192	1.193	1.191	1.193	1.192	1.193
43	1.193	1.193	1.193	1.194	1.193	1.193	1.193	1.194	1.192	1.193
44	1.196	1.194	1.196	1.196	1.196	1.196	1.196	1.193	1.196	1.196
45	1.200	1.199	1.198	1.200	1.198	1.200	1.198	1.199	1.198	1.199
46	1.204	1.203	1.203	1.201	1.202	1.201	1.202	1.201	1.202	1.200
47	1.204	1.202	1.204	1.203	1.204	1.203	1.204	1.203	1.204	1.203
48	1.204	1.207	1.204	1.206	1.203	1.204	1.201	1.207	1.201	1.204
49	1.207	1.207	1.207	1.206	1.207	1.206	1.206	1.206	1.206	1.204
50	1.208	1.209	1.208	1.208	1.208	1.208	1.207	1.208	1.206	1.208
51	1.209	1.210	1.209	1.209	1.209	1.208	1.209	1.208	1.208	1.206
52	1.206	1.206	1.204	1.206	1.204	1.204	1.203	1.203	1.202	1.203
53	1.200	1.199	1.199	1.199	1.198	1.198	1.197	1.196	1.197	1.194
54	1.193	1.197	1.194	1.196	1.194	1.193	1.192	1.193	1.191	1.193
55	1.196	1.197	1.194	1.196	1.190	1.196	1.189	1.194	1.188	1.193
56	1.197	1.196	1.194	1.193	1.193	1.192	1.193	1.191	1.191	1.191
57	1.198	1.196	1.197	1.194	1.194	1.192	1.194	1.192	1.193	1.191
58	1.207	1.207	1.206	1.204	1.198	1.196	1.197	1.202	1.203	1.206
59	1.193	1.192	1.193	1.193	1.194	1.192	1.192	1.191	1.192	1.191
60	1.192	1.191	1.191	1.191	1.191	1.191	1.191	1.190	1.191	1.190
61	1.191	1.193	1.191	1.193	1.191	1.193	1.190	1.191	1.189	1.190
62	1.196	1.190	1.193	1.189	1.192	1.189	1.191	1.188	1.190	1.188
63	1.193	1.191	1.192	1.191	1.191	1.190	1.191	1.190	1.190	1.188

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP, CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 24

IR SCAN TIME 11.62 SEC
INITIAL TEMP 523.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	1.197	1.197	1.199	1.199	1.200	1.201	1.203	1.206	1.210	1.206	1.210	1.208	1.216	1.242	1.371	1.465	1.504	1.527	1.545	1.557
65	1.196	1.196	1.198	1.199	1.199	1.200	1.201	1.204	1.204	1.208	1.210	1.212	1.216	1.269	1.398	1.471	1.503	1.526	1.541	1.552
66	1.193	1.194	1.193	1.196	1.196	1.198	1.199	1.200	1.202	1.203	1.206	1.209	1.219	1.303	1.421	1.473	1.501	1.521	1.536	1.547
67	1.191	1.191	1.193	1.192	1.194	1.196	1.198	1.198	1.201	1.200	1.204	1.210	1.229	1.334	1.434	1.475	1.501	1.517	1.530	1.542
68	1.190	1.193	1.192	1.193	1.193	1.193	1.194	1.198	1.199	1.202	1.201	1.208	1.238	1.356	1.439	1.473	1.496	1.512	1.522	1.533
69	1.190	1.189	1.190	1.190	1.192	1.193	1.194	1.196	1.198	1.200	1.203	1.209	1.253	1.372	1.438	1.468	1.489	1.503	1.514	1.525
70	1.189	1.190	1.192	1.189	1.193	1.193	1.196	1.196	1.196	1.199	1.201	1.209	1.266	1.378	1.437	1.464	1.482	1.495	1.506	1.517
71	1.190	1.189	1.191	1.191	1.193	1.194	1.196	1.196	1.199	1.198	1.202	1.209	1.286	1.393	1.442	1.466	1.484	1.496	1.508	1.518
72	1.191	1.190	1.191	1.193	1.193	1.198	1.198	1.199	1.198	1.201	1.202	1.223	1.320	1.412	1.448	1.470	1.485	1.497	1.508	1.517
73	1.190	1.190	1.191	1.191	1.192	1.196	1.196	1.199	1.199	1.200	1.203	1.236	1.346	1.419	1.450	1.469	1.484	1.494	1.504	1.513
74	1.190	1.190	1.191	1.191	1.193	1.192	1.196	1.196	1.198	1.199	1.204	1.262	1.371	1.427	1.452	1.469	1.481	1.490	1.502	1.512
75	1.190	1.190	1.189	1.190	1.192	1.192	1.193	1.196	1.197	1.200	1.212	1.295	1.391	1.432	1.454	1.469	1.480	1.489	1.498	1.507
76	1.190	1.191	1.191	1.191	1.193	1.192	1.193	1.196	1.197	1.201	1.218	1.316	1.401	1.434	1.453	1.466	1.477	1.485	1.493	1.502
77	1.190	1.191	1.188	1.192	1.190	1.193	1.193	1.196	1.194	1.199	1.229	1.336	1.408	1.435	1.452	1.465	1.474	1.483	1.489	1.497
78	1.191	1.196	1.200	1.200	1.199	1.199	1.203	1.199	1.200	1.197	1.237	1.344	1.409	1.433	1.449	1.460	1.470	1.476	1.484	1.491
79	1.194	1.209	1.213	1.208	1.210	1.208	1.200	1.198	1.202	1.208	1.257	1.361	1.411	1.433	1.449	1.458	1.467	1.474	1.480	1.488
80	1.207	1.222	1.228	1.211	1.209	1.210	1.210	1.204	1.200	1.208	1.283	1.378	1.416	1.436	1.448	1.456	1.464	1.470	1.477	1.483
81	1.216	1.241	1.256	1.233	1.216	1.213	1.213	1.212	1.211	1.224	1.313	1.393	1.422	1.438	1.447	1.454	1.459	1.465	1.471	1.478
82	1.266	1.285	1.304	1.299	1.246	1.223	1.210	1.213	1.215	1.242	1.341	1.405	1.428	1.441	1.449	1.454	1.458	1.463	1.466	1.472
83	1.297	1.313	1.326	1.327	1.277	1.237	1.212	1.203	1.210	1.266	1.362	1.411	1.430	1.442	1.449	1.454	1.458	1.463	1.465	1.469
84	1.269	1.271	1.301	1.313	1.262	1.231	1.211	1.200	1.212	1.309	1.411	1.439	1.448	1.451	1.454	1.456	1.459	1.459	1.461	1.464
85	1.247	1.240	1.232	1.233	1.232	1.221	1.216	1.213	1.227	1.253	1.313	1.355	1.386	1.411	1.438	1.462	1.487	1.506	1.519	1.523
86	1.242	1.238	1.230	1.229	1.228	1.226	1.220	1.220	1.222	1.225	1.225	1.228	1.228	1.229	1.230	1.232	1.234	1.241	1.253	1.274
87	1.217	1.209	1.209	1.210	1.210	1.209	1.209	1.210	1.219	1.220	1.220	1.221	1.220	1.222	1.221	1.223	1.222	1.225	1.225	1.227
88	1.199	1.193	1.192	1.197	1.197	1.198	1.200	1.210	1.217	1.216	1.214	1.215	1.214	1.216	1.215	1.217	1.215	1.218	1.217	1.220
89	1.189	1.186	1.186	1.188	1.190	1.192	1.197	1.206	1.215	1.214	1.215	1.213	1.214	1.213	1.214	1.213	1.214	1.213	1.214	1.214
90	1.184	1.181	1.184	1.185	1.189	1.190	1.191	1.199	1.212	1.214	1.214	1.213	1.212	1.213	1.211	1.212	1.210	1.212	1.211	1.213
91	1.181	1.180	1.181	1.184	1.186	1.188	1.190	1.197	1.210	1.211	1.212	1.212	1.211	1.211	1.211	1.210	1.210	1.210	1.210	1.210
92	1.180	1.180	1.183	1.180	1.185	1.183	1.189	1.191	1.204	1.210	1.210	1.210	1.212	1.210	1.211	1.209	1.210	1.210	1.210	1.209
93	1.183	1.183	1.183	1.185	1.185	1.189	1.190	1.193	1.204	1.211	1.210	1.212	1.210	1.210	1.210	1.210	1.210	1.210	1.208	1.210
94	1.194	1.193	1.193	1.190	1.191	1.191	1.192	1.192	1.203	1.209	1.209	1.210	1.211	1.210	1.209	1.208	1.209	1.210	1.209	1.208
95	1.199	1.198	1.198	1.197	1.196	1.196	1.193	1.197	1.203	1.209	1.210	1.210	1.212	1.212	1.213	1.212	1.212	1.210	1.209	1.207
96	1.204	1.203	1.204	1.203	1.200	1.199	1.194	1.197	1.208	1.212	1.211	1.212	1.214	1.213	1.215	1.214	1.214	1.212	1.209	1.206
97	1.204	1.204	1.204	1.206	1.203	1.200	1.196	1.197	1.208	1.210	1.210	1.212	1.216	1.216	1.218	1.217	1.216	1.212	1.208	1.208
98	1.208	1.206	1.206	1.206	1.206	1.200	1.197	1.198	1.207	1.208	1.210	1.211	1.214	1.217	1.217	1.216	1.215	1.210	1.210	1.210

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 24

IR SCAN TIME 11.62 SEC
INITIAL TEMP 523.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	1.566	1.576	1.589	1.598	1.614	1.632	1.650	1.672	1.692	1.707	1.718	1.734	1.754	1.764	1.770	1.776	1.778	1.782	1.785	1.784
65	1.559	1.571	1.584	1.594	1.609	1.626	1.644	1.663	1.685	1.703	1.713	1.730	1.749	1.756	1.759	1.768	1.773	1.780	1.780	1.783
66	1.555	1.566	1.580	1.593	1.608	1.625	1.641	1.660	1.680	1.703	1.715	1.723	1.737	1.746	1.752	1.760	1.769	1.772	1.771	1.775
67	1.551	1.561	1.574	1.587	1.602	1.618	1.635	1.655	1.673	1.694	1.710	1.720	1.726	1.735	1.745	1.753	1.759	1.763	1.766	1.773
68	1.542	1.551	1.564	1.575	1.589	1.603	1.619	1.636	1.655	1.675	1.694	1.707	1.714	1.718	1.728	1.741	1.745	1.747	1.754	1.760
69	1.533	1.543	1.553	1.565	1.579	1.592	1.604	1.621	1.639	1.658	1.677	1.695	1.704	1.712	1.719	1.724	1.731	1.740	1.750	1.755
70	1.527	1.537	1.549	1.561	1.576	1.592	1.604	1.617	1.633	1.652	1.671	1.687	1.696	1.703	1.709	1.713	1.716	1.723	1.731	1.736
71	1.527	1.535	1.549	1.560	1.569	1.585	1.601	1.613	1.626	1.644	1.662	1.675	1.687	1.693	1.697	1.700	1.707	1.713	1.717	1.720
72	1.525	1.534	1.544	1.556	1.565	1.579	1.594	1.606	1.621	1.638	1.652	1.664	1.674	1.680	1.683	1.687	1.692	1.700	1.704	1.709
73	1.521	1.530	1.540	1.551	1.566	1.578	1.592	1.608	1.621	1.633	1.646	1.656	1.666	1.675	1.677	1.677	1.679	1.683	1.689	1.692
74	1.521	1.530	1.539	1.549	1.562	1.577	1.591	1.604	1.618	1.629	1.640	1.651	1.664	1.673	1.672	1.669	1.669	1.671	1.675	1.682
75	1.513	1.524	1.535	1.545	1.556	1.568	1.581	1.596	1.608	1.621	1.631	1.640	1.646	1.653	1.656	1.660	1.663	1.664	1.663	1.665
76	1.510	1.518	1.528	1.538	1.550	1.563	1.576	1.587	1.598	1.611	1.624	1.634	1.640	1.646	1.650	1.651	1.652	1.654	1.655	1.656
77	1.506	1.515	1.523	1.533	1.544	1.557	1.570	1.583	1.596	1.606	1.616	1.628	1.637	1.643	1.646	1.650	1.652	1.654	1.656	1.659
78	1.499	1.508	1.518	1.528	1.539	1.551	1.566	1.581	1.593	1.603	1.613	1.621	1.627	1.632	1.636	1.641	1.645	1.650	1.653	1.655
79	1.498	1.506	1.515	1.524	1.535	1.548	1.561	1.573	1.586	1.598	1.609	1.616	1.623	1.627	1.633	1.636	1.641	1.645	1.648	1.651
80	1.492	1.501	1.511	1.522	1.532	1.543	1.556	1.570	1.584	1.597	1.609	1.618	1.626	1.629	1.633	1.636	1.638	1.640	1.643	1.646
81	1.484	1.493	1.501	1.512	1.524	1.536	1.548	1.561	1.575	1.589	1.602	1.613	1.620	1.627	1.631	1.634	1.637	1.640	1.641	1.643
82	1.478	1.485	1.495	1.507	1.517	1.528	1.539	1.552	1.565	1.578	1.589	1.599	1.608	1.615	1.620	1.624	1.628	1.633	1.635	1.638
83	1.474	1.480	1.488	1.500	1.510	1.524	1.535	1.549	1.561	1.573	1.583	1.592	1.599	1.607	1.612	1.615	1.618	1.621	1.624	1.628
84	1.469	1.475	1.481	1.489	1.500	1.513	1.526	1.539	1.551	1.563	1.574	1.584	1.591	1.597	1.602	1.605	1.608	1.611	1.615	1.618
85	1.510	1.496	1.482	1.479	1.484	1.490	1.500	1.513	1.524	1.535	1.549	1.559	1.566	1.573	1.579	1.582	1.587	1.590	1.593	1.597
86	1.297	1.323	1.320	1.321	1.326	1.330	1.331	1.340	1.343	1.348	1.355	1.367	1.379	1.393	1.400	1.408	1.415	1.425	1.433	1.443
87	1.226	1.228	1.227	1.228	1.228	1.229	1.228	1.230	1.229	1.231	1.231	1.233	1.234	1.236	1.236	1.239	1.237	1.240	1.240	1.242
88	1.219	1.221	1.221	1.222	1.221	1.224	1.222	1.224	1.223	1.224	1.222	1.225	1.224	1.226	1.226	1.228	1.227	1.230	1.229	1.231
89	1.215	1.214	1.216	1.216	1.217	1.218	1.219	1.218	1.220	1.218	1.219	1.219	1.221	1.221	1.222	1.222	1.223	1.223	1.225	1.224
90	1.210	1.212	1.212	1.214	1.213	1.215	1.214	1.216	1.216	1.217	1.216	1.219	1.218	1.220	1.218	1.220	1.219	1.221	1.221	1.223
91	1.210	1.210	1.212	1.212	1.211	1.212	1.213	1.213	1.214	1.217	1.222	1.255	1.287	1.257	1.228	1.221	1.219	1.218	1.219	1.217
92	1.209	1.208	1.210	1.210	1.210	1.210	1.212	1.210	1.212	1.213	1.230	1.320	1.386	1.348	1.265	1.228	1.219	1.216	1.217	1.218
93	1.204	1.209	1.206	1.210	1.204	1.210	1.206	1.210	1.208	1.213	1.210	1.218	1.229	1.230	1.214	1.217	1.214	1.215	1.214	1.216
94	1.207	1.208	1.207	1.208	1.208	1.208	1.207	1.210	1.211	1.211	1.210	1.212	1.210	1.212	1.210	1.210	1.212	1.212	1.213	1.211
95	1.207	1.204	1.206	1.206	1.206	1.206	1.208	1.208	1.209	1.210	1.211	1.210	1.210	1.209	1.209	1.210	1.210	1.210	1.210	1.210
96	1.207	1.206	1.206	1.204	1.208	1.208	1.209	1.209	1.209	1.210	1.211	1.210	1.210	1.208	1.208	1.207	1.208	1.208	1.210	1.210
97	1.207	1.206	1.206	1.206	1.207	1.208	1.209	1.210	1.210	1.210	1.211	1.210	1.210	1.210	1.208	1.207	1.208	1.208	1.208	1.208
98	1.210	1.209	1.209	1.209	1.210	1.210	1.210	1.210	1.211	1.210	1.210	1.209	1.210	1.209	1.209	1.208	1.209	1.208	1.210	1.209

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 24

IR SCAN TIME 11.62 SEC
INITIAL TEMP 523.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	1.782	1.770	1.753	1.732	1.716	1.707	1.707	1.715	1.732	1.734	1.680	1.626	1.587	1.554	1.535	1.528	1.524	1.499	1.417	1.311
65	1.787	1.788	1.785	1.769	1.737	1.692	1.652	1.636	1.638	1.620	1.595	1.588	1.571	1.549	1.526	1.511	1.504	1.502	1.486	1.421
66	1.777	1.776	1.769	1.758	1.745	1.731	1.708	1.675	1.640	1.584	1.547	1.534	1.527	1.521	1.515	1.504	1.493	1.484	1.477	1.460
67	1.776	1.776	1.773	1.764	1.750	1.727	1.693	1.670	1.662	1.611	1.564	1.546	1.534	1.524	1.514	1.511	1.513	1.511	1.503	1.491
68	1.766	1.772	1.776	1.775	1.776	1.781	1.778	1.759	1.722	1.662	1.615	1.586	1.569	1.556	1.551	1.544	1.535	1.528	1.525	1.524
69	1.761	1.768	1.776	1.781	1.781	1.789	1.805	1.825	1.823	1.780	1.736	1.690	1.640	1.598	1.573	1.561	1.554	1.554	1.547	1.535
70	1.742	1.748	1.755	1.760	1.767	1.778	1.792	1.812	1.823	1.790	1.764	1.749	1.737	1.717	1.682	1.638	1.600	1.573	1.557	1.550
71	1.724	1.729	1.735	1.741	1.741	1.741	1.749	1.766	1.769	1.749	1.737	1.731	1.724	1.713	1.694	1.672	1.654	1.636	1.612	1.586
72	1.712	1.715	1.719	1.721	1.719	1.719	1.727	1.742	1.736	1.707	1.688	1.673	1.659	1.649	1.642	1.637	1.633	1.623	1.612	1.599
73	1.697	1.699	1.696	1.689	1.689	1.694	1.709	1.730	1.740	1.716	1.697	1.684	1.667	1.644	1.621	1.600	1.579	1.561	1.553	1.546
74	1.689	1.694	1.692	1.691	1.689	1.694	1.712	1.733	1.744	1.716	1.684	1.666	1.649	1.630	1.611	1.599	1.583	1.570	1.559	1.544
75	1.667	1.673	1.682	1.686	1.694	1.688	1.701	1.725	1.749	1.727	1.679	1.660	1.646	1.633	1.619	1.605	1.589	1.575	1.559	1.545
76	1.656	1.659	1.663	1.665	1.668	1.671	1.676	1.685	1.698	1.696	1.654	1.639	1.630	1.620	1.611	1.601	1.593	1.583	1.570	1.557
77	1.661	1.664	1.666	1.666	1.664	1.664	1.665	1.670	1.675	1.665	1.641	1.630	1.623	1.616	1.607	1.599	1.591	1.584	1.576	1.569
78	1.658	1.659	1.661	1.661	1.660	1.660	1.662	1.668	1.678	1.673	1.650	1.640	1.634	1.625	1.617	1.608	1.599	1.591	1.583	1.573
79	1.654	1.655	1.656	1.657	1.657	1.656	1.658	1.665	1.676	1.676	1.654	1.643	1.641	1.635	1.629	1.621	1.615	1.608	1.601	1.594
80	1.648	1.651	1.654	1.654	1.653	1.653	1.656	1.664	1.678	1.684	1.663	1.649	1.648	1.644	1.639	1.633	1.629	1.623	1.617	1.611
81	1.645	1.649	1.651	1.653	1.654	1.654	1.656	1.663	1.675	1.685	1.668	1.654	1.652	1.651	1.647	1.644	1.640	1.636	1.631	1.626
82	1.641	1.643	1.645	1.648	1.650	1.652	1.654	1.661	1.674	1.687	1.675	1.660	1.658	1.657	1.655	1.652	1.650	1.644	1.640	1.637
83	1.631	1.634	1.638	1.641	1.645	1.649	1.653	1.660	1.672	1.688	1.679	1.662	1.660	1.659	1.658	1.656	1.656	1.654	1.651	1.648
84	1.621	1.625	1.630	1.633	1.637	1.640	1.644	1.649	1.659	1.670	1.665	1.655	1.656	1.656	1.656	1.656	1.655	1.653	1.654	1.655
85	1.602	1.606	1.612	1.617	1.621	1.626	1.632	1.640	1.651	1.667	1.675	1.656	1.647	1.647	1.649	1.648	1.649	1.649	1.648	1.648
86	1.453	1.463	1.472	1.484	1.497	1.510	1.521	1.535	1.551	1.578	1.605	1.589	1.566	1.568	1.572	1.577	1.580	1.583	1.587	1.592
87	1.241	1.244	1.242	1.247	1.245	1.248	1.247	1.251	1.251	1.254	1.253	1.254	1.250	1.253	1.250	1.253	1.252	1.254	1.253	1.257
88	1.231	1.232	1.232	1.233	1.234	1.236	1.236	1.236	1.236	1.237	1.236	1.236	1.236	1.235	1.233	1.234	1.232	1.234	1.231	1.233
89	1.226	1.226	1.228	1.227	1.228	1.228	1.229	1.229	1.230	1.229	1.230	1.228	1.229	1.228	1.227	1.226	1.227	1.225	1.225	1.224
90	1.222	1.224	1.224	1.225	1.224	1.226	1.225	1.226	1.226	1.227	1.226	1.227	1.226	1.226	1.222	1.224	1.221	1.222	1.221	1.222
91	1.220	1.220	1.220	1.221	1.222	1.221	1.223	1.222	1.223	1.223	1.227	1.238	1.244	1.230	1.224	1.220	1.220	1.219	1.220	1.219
92	1.219	1.218	1.219	1.218	1.220	1.220	1.222	1.221	1.222	1.222	1.253	1.352	1.391	1.330	1.255	1.229	1.222	1.218	1.218	1.217
93	1.215	1.218	1.216	1.218	1.217	1.219	1.219	1.221	1.217	1.219	1.221	1.250	1.281	1.260	1.229	1.223	1.220	1.219	1.217	1.217
94	1.213	1.213	1.214	1.217	1.216	1.218	1.218	1.219	1.218	1.215	1.216	1.214	1.216	1.218	1.217	1.217	1.215	1.215	1.213	1.215
95	1.210	1.210	1.211	1.212	1.215	1.215	1.216	1.216	1.216	1.214	1.215	1.215	1.214	1.214	1.213	1.212	1.212	1.208	1.212	1.209
96	1.210	1.210	1.210	1.210	1.212	1.214	1.215	1.215	1.216	1.215	1.214	1.212	1.212	1.212	1.212	1.211	1.212	1.210	1.210	1.208
97	1.210	1.208	1.210	1.210	1.212	1.212	1.215	1.214	1.215	1.214	1.214	1.212	1.212	1.211	1.211	1.210	1.210	1.207	1.210	1.208
98	1.210	1.209	1.209	1.208	1.210	1.211	1.212	1.212	1.213	1.212	1.212	1.210	1.210	1.210	1.210	1.210	1.210	1.208	1.209	1.208

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 24

IR SCAN TIME 11.62 SEC
INITIAL TEMP 523.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	1.263	1.244	1.239	1.231	1.224	1.218	1.218	1.215	1.215	1.213	1.213	1.212	1.210	1.210	1.211	1.208	1.208	1.208	1.207	1.206
65	1.320	1.265	1.247	1.241	1.233	1.226	1.218	1.217	1.215	1.214	1.212	1.212	1.210	1.211	1.210	1.209	1.208	1.208	1.206	1.207
66	1.412	1.326	1.266	1.245	1.238	1.233	1.226	1.217	1.216	1.213	1.212	1.211	1.211	1.210	1.210	1.207	1.208	1.206	1.206	1.204
67	1.471	1.432	1.351	1.277	1.247	1.240	1.234	1.226	1.217	1.215	1.212	1.210	1.210	1.209	1.209	1.210	1.207	1.206	1.201	1.207
68	1.520	1.508	1.479	1.407	1.310	1.258	1.242	1.233	1.229	1.218	1.212	1.210	1.210	1.208	1.207	1.206	1.204	1.203	1.202	1.201
69	1.525	1.520	1.519	1.513	1.471	1.372	1.283	1.253	1.238	1.232	1.222	1.214	1.210	1.210	1.208	1.208	1.204	1.206	1.203	1.203
70	1.544	1.539	1.536	1.531	1.528	1.515	1.446	1.330	1.266	1.243	1.234	1.226	1.217	1.211	1.210	1.208	1.208	1.206	1.204	1.202
71	1.567	1.558	1.553	1.549	1.547	1.538	1.522	1.472	1.368	1.279	1.250	1.236	1.231	1.221	1.213	1.209	1.207	1.207	1.204	1.203
72	1.579	1.565	1.555	1.546	1.535	1.527	1.522	1.514	1.485	1.403	1.301	1.256	1.238	1.232	1.224	1.214	1.210	1.208	1.206	1.206
73	1.542	1.537	1.531	1.523	1.518	1.517	1.517	1.517	1.512	1.493	1.434	1.331	1.263	1.241	1.231	1.226	1.216	1.209	1.208	1.206
74	1.533	1.522	1.518	1.510	1.508	1.508	1.509	1.505	1.503	1.498	1.488	1.447	1.363	1.278	1.248	1.231	1.228	1.218	1.210	1.206
75	1.534	1.524	1.517	1.513	1.508	1.505	1.499	1.495	1.490	1.488	1.486	1.480	1.457	1.393	1.301	1.253	1.234	1.229	1.221	1.214
76	1.547	1.535	1.526	1.518	1.513	1.508	1.504	1.498	1.494	1.488	1.484	1.478	1.470	1.454	1.410	1.326	1.259	1.238	1.229	1.224
77	1.561	1.553	1.543	1.531	1.519	1.510	1.502	1.497	1.492	1.484	1.477	1.475	1.471	1.466	1.453	1.423	1.353	1.275	1.241	1.229
78	1.565	1.557	1.550	1.544	1.538	1.532	1.525	1.517	1.508	1.501	1.494	1.486	1.479	1.472	1.465	1.454	1.436	1.389	1.311	1.253
79	1.589	1.583	1.573	1.565	1.553	1.542	1.537	1.531	1.527	1.520	1.510	1.503	1.497	1.489	1.482	1.476	1.468	1.455	1.423	1.350
80	1.605	1.597	1.588	1.583	1.573	1.560	1.550	1.545	1.540	1.535	1.527	1.515	1.506	1.502	1.497	1.490	1.481	1.471	1.460	1.437
81	1.618	1.610	1.599	1.593	1.587	1.580	1.567	1.557	1.550	1.546	1.542	1.539	1.528	1.517	1.507	1.501	1.493	1.482	1.471	1.461
82	1.629	1.620	1.609	1.601	1.594	1.589	1.581	1.574	1.565	1.559	1.553	1.548	1.543	1.537	1.524	1.515	1.511	1.499	1.484	1.474
83	1.640	1.631	1.623	1.613	1.602	1.596	1.591	1.585	1.578	1.570	1.563	1.557	1.552	1.546	1.537	1.531	1.526	1.517	1.506	1.498
84	1.653	1.648	1.643	1.635	1.627	1.620	1.615	1.610	1.603	1.594	1.586	1.577	1.567	1.558	1.551	1.543	1.535	1.525	1.515	1.507
85	1.648	1.648	1.646	1.645	1.642	1.636	1.631	1.624	1.618	1.612	1.608	1.603	1.596	1.588	1.579	1.567	1.557	1.543	1.531	1.521
86	1.595	1.598	1.600	1.603	1.605	1.605	1.603	1.601	1.598	1.594	1.591	1.588	1.582	1.578	1.575	1.570	1.563	1.556	1.550	1.544
87	1.257	1.262	1.263	1.268	1.270	1.274	1.277	1.281	1.283	1.286	1.289	1.295	1.297	1.301	1.308	1.316	1.320	1.323	1.326	1.328
88	1.231	1.233	1.231	1.233	1.231	1.232	1.230	1.231	1.228	1.230	1.226	1.228	1.225	1.228	1.230	1.232	1.233	1.236	1.235	1.233
89	1.225	1.224	1.226	1.224	1.225	1.223	1.224	1.224	1.224	1.222	1.222	1.220	1.220	1.219	1.223	1.225	1.228	1.228	1.230	1.224
90	1.220	1.221	1.221	1.222	1.221	1.222	1.220	1.221	1.219	1.220	1.217	1.219	1.216	1.217	1.219	1.229	1.228	1.228	1.227	1.228
91	1.220	1.219	1.219	1.217	1.218	1.218	1.218	1.217	1.218	1.219	1.222	1.219	1.216	1.213	1.222	1.237	1.232	1.227	1.228	1.228
92	1.217	1.216	1.217	1.216	1.216	1.216	1.216	1.216	1.224	1.288	1.372	1.357	1.276	1.231	1.221	1.219	1.222	1.226	1.226	1.226
93	1.217	1.216	1.216	1.216	1.215	1.215	1.215	1.216	1.216	1.233	1.283	1.291	1.246	1.222	1.216	1.220	1.220	1.225	1.225	1.226
94	1.216	1.215	1.215	1.214	1.214	1.212	1.213	1.213	1.212	1.211	1.213	1.212	1.212	1.210	1.211	1.214	1.221	1.227	1.225	1.225
95	1.211	1.208	1.211	1.208	1.210	1.208	1.210	1.207	1.209	1.208	1.210	1.210	1.210	1.210	1.211	1.216	1.223	1.225	1.228	1.227
96	1.210	1.208	1.210	1.210	1.210	1.207	1.210	1.208	1.209	1.208	1.208	1.208	1.209	1.206	1.212	1.218	1.227	1.228	1.231	1.231
97	1.210	1.208	1.209	1.208	1.209	1.209	1.210	1.207	1.209	1.208	1.208	1.208	1.207	1.208	1.212	1.222	1.231	1.237	1.240	1.239
98	1.209	1.208	1.209	1.208	1.209	1.208	1.209	1.208	1.209	1.208	1.209	1.208	1.209	1.210	1.225	1.257	1.269	1.259	1.256	1.254

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 24

IR SCAN TIME 11.62 SEC
INITIAL TEMP 523.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	1.207	1.204	1.206	1.203	1.203	1.203	1.201	1.200	1.201	1.198	1.199	1.198	1.199	1.197	1.197	1.196	1.196	1.196	1.196	1.193
65	1.206	1.204	1.203	1.204	1.202	1.203	1.201	1.202	1.200	1.199	1.199	1.199	1.198	1.198	1.196	1.197	1.193	1.192	1.192	1.193
66	1.204	1.204	1.203	1.203	1.202	1.201	1.200	1.199	1.199	1.199	1.197	1.196	1.196	1.194	1.193	1.192	1.192	1.192	1.192	1.191
67	1.204	1.203	1.203	1.201	1.201	1.199	1.199	1.197	1.197	1.194	1.196	1.194	1.194	1.193	1.191	1.192	1.192	1.192	1.191	1.190
68	1.201	1.198	1.200	1.197	1.198	1.194	1.198	1.193	1.196	1.193	1.196	1.192	1.193	1.190	1.191	1.190	1.192	1.191	1.190	1.188
69	1.201	1.200	1.199	1.199	1.198	1.199	1.196	1.196	1.196	1.196	1.193	1.193	1.192	1.193	1.191	1.191	1.189	1.189	1.188	1.190
70	1.202	1.202	1.201	1.199	1.201	1.197	1.197	1.197	1.197	1.194	1.196	1.192	1.193	1.191	1.192	1.191	1.191	1.190	1.190	1.188
71	1.203	1.201	1.201	1.199	1.199	1.198	1.199	1.198	1.198	1.196	1.196	1.194	1.193	1.192	1.193	1.191	1.192	1.191	1.191	1.190
72	1.202	1.203	1.201	1.201	1.199	1.201	1.198	1.198	1.197	1.197	1.196	1.196	1.193	1.194	1.193	1.193	1.191	1.191	1.190	1.192
73	1.204	1.202	1.201	1.201	1.200	1.199	1.199	1.199	1.198	1.197	1.197	1.196	1.196	1.193	1.193	1.192	1.192	1.191	1.191	1.190
74	1.206	1.203	1.203	1.200	1.201	1.200	1.200	1.198	1.199	1.197	1.197	1.196	1.196	1.194	1.193	1.191	1.192	1.191	1.191	1.189
75	1.203	1.204	1.200	1.203	1.198	1.201	1.196	1.200	1.196	1.197	1.193	1.196	1.192	1.194	1.190	1.193	1.191	1.192	1.190	1.190
76	1.217	1.209	1.204	1.202	1.201	1.200	1.200	1.198	1.198	1.197	1.196	1.196	1.196	1.196	1.193	1.191	1.192	1.190	1.192	1.189
77	1.225	1.223	1.216	1.210	1.203	1.200	1.199	1.199	1.197	1.198	1.196	1.196	1.194	1.194	1.192	1.193	1.191	1.192	1.190	1.192
78	1.231	1.224	1.221	1.220	1.217	1.207	1.203	1.199	1.199	1.197	1.196	1.193	1.194	1.193	1.193	1.191	1.192	1.190	1.191	1.189
79	1.272	1.239	1.226	1.220	1.219	1.217	1.216	1.210	1.203	1.198	1.196	1.193	1.193	1.192	1.192	1.191	1.191	1.190	1.191	1.188
80	1.379	1.296	1.246	1.228	1.224	1.220	1.219	1.217	1.216	1.213	1.210	1.204	1.201	1.199	1.198	1.197	1.198	1.196	1.197	1.196
81	1.442	1.396	1.311	1.250	1.229	1.222	1.218	1.217	1.214	1.212	1.209	1.210	1.209	1.207	1.203	1.200	1.197	1.193	1.191	1.191
82	1.461	1.449	1.414	1.340	1.260	1.231	1.217	1.217	1.212	1.215	1.211	1.212	1.208	1.210	1.208	1.209	1.209	1.209	1.203	1.204
83	1.488	1.479	1.467	1.440	1.373	1.286	1.237	1.222	1.215	1.214	1.212	1.211	1.210	1.210	1.208	1.210	1.202	1.208	1.201	1.206
84	1.500	1.494	1.489	1.485	1.474	1.433	1.339	1.253	1.225	1.214	1.211	1.210	1.209	1.208	1.208	1.207	1.207	1.206	1.206	1.206
85	1.512	1.503	1.495	1.490	1.483	1.467	1.425	1.338	1.258	1.224	1.215	1.208	1.208	1.207	1.207	1.204	1.206	1.204	1.206	1.204
86	1.536	1.529	1.523	1.515	1.503	1.490	1.470	1.436	1.371	1.284	1.230	1.214	1.207	1.206	1.203	1.206	1.203	1.204	1.202	1.202
87	1.328	1.328	1.326	1.327	1.326	1.326	1.324	1.322	1.308	1.273	1.229	1.212	1.203	1.203	1.201	1.201	1.199	1.200	1.199	1.200
88	1.229	1.226	1.219	1.217	1.214	1.215	1.212	1.212	1.208	1.208	1.204	1.203	1.200	1.200	1.199	1.200	1.198	1.199	1.198	1.198
89	1.224	1.216	1.214	1.209	1.210	1.208	1.208	1.204	1.206	1.201	1.202	1.200	1.200	1.199	1.199	1.198	1.198	1.196	1.197	1.196
90	1.231	1.227	1.213	1.210	1.206	1.206	1.203	1.203	1.201	1.202	1.199	1.199	1.198	1.199	1.194	1.198	1.193	1.197	1.193	1.195
91	1.243	1.240	1.219	1.210	1.207	1.204	1.203	1.201	1.201	1.199	1.199	1.198	1.198	1.197	1.197	1.196	1.196	1.196	1.196	1.194
92	1.223	1.217	1.212	1.207	1.206	1.202	1.202	1.200	1.201	1.198	1.199	1.197	1.198	1.197	1.197	1.194	1.194	1.192	1.194	1.193
93	1.223	1.221	1.213	1.208	1.206	1.204	1.202	1.201	1.200	1.200	1.200	1.200	1.197	1.198	1.196	1.196	1.194	1.193	1.193	1.193
94	1.228	1.227	1.215	1.204	1.204	1.201	1.201	1.201	1.201	1.199	1.199	1.198	1.197	1.196	1.197	1.193	1.194	1.193	1.192	1.191
95	1.227	1.225	1.217	1.207	1.203	1.200	1.201	1.200	1.199	1.198	1.198	1.196	1.196	1.196	1.194	1.193	1.193	1.192	1.192	1.192
96	1.231	1.226	1.218	1.204	1.203	1.199	1.200	1.198	1.199	1.196	1.197	1.196	1.196	1.193	1.194	1.193	1.193	1.191	1.192	1.190
97	1.238	1.231	1.220	1.207	1.201	1.199	1.201	1.199	1.198	1.197	1.197	1.191	1.196	1.190	1.193	1.190	1.193	1.189	1.192	1.188
98	1.264	1.275	1.250	1.215	1.204	1.200	1.199	1.199	1.199	1.198	1.198	1.194	1.194	1.192	1.193	1.192	1.193	1.191	1.191	1.191

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 24

IR SCAN TIME 11.62 SEC
INITIAL TEMP 523.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	1.193	1.191	1.193	1.191	1.192	1.190	1.191	1.189	1.190	1.189
65	1.191	1.192	1.191	1.191	1.190	1.191	1.188	1.190	1.188	1.189
66	1.191	1.190	1.190	1.189	1.189	1.188	1.189	1.186	1.188	1.185
67	1.190	1.188	1.186	1.188	1.186	1.185	1.188	1.188	1.185	1.185
68	1.188	1.188	1.186	1.185	1.185	1.185	1.185	1.183	1.183	1.183
69	1.183	1.189	1.185	1.188	1.183	1.185	1.181	1.185	1.180	1.184
70	1.188	1.188	1.188	1.186	1.186	1.184	1.185	1.184	1.185	1.183
71	1.190	1.188	1.189	1.188	1.188	1.185	1.185	1.184	1.185	1.183
72	1.190	1.190	1.189	1.189	1.188	1.188	1.185	1.185	1.184	1.184
73	1.190	1.188	1.188	1.186	1.186	1.185	1.185	1.183	1.184	1.183
74	1.189	1.188	1.188	1.186	1.186	1.185	1.185	1.183	1.184	1.183
75	1.189	1.190	1.188	1.188	1.185	1.186	1.183	1.185	1.183	1.184
76	1.191	1.186	1.189	1.184	1.186	1.184	1.184	1.183	1.183	1.180
77	1.189	1.189	1.188	1.189	1.186	1.188	1.183	1.186	1.184	1.185
78	1.190	1.188	1.188	1.186	1.186	1.185	1.184	1.183	1.183	1.183
79	1.189	1.189	1.189	1.188	1.190	1.186	1.185	1.186	1.185	1.184
80	1.197	1.196	1.197	1.196	1.197	1.196	1.196	1.193	1.194	1.192
81	1.190	1.190	1.188	1.186	1.189	1.185	1.184	1.185	1.183	1.184
82	1.199	1.198	1.192	1.193	1.188	1.189	1.185	1.185	1.183	1.184
83	1.201	1.206	1.199	1.202	1.196	1.198	1.191	1.193	1.188	1.190
84	1.204	1.203	1.202	1.202	1.203	1.201	1.200	1.199	1.199	1.197
85	1.204	1.203	1.202	1.201	1.201	1.200	1.201	1.199	1.200	1.200
86	1.201	1.201	1.200	1.200	1.199	1.200	1.198	1.199	1.197	1.198
87	1.199	1.198	1.197	1.199	1.198	1.198	1.196	1.197	1.196	1.196
88	1.196	1.197	1.196	1.196	1.196	1.196	1.194	1.196	1.194	1.196
89	1.199	1.196	1.196	1.196	1.196	1.194	1.196	1.196	1.194	1.193
90	1.191	1.196	1.192	1.196	1.192	1.194	1.191	1.193	1.191	1.193
91	1.193	1.193	1.193	1.192	1.193	1.191	1.192	1.192	1.192	1.191
92	1.194	1.193	1.193	1.192	1.192	1.192	1.193	1.192	1.192	1.191
93	1.191	1.193	1.191	1.193	1.191	1.191	1.191	1.192	1.191	1.191
94	1.193	1.190	1.191	1.191	1.191	1.192	1.191	1.192	1.190	1.190
95	1.191	1.191	1.191	1.190	1.192	1.191	1.192	1.191	1.192	1.191
96	1.191	1.190	1.192	1.190	1.191	1.191	1.191	1.191	1.192	1.191
97	1.191	1.186	1.191	1.188	1.192	1.189	1.192	1.191	1.192	1.192
98	1.191	1.191	1.191	1.191	1.191	1.190	1.191	1.191	1.191	1.190

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP, CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 11.62 SEC
HREF = 0.398E-01

GROUP 24

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	0.070	0.072	0.073	0.073	0.073	0.072	0.071	0.072	0.072	0.073	0.073	0.072	0.073	0.074	0.074	0.074	0.074	0.075	0.075	0.075
30	0.073	0.074	0.074	0.073	0.072	0.071	0.072	0.073	0.073	0.074	0.074	0.075	0.074	0.075	0.075	0.075	0.075	0.076	0.075	0.075
31	0.073	0.072	0.072	0.072	0.072	0.073	0.074	0.074	0.075	0.074	0.075	0.075	0.075	0.076	0.076	0.076	0.074	0.074	0.072	0.072
32	0.073	0.072	0.073	0.074	0.075	0.076	0.076	0.075	0.075	0.075	0.075	0.075	0.075	0.074	0.074	0.072	0.071	0.070	0.070	0.070
33	0.074	0.074	0.075	0.075	0.075	0.075	0.075	0.075	0.074	0.075	0.074	0.072	0.071	0.070	0.070	0.070	0.071	0.072	0.072	0.072
34	0.076	0.076	0.075	0.074	0.074	0.074	0.074	0.073	0.072	0.071	0.070	0.069	0.069	0.070	0.071	0.072	0.073	0.073	0.073	0.074
35	0.075	0.075	0.074	0.074	0.072	0.072	0.070	0.070	0.068	0.070	0.069	0.070	0.070	0.071	0.071	0.073	0.073	0.074	0.074	0.074
36	0.074	0.072	0.071	0.070	0.069	0.069	0.069	0.070	0.070	0.071	0.071	0.072	0.072	0.073	0.073	0.073	0.073	0.073	0.069	0.068
37	0.071	0.070	0.069	0.069	0.069	0.070	0.070	0.071	0.071	0.072	0.072	0.072	0.073	0.073	0.072	0.070	0.067	0.065	0.062	0.061
38	0.069	0.069	0.070	0.070	0.071	0.070	0.071	0.071	0.072	0.072	0.073	0.072	0.071	0.068	0.065	0.062	0.062	0.060	0.060	0.060
39	0.069	0.070	0.070	0.070	0.071	0.071	0.072	0.072	0.073	0.071	0.069	0.066	0.063	0.061	0.060	0.061	0.061	0.060	0.061	0.060
40	0.071	0.070	0.071	0.072	0.072	0.072	0.071	0.069	0.066	0.064	0.062	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061
41	0.072	0.072	0.073	0.073	0.072	0.068	0.066	0.062	0.062	0.061	0.061	0.061	0.061	0.062	0.061	0.061	0.062	0.061	0.062	0.062
42	0.075	0.075	0.073	0.069	0.063	0.062	0.060	0.061	0.060	0.062	0.060	0.062	0.061	0.062	0.062	0.062	0.062	0.062	0.062	0.063
43	0.073	0.068	0.064	0.062	0.062	0.062	0.061	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.063	0.062	0.063	0.062	0.064
44	0.064	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.063	0.063	0.063	0.064	0.064	0.064	0.064	0.065
45	0.063	0.063	0.063	0.063	0.063	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.065	0.065	0.065	0.066	0.068	0.071
46	0.064	0.064	0.064	0.064	0.065	0.065	0.065	0.065	0.065	0.065	0.065	0.065	0.066	0.066	0.067	0.067	0.068	0.072	0.107	0.151
47	0.064	0.064	0.065	0.065	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.067	0.067	0.068	0.068	0.069	0.080	0.130	0.182
48	0.065	0.065	0.065	0.066	0.066	0.066	0.066	0.067	0.066	0.067	0.067	0.067	0.068	0.068	0.068	0.070	0.071	0.095	0.160	0.210
49	0.066	0.065	0.066	0.066	0.066	0.066	0.067	0.066	0.067	0.066	0.068	0.068	0.069	0.069	0.070	0.070	0.074	0.112	0.181	0.222
50	0.066	0.066	0.066	0.066	0.066	0.067	0.067	0.068	0.068	0.068	0.068	0.069	0.069	0.070	0.070	0.071	0.079	0.132	0.196	0.230
51	0.066	0.067	0.066	0.066	0.067	0.067	0.068	0.068	0.069	0.069	0.069	0.069	0.070	0.070	0.071	0.073	0.089	0.150	0.207	0.232
52	0.065	0.065	0.065	0.066	0.066	0.067	0.066	0.068	0.067	0.068	0.068	0.069	0.069	0.070	0.070	0.073	0.096	0.163	0.211	0.232
53	0.062	0.063	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.065	0.066	0.066	0.067	0.067	0.068	0.071	0.106	0.174	0.214	0.232
54	0.061	0.061	0.061	0.062	0.062	0.062	0.063	0.064	0.064	0.064	0.064	0.065	0.066	0.066	0.067	0.072	0.114	0.180	0.215	0.232
55	0.060	0.061	0.061	0.061	0.062	0.062	0.063	0.063	0.064	0.064	0.065	0.065	0.066	0.067	0.068	0.077	0.131	0.192	0.219	0.234
56	0.061	0.061	0.062	0.060	0.063	0.061	0.063	0.062	0.065	0.064	0.065	0.065	0.066	0.067	0.069	0.089	0.154	0.203	0.225	0.238
57	0.060	0.061	0.061	0.062	0.062	0.062	0.063	0.063	0.064	0.064	0.065	0.065	0.066	0.066	0.071	0.101	0.167	0.206	0.226	0.239
58	0.060	0.060	0.060	0.060	0.061	0.061	0.062	0.062	0.063	0.064	0.064	0.064	0.065	0.067	0.072	0.117	0.180	0.213	0.229	0.240
59	0.060	0.059	0.060	0.060	0.060	0.061	0.062	0.062	0.062	0.063	0.064	0.064	0.065	0.066	0.077	0.133	0.189	0.215	0.230	0.240
60	0.060	0.060	0.060	0.060	0.061	0.061	0.062	0.062	0.062	0.063	0.064	0.064	0.065	0.066	0.082	0.141	0.192	0.215	0.229	0.239
61	0.060	0.060	0.060	0.060	0.061	0.062	0.062	0.063	0.063	0.064	0.064	0.065	0.065	0.068	0.089	0.151	0.194	0.214	0.228	0.239
62	0.060	0.060	0.060	0.061	0.061	0.062	0.062	0.062	0.064	0.064	0.064	0.065	0.066	0.068	0.096	0.156	0.193	0.212	0.224	0.233
63	0.060	0.059	0.061	0.060	0.061	0.061	0.063	0.063	0.064	0.064	0.064	0.064	0.066	0.070	0.110	0.166	0.196	0.212	0.223	0.232

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 11.62 SEC
HRFR = 0.398E-01

GROUP 24

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	0.076	0.075	0.076	0.074	0.074	0.071	0.071	0.070	0.071	0.070	0.071	0.070	0.071	0.070	0.071	0.072	0.073	0.073	0.073	0.074
30	0.074	0.073	0.072	0.071	0.071	0.071	0.070	0.071	0.071	0.073	0.073	0.074	0.074	0.074	0.074	0.075	0.075	0.075	0.073	0.074
31	0.071	0.070	0.070	0.071	0.072	0.073	0.072	0.073	0.073	0.074	0.075	0.076	0.076	0.075	0.075	0.074	0.072	0.071	0.069	0.068
32	0.071	0.071	0.072	0.073	0.074	0.074	0.074	0.074	0.075	0.076	0.075	0.074	0.072	0.070	0.067	0.065	0.063	0.061	0.060	0.059
33	0.073	0.073	0.073	0.074	0.075	0.075	0.073	0.072	0.071	0.069	0.066	0.065	0.062	0.060	0.059	0.059	0.059	0.059	0.059	0.059
34	0.074	0.074	0.074	0.072	0.071	0.069	0.066	0.064	0.062	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059
35	0.072	0.070	0.067	0.064	0.062	0.060	0.059	0.060	0.059	0.059	0.059	0.060	0.059	0.060	0.059	0.060	0.059	0.060	0.059	0.060
36	0.064	0.062	0.059	0.060	0.059	0.060	0.059	0.060	0.059	0.060	0.059	0.060	0.059	0.060	0.059	0.060	0.060	0.060	0.059	0.060
37	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.059	0.060	0.059	0.061
38	0.060	0.060	0.061	0.060	0.061	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.060
39	0.061	0.061	0.062	0.061	0.062	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.062	0.061
40	0.062	0.061	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.061	0.061	0.062	0.064	0.062	0.064	0.062	0.062
41	0.062	0.063	0.062	0.062	0.063	0.063	0.063	0.063	0.063	0.063	0.063	0.063	0.063	0.063	0.062	0.063	0.063	0.063	0.063	0.063
42	0.063	0.063	0.063	0.063	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
43	0.062	0.064	0.063	0.064	0.064	0.065	0.064	0.065	0.064	0.065	0.064	0.065	0.065	0.065	0.065	0.065	0.065	0.065	0.064	0.065
44	0.065	0.065	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.065	0.066	0.065	0.066	0.064
45	0.072	0.073	0.072	0.072	0.071	0.071	0.070	0.070	0.070	0.070	0.069	0.070	0.069	0.069	0.069	0.069	0.068	0.069	0.068	0.068
46	0.172	0.182	0.188	0.191	0.191	0.186	0.177	0.161	0.140	0.118	0.099	0.085	0.079	0.075	0.073	0.072	0.071	0.071	0.070	0.070
47	0.205	0.216	0.226	0.237	0.249	0.263	0.281	0.296	0.305	0.307	0.299	0.276	0.237	0.189	0.139	0.102	0.084	0.076	0.073	0.072
48	0.229	0.239	0.246	0.254	0.263	0.273	0.285	0.299	0.313	0.323	0.329	0.331	0.327	0.324	0.312	0.268	0.192	0.122	0.090	0.080
49	0.244	0.260	0.272	0.281	0.289	0.298	0.308	0.316	0.318	0.319	0.323	0.326	0.326	0.327	0.332	0.328	0.307	0.238	0.150	0.100
50	0.248	0.265	0.279	0.293	0.309	0.326	0.339	0.348	0.348	0.351	0.352	0.350	0.348	0.348	0.349	0.348	0.340	0.320	0.260	0.169
51	0.248	0.260	0.274	0.291	0.308	0.328	0.350	0.373	0.394	0.401	0.395	0.382	0.368	0.356	0.352	0.351	0.351	0.348	0.334	0.286
52	0.247	0.259	0.271	0.286	0.303	0.322	0.342	0.367	0.394	0.414	0.422	0.426	0.421	0.408	0.393	0.376	0.364	0.360	0.356	0.346
53	0.246	0.256	0.267	0.279	0.295	0.313	0.335	0.358	0.384	0.404	0.417	0.428	0.439	0.449	0.453	0.446	0.437	0.426	0.415	0.398
54	0.243	0.253	0.262	0.274	0.289	0.309	0.329	0.350	0.373	0.396	0.414	0.426	0.432	0.439	0.450	0.459	0.468	0.471	0.463	0.444
55	0.245	0.254	0.262	0.274	0.290	0.308	0.327	0.349	0.371	0.392	0.408	0.421	0.429	0.438	0.449	0.454	0.463	0.477	0.489	0.501
56	0.247	0.256	0.265	0.276	0.290	0.308	0.328	0.351	0.374	0.393	0.404	0.414	0.421	0.426	0.434	0.443	0.456	0.470	0.482	0.492
57	0.248	0.255	0.265	0.276	0.291	0.306	0.326	0.347	0.366	0.385	0.401	0.410	0.418	0.429	0.437	0.437	0.438	0.445	0.454	0.467
58	0.248	0.255	0.265	0.279	0.293	0.310	0.329	0.351	0.371	0.388	0.397	0.406	0.421	0.435	0.437	0.438	0.442	0.446	0.445	0.449
59	0.248	0.254	0.264	0.278	0.292	0.308	0.327	0.349	0.371	0.385	0.394	0.403	0.417	0.428	0.430	0.429	0.438	0.448	0.449	0.445
60	0.247	0.254	0.263	0.273	0.284	0.301	0.319	0.339	0.361	0.377	0.388	0.404	0.422	0.437	0.438	0.435	0.442	0.450	0.451	0.453
61	0.245	0.252	0.262	0.273	0.282	0.297	0.314	0.333	0.352	0.365	0.375	0.389	0.409	0.422	0.429	0.439	0.443	0.443	0.444	0.450
62	0.240	0.245	0.255	0.265	0.276	0.289	0.307	0.327	0.347	0.361	0.371	0.384	0.402	0.414	0.422	0.429	0.431	0.432	0.427	0.428
63	0.239	0.246	0.256	0.265	0.276	0.287	0.304	0.325	0.346	0.360	0.371	0.386	0.405	0.416	0.421	0.423	0.423	0.429	0.431	0.422

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 11.62 SEC
.GROUP 24 HREF = 0.398E-01

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	0.074	0.074	0.074	0.074	0.074	0.073	0.073	0.072	0.070	0.069	0.068	0.068	0.066	0.066	0.065	0.064	0.064	0.062	0.062	0.061
30	0.073	0.073	0.070	0.070	0.067	0.067	0.065	0.064	0.062	0.062	0.059	0.059	0.058	0.059	0.058	0.059	0.058	0.059	0.058	0.059
31	0.066	0.064	0.063	0.061	0.060	0.059	0.059	0.059	0.058	0.059	0.058	0.059	0.058	0.059	0.058	0.058	0.057	0.058	0.057	0.058
32	0.059	0.059	0.059	0.059	0.059	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.059	0.058	0.058	0.057	0.058	0.058	0.058	0.058
33	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.058	0.059	0.058	0.059	0.058	0.059	0.057	0.058	0.058	0.058	0.057	0.058
34	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.058	0.059	0.058	0.059	0.058	0.059	0.058	0.058	0.058	0.058	0.058
35	0.060	0.060	0.060	0.060	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.058	0.059	0.058	0.059	0.058	0.059	0.059
36	0.059	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.059	0.060	0.059	0.060	0.059	0.059	0.059	0.059	0.058	0.059	0.058	0.059
37	0.059	0.060	0.059	0.060	0.059	0.060	0.059	0.060	0.059	0.060	0.059	0.060	0.059	0.060	0.059	0.059	0.059	0.059	0.059	0.059
38	0.061	0.060	0.061	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.059	0.060	0.059	0.059	0.059	0.059	0.059
39	0.061	0.061	0.061	0.061	0.061	0.060	0.061	0.061	0.061	0.061	0.061	0.060	0.060	0.060	0.060	0.060	0.060	0.059	0.059	0.059
40	0.062	0.062	0.062	0.062	0.062	0.062	0.060	0.061	0.062	0.062	0.062	0.062	0.061	0.060	0.060	0.060	0.060	0.060	0.060	0.059
41	0.063	0.063	0.062	0.063	0.062	0.063	0.062	0.063	0.062	0.062	0.062	0.062	0.061	0.062	0.061	0.061	0.060	0.061	0.060	0.061
42	0.064	0.064	0.064	0.064	0.064	0.063	0.063	0.063	0.063	0.063	0.062	0.062	0.062	0.062	0.061	0.061	0.061	0.061	0.060	0.061
43	0.064	0.065	0.064	0.064	0.064	0.064	0.064	0.063	0.063	0.063	0.062	0.062	0.062	0.062	0.062	0.062	0.061	0.061	0.061	0.062
44	0.065	0.064	0.065	0.064	0.065	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.063	0.063	0.063	0.062	0.063	0.062	0.062	0.061
45	0.067	0.067	0.066	0.067	0.066	0.066	0.066	0.066	0.065	0.065	0.064	0.065	0.064	0.064	0.063	0.064	0.063	0.064	0.062	0.064
46	0.070	0.070	0.070	0.069	0.069	0.068	0.068	0.067	0.068	0.066	0.066	0.066	0.066	0.066	0.066	0.065	0.065	0.065	0.065	0.064
47	0.072	0.071	0.071	0.071	0.070	0.070	0.069	0.069	0.068	0.068	0.068	0.067	0.067	0.066	0.067	0.066	0.066	0.066	0.066	0.065
48	0.075	0.074	0.073	0.073	0.072	0.071	0.070	0.070	0.069	0.069	0.069	0.069	0.068	0.068	0.068	0.068	0.067	0.067	0.066	0.067
49	0.084	0.078	0.075	0.074	0.073	0.072	0.072	0.071	0.071	0.070	0.070	0.069	0.069	0.069	0.069	0.068	0.068	0.068	0.067	0.067
50	0.107	0.087	0.079	0.077	0.075	0.074	0.073	0.072	0.072	0.072	0.071	0.071	0.070	0.070	0.069	0.069	0.069	0.069	0.069	0.068
51	0.197	0.120	0.091	0.080	0.077	0.075	0.075	0.074	0.073	0.072	0.072	0.071	0.071	0.071	0.070	0.070	0.070	0.069	0.069	0.069
52	0.314	0.240	0.151	0.103	0.085	0.078	0.076	0.076	0.073	0.073	0.072	0.072	0.071	0.071	0.070	0.070	0.069	0.070	0.069	0.069
53	0.370	0.338	0.283	0.187	0.114	0.089	0.080	0.076	0.075	0.072	0.070	0.069	0.069	0.068	0.068	0.067	0.067	0.066	0.066	0.066
54	0.421	0.398	0.369	0.324	0.231	0.138	0.097	0.083	0.077	0.076	0.072	0.071	0.069	0.069	0.067	0.068	0.066	0.066	0.066	0.068
55	0.497	0.479	0.453	0.420	0.372	0.285	0.176	0.111	0.089	0.080	0.077	0.075	0.071	0.070	0.069	0.069	0.068	0.069	0.069	0.070
56	0.505	0.517	0.520	0.505	0.476	0.430	0.349	0.224	0.130	0.096	0.083	0.078	0.077	0.072	0.071	0.070	0.070	0.070	0.070	0.071
57	0.481	0.488	0.492	0.504	0.525	0.526	0.497	0.426	0.297	0.169	0.109	0.089	0.081	0.077	0.074	0.071	0.070	0.070	0.071	0.071
58	0.453	0.459	0.466	0.474	0.489	0.492	0.507	0.508	0.472	0.376	0.235	0.135	0.093	0.084	0.079	0.076	0.072	0.071	0.070	0.070
59	0.448	0.449	0.443	0.439	0.442	0.453	0.462	0.464	0.462	0.471	0.453	0.309	0.163	0.106	0.087	0.079	0.075	0.071	0.069	0.068
60	0.457	0.463	0.467	0.461	0.440	0.413	0.395	0.395	0.411	0.426	0.437	0.455	0.390	0.214	0.120	0.092	0.080	0.076	0.072	0.070
61	0.456	0.456	0.459	0.467	0.466	0.453	0.415	0.357	0.303	0.290	0.325	0.382	0.334	0.254	0.182	0.113	0.088	0.080	0.076	0.073
62	0.441	0.446	0.449	0.451	0.456	0.464	0.466	0.443	0.394	0.334	0.292	0.248	0.218	0.222	0.222	0.190	0.130	0.091	0.081	0.076
63	0.419	0.413	0.415	0.420	0.426	0.429	0.431	0.433	0.436	0.435	0.373	0.268	0.233	0.226	0.221	0.216	0.193	0.139	0.096	0.082

NASA/RI OH90 TRANSITION TEST
V41B-P4A
APO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 11.62 SEC
HRFR = 0.398E-01

GROUP 24

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.060	0.059	0.059	0.059	0.059	0.059	0.059	0.058	0.059	0.058	0.058	0.058	0.059	0.058	0.059	0.058	0.059	0.058	0.059	0.059
30	0.058	0.059	0.058	0.059	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058
31	0.057	0.058	0.057	0.058	0.057	0.058	0.057	0.057	0.056	0.057	0.057	0.057	0.057	0.058	0.057	0.058	0.058	0.058	0.058	0.058
32	0.058	0.057	0.058	0.057	0.057	0.057	0.057	0.057	0.057	0.057	0.057	0.057	0.057	0.055	0.057	0.056	0.058	0.056	0.057	0.056
33	0.057	0.058	0.057	0.058	0.057	0.057	0.057	0.057	0.057	0.057	0.057	0.057	0.057	0.057	0.057	0.057	0.057	0.057	0.057	0.057
34	0.058	0.058	0.058	0.057	0.058	0.057	0.057	0.057	0.057	0.057	0.058	0.057	0.057	0.057	0.057	0.057	0.057	0.057	0.057	0.056
35	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.057	0.058	0.057	0.057	0.057	0.057	0.057	0.057
36	0.058	0.059	0.058	0.059	0.058	0.058	0.058	0.059	0.058	0.058	0.058	0.058	0.057	0.058	0.057	0.058	0.057	0.058	0.057	0.058
37	0.059	0.059	0.059	0.059	0.058	0.059	0.057	0.059	0.058	0.059	0.058	0.059	0.058	0.058	0.058	0.058	0.058	0.058	0.057	0.058
38	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.058	0.059	0.058	0.059	0.058	0.059	0.058	0.059	0.058	0.058	0.058	0.058	0.058
39	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.058	0.059	0.058	0.059	0.058	0.059	0.057	0.059	0.057
40	0.060	0.060	0.060	0.060	0.059	0.059	0.059	0.060	0.059	0.059	0.061	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059
41	0.060	0.060	0.060	0.060	0.059	0.060	0.059	0.060	0.059	0.060	0.059	0.060	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059
42	0.060	0.061	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.059	0.060	0.059	0.060	0.059	0.060	0.059	0.060
43	0.061	0.061	0.061	0.061	0.060	0.060	0.060	0.061	0.060	0.060	0.060	0.060	0.060	0.061	0.060	0.060	0.059	0.060	0.059	0.060
44	0.062	0.062	0.061	0.061	0.062	0.061	0.061	0.060	0.061	0.061	0.061	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060
45	0.063	0.064	0.062	0.063	0.062	0.063	0.062	0.063	0.062	0.062	0.062	0.062	0.062	0.062	0.061	0.062	0.061	0.062	0.061	0.062
46	0.065	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.061	0.064	0.061	0.064	0.061	0.063	0.061	0.063	0.061	0.063	0.061
47	0.066	0.065	0.065	0.065	0.065	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.063	0.064	0.063	0.063	0.063
48	0.066	0.066	0.066	0.066	0.065	0.065	0.065	0.065	0.064	0.065	0.064	0.065	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
49	0.067	0.066	0.066	0.066	0.066	0.066	0.066	0.065	0.066	0.065	0.065	0.065	0.065	0.064	0.065	0.064	0.065	0.064	0.065	0.064
50	0.067	0.068	0.067	0.067	0.066	0.067	0.066	0.066	0.066	0.066	0.065	0.066	0.065	0.066	0.066	0.066	0.065	0.065	0.065	0.065
51	0.069	0.068	0.068	0.068	0.068	0.067	0.067	0.067	0.068	0.068	0.067	0.066	0.066	0.065	0.066	0.066	0.066	0.066	0.066	0.065
52	0.068	0.069	0.068	0.069	0.068	0.069	0.068	0.068	0.068	0.068	0.067	0.068	0.067	0.068	0.066	0.067	0.066	0.068	0.066	0.067
53	0.067	0.068	0.069	0.069	0.069	0.069	0.069	0.068	0.069	0.068	0.069	0.068	0.069	0.068	0.068	0.068	0.068	0.067	0.067	0.066
54	0.068	0.069	0.069	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.069	0.069	0.068	0.068
55	0.070	0.071	0.071	0.071	0.071	0.072	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.070	0.070	0.069	0.070	0.069	0.069
56	0.072	0.072	0.072	0.072	0.072	0.072	0.072	0.072	0.072	0.072	0.072	0.071	0.071	0.071	0.071	0.070	0.070	0.070	0.070	0.069
57	0.071	0.071	0.071	0.071	0.071	0.070	0.070	0.070	0.070	0.070	0.070	0.069	0.069	0.069	0.069	0.068	0.068	0.068	0.068	0.067
58	0.070	0.070	0.069	0.069	0.069	0.069	0.069	0.069	0.069	0.069	0.068	0.069	0.068	0.068	0.068	0.068	0.068	0.068	0.067	0.069
59	0.068	0.066	0.067	0.066	0.066	0.066	0.066	0.065	0.065	0.065	0.065	0.064	0.065	0.064	0.064	0.064	0.063	0.063	0.064	0.063
60	0.069	0.068	0.068	0.066	0.067	0.065	0.066	0.065	0.066	0.064	0.065	0.064	0.064	0.063	0.064	0.063	0.064	0.062	0.063	0.062
61	0.070	0.069	0.068	0.068	0.067	0.067	0.066	0.067	0.066	0.066	0.065	0.065	0.065	0.065	0.064	0.064	0.064	0.064	0.063	0.063
62	0.074	0.071	0.069	0.068	0.068	0.066	0.067	0.066	0.066	0.065	0.066	0.065	0.065	0.064	0.064	0.064	0.064	0.064	0.064	0.064
63	0.077	0.074	0.072	0.069	0.068	0.067	0.067	0.066	0.066	0.065	0.065	0.065	0.065	0.064	0.064	0.064	0.064	0.064	0.063	0.062

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 11.62 SEC
GROUP 24 HRFR = 0.398E-01

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.059	0.058	0.059	0.058	0.059	0.058	0.059	0.058	0.059	0.058	0.058	0.058	0.058	0.058	0.058	0.057	0.057	0.057	0.057	0.057
30	0.058	0.058	0.058	0.058	0.058	0.059	0.058	0.059	0.058	0.058	0.058	0.058	0.059	0.058	0.057	0.057	0.057	0.057	0.057	0.057
31	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.057	0.058	0.057	0.058	0.057	0.057	0.057	0.057	0.057	0.057	0.057	0.057
32	0.057	0.056	0.057	0.056	0.057	0.057	0.057	0.056	0.057	0.057	0.057	0.057	0.057	0.057	0.057	0.056	0.057	0.056	0.056	0.056
33	0.057	0.057	0.057	0.057	0.057	0.057	0.057	0.057	0.056	0.057	0.056	0.057	0.055	0.056	0.055	0.056	0.055	0.056	0.055	0.056
34	0.057	0.057	0.057	0.057	0.057	0.056	0.057	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.055
35	0.057	0.057	0.057	0.057	0.056	0.057	0.056	0.057	0.056	0.057	0.056	0.057	0.056	0.057	0.056	0.056	0.056	0.057	0.056	0.057
36	0.057	0.057	0.057	0.057	0.056	0.057	0.057	0.057	0.057	0.057	0.056	0.057	0.056	0.057	0.056	0.057	0.056	0.057	0.056	0.057
37	0.057	0.057	0.057	0.058	0.057	0.058	0.057	0.058	0.057	0.057	0.057	0.057	0.057	0.057	0.057	0.057	0.057	0.057	0.057	0.057
38	0.059	0.058	0.058	0.057	0.058	0.058	0.058	0.058	0.058	0.057	0.058	0.057	0.058	0.057	0.057	0.057	0.058	0.058	0.057	0.057
39	0.059	0.057	0.058	0.057	0.058	0.057	0.059	0.058	0.058	0.058	0.058	0.057	0.058	0.057	0.058	0.057	0.058	0.057	0.058	0.057
40	0.059	0.059	0.059	0.058	0.058	0.059	0.059	0.057	0.059	0.058	0.058	0.059	0.057	0.059	0.058	0.058	0.058	0.058	0.057	0.058
41	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.058	0.059	0.058	0.059	0.058	0.059	0.058	0.058	0.058	0.059	0.058	0.058
42	0.059	0.060	0.059	0.059	0.059	0.059	0.059	0.059	0.058	0.059	0.058	0.059	0.058	0.059	0.058	0.058	0.058	0.059	0.058	0.059
43	0.059	0.060	0.059	0.059	0.059	0.060	0.059	0.059	0.059	0.059	0.059	0.059	0.058	0.059	0.059	0.059	0.059	0.059	0.058	0.059
44	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059
45	0.061	0.062	0.061	0.062	0.061	0.062	0.061	0.062	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061
46	0.063	0.061	0.063	0.062	0.064	0.063	0.063	0.062	0.063	0.062	0.063	0.062	0.063	0.062	0.063	0.062	0.062	0.062	0.062	0.062
47	0.064	0.064	0.065	0.064	0.064	0.064	0.064	0.063	0.064	0.063	0.064	0.062	0.063	0.062	0.063	0.062	0.063	0.062	0.062	0.062
48	0.064	0.065	0.064	0.065	0.065	0.065	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.063	0.064	0.063	0.063	0.063	0.063
49	0.064	0.064	0.065	0.065	0.065	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.063	0.064	0.063
50	0.065	0.065	0.065	0.065	0.064	0.065	0.064	0.065	0.065	0.065	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
51	0.066	0.065	0.065	0.065	0.065	0.065	0.065	0.065	0.065	0.065	0.065	0.064	0.065	0.064	0.065	0.064	0.065	0.064	0.064	0.064
52	0.066	0.066	0.066	0.066	0.065	0.065	0.065	0.065	0.064	0.065	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.063	0.063
53	0.067	0.066	0.066	0.065	0.065	0.064	0.064	0.062	0.063	0.062	0.062	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061
54	0.067	0.068	0.066	0.066	0.065	0.064	0.063	0.062	0.061	0.061	0.060	0.061	0.060	0.060	0.061	0.061	0.059	0.060	0.059	0.060
55	0.069	0.069	0.067	0.068	0.066	0.066	0.064	0.064	0.062	0.063	0.062	0.062	0.061	0.062	0.061	0.061	0.060	0.060	0.060	0.060
56	0.069	0.068	0.068	0.067	0.067	0.066	0.065	0.064	0.063	0.062	0.062	0.062	0.062	0.061	0.061	0.061	0.061	0.060	0.060	0.059
57	0.067	0.066	0.066	0.066	0.066	0.065	0.064	0.064	0.063	0.062	0.063	0.062	0.062	0.061	0.061	0.060	0.061	0.060	0.060	0.060
58	0.067	0.068	0.066	0.067	0.066	0.067	0.066	0.066	0.065	0.065	0.064	0.065	0.064	0.064	0.064	0.065	0.064	0.064	0.064	0.064
59	0.063	0.062	0.062	0.062	0.061	0.061	0.061	0.060	0.060	0.060	0.060	0.060	0.059	0.059	0.059	0.059	0.059	0.058	0.059	0.058
60	0.063	0.062	0.062	0.062	0.061	0.061	0.061	0.060	0.061	0.060	0.060	0.060	0.060	0.059	0.059	0.059	0.059	0.059	0.059	0.059
61	0.062	0.063	0.062	0.062	0.060	0.061	0.060	0.061	0.059	0.061	0.059	0.060	0.059	0.059	0.059	0.060	0.059	0.059	0.058	0.059
62	0.063	0.062	0.062	0.062	0.062	0.061	0.061	0.061	0.061	0.060	0.060	0.060	0.059	0.059	0.059	0.059	0.059	0.058	0.059	0.058
63	0.063	0.062	0.063	0.062	0.062	0.061	0.061	0.061	0.061	0.060	0.060	0.060	0.060	0.060	0.060	0.059	0.059	0.059	0.059	0.059

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 11.62 SEC
HRFR = 0.398E-01

GROUP 24

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.057	0.056	0.057	0.056	0.057	0.056	0.056	0.056	0.056	0.055
30	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.057
31	0.056	0.057	0.056	0.056	0.056	0.056	0.055	0.056	0.056	0.056
32	0.056	0.056	0.056	0.056	0.056	0.055	0.056	0.056	0.056	0.056
33	0.055	0.056	0.055	0.056	0.054	0.056	0.055	0.056	0.056	0.056
34	0.056	0.056	0.056	0.055	0.056	0.055	0.056	0.056	0.056	0.054
35	0.056	0.057	0.056	0.056	0.055	0.056	0.055	0.056	0.055	0.056
36	0.056	0.057	0.056	0.057	0.056	0.057	0.056	0.057	0.056	0.056
37	0.057	0.057	0.056	0.057	0.056	0.057	0.057	0.057	0.056	0.057
38	0.057	0.057	0.057	0.057	0.057	0.057	0.057	0.057	0.057	0.057
39	0.057	0.057	0.058	0.057	0.057	0.057	0.057	0.057	0.057	0.057
40	0.058	0.058	0.058	0.058	0.058	0.057	0.057	0.057	0.057	0.057
41	0.058	0.058	0.058	0.059	0.057	0.058	0.058	0.059	0.057	0.059
42	0.058	0.059	0.058	0.059	0.058	0.059	0.058	0.059	0.058	0.059
43	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.058	0.059
44	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059
45	0.061	0.060	0.060	0.061	0.060	0.061	0.060	0.060	0.060	0.060
46	0.062	0.062	0.062	0.061	0.062	0.061	0.062	0.061	0.062	0.061
47	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062
48	0.062	0.063	0.062	0.063	0.062	0.062	0.061	0.063	0.061	0.062
49	0.063	0.063	0.063	0.063	0.063	0.063	0.063	0.063	0.063	0.062
50	0.064	0.064	0.064	0.064	0.064	0.064	0.063	0.064	0.063	0.064
51	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.063
52	0.063	0.063	0.062	0.063	0.062	0.062	0.062	0.062	0.062	0.062
53	0.061	0.060	0.060	0.060	0.060	0.060	0.060	0.059	0.060	0.059
54	0.059	0.060	0.059	0.059	0.059	0.059	0.058	0.059	0.058	0.059
55	0.059	0.060	0.059	0.059	0.057	0.059	0.057	0.059	0.057	0.059
56	0.060	0.059	0.059	0.059	0.059	0.058	0.059	0.058	0.058	0.058
57	0.060	0.059	0.060	0.059	0.059	0.058	0.059	0.058	0.059	0.058
58	0.063	0.063	0.063	0.062	0.060	0.059	0.060	0.062	0.062	0.063
59	0.059	0.058	0.059	0.059	0.059	0.058	0.058	0.058	0.058	0.058
60	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.057	0.058	0.057
61	0.058	0.059	0.058	0.059	0.058	0.059	0.057	0.058	0.057	0.057
62	0.059	0.057	0.059	0.057	0.058	0.057	0.058	0.057	0.057	0.057
63	0.059	0.058	0.058	0.058	0.058	0.057	0.058	0.057	0.057	0.057

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 11.62 SEC
HREF = 0.398E-01

GROUP 24

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.060	0.060	0.060	0.060	0.061	0.061	0.062	0.063	0.064	0.063	0.064	0.064	0.066	0.076	0.129	0.176	0.198	0.212	0.224	0.231
65	0.059	0.059	0.060	0.060	0.060	0.061	0.061	0.062	0.062	0.064	0.064	0.065	0.066	0.086	0.142	0.179	0.197	0.211	0.221	0.228
66	0.059	0.059	0.059	0.059	0.059	0.060	0.060	0.061	0.062	0.062	0.063	0.064	0.068	0.099	0.153	0.180	0.196	0.208	0.218	0.225
67	0.058	0.058	0.059	0.058	0.059	0.059	0.060	0.060	0.061	0.061	0.062	0.064	0.071	0.113	0.160	0.181	0.196	0.206	0.214	0.222
68	0.057	0.059	0.058	0.059	0.059	0.059	0.059	0.060	0.060	0.062	0.061	0.064	0.074	0.122	0.162	0.180	0.194	0.203	0.209	0.215
69	0.057	0.057	0.057	0.057	0.058	0.059	0.059	0.059	0.060	0.061	0.062	0.064	0.080	0.129	0.162	0.178	0.189	0.197	0.204	0.211
70	0.057	0.057	0.058	0.057	0.059	0.059	0.059	0.059	0.060	0.060	0.061	0.064	0.085	0.132	0.161	0.175	0.186	0.193	0.199	0.206
71	0.057	0.057	0.058	0.058	0.059	0.059	0.059	0.059	0.060	0.060	0.062	0.064	0.093	0.139	0.163	0.176	0.186	0.193	0.201	0.206
72	0.058	0.057	0.058	0.059	0.059	0.060	0.060	0.060	0.060	0.061	0.062	0.069	0.107	0.148	0.167	0.179	0.187	0.194	0.200	0.206
73	0.057	0.057	0.058	0.058	0.058	0.059	0.059	0.060	0.060	0.061	0.062	0.074	0.118	0.152	0.168	0.178	0.186	0.192	0.198	0.203
74	0.057	0.057	0.058	0.058	0.059	0.058	0.059	0.059	0.060	0.060	0.062	0.083	0.129	0.156	0.169	0.178	0.185	0.190	0.197	0.203
75	0.057	0.057	0.057	0.057	0.058	0.058	0.059	0.059	0.060	0.061	0.065	0.096	0.138	0.159	0.170	0.178	0.184	0.189	0.195	0.200
76	0.057	0.058	0.058	0.058	0.059	0.058	0.059	0.059	0.060	0.061	0.067	0.105	0.143	0.159	0.170	0.176	0.182	0.187	0.192	0.197
77	0.057	0.058	0.057	0.058	0.057	0.059	0.059	0.059	0.059	0.060	0.071	0.114	0.146	0.160	0.169	0.176	0.181	0.186	0.189	0.194
78	0.058	0.059	0.061	0.061	0.060	0.060	0.062	0.060	0.061	0.060	0.074	0.117	0.147	0.159	0.167	0.173	0.178	0.182	0.187	0.191
79	0.059	0.064	0.065	0.064	0.064	0.064	0.061	0.060	0.062	0.064	0.081	0.124	0.148	0.159	0.167	0.172	0.177	0.181	0.184	0.189
80	0.063	0.069	0.071	0.065	0.064	0.064	0.064	0.062	0.061	0.064	0.092	0.132	0.151	0.160	0.167	0.171	0.175	0.179	0.182	0.186
81	0.066	0.075	0.081	0.073	0.066	0.065	0.065	0.065	0.065	0.069	0.104	0.139	0.153	0.162	0.166	0.170	0.173	0.176	0.179	0.183
82	0.085	0.092	0.100	0.098	0.077	0.069	0.064	0.065	0.066	0.076	0.116	0.145	0.156	0.163	0.167	0.170	0.172	0.175	0.176	0.180
83	0.097	0.104	0.109	0.110	0.089	0.074	0.065	0.062	0.064	0.085	0.125	0.148	0.157	0.164	0.167	0.170	0.172	0.175	0.176	0.178
84	0.086	0.087	0.099	0.104	0.083	0.072	0.065	0.061	0.065	0.102	0.148	0.162	0.167	0.169	0.170	0.171	0.173	0.173	0.174	0.175
85	0.078	0.075	0.072	0.073	0.072	0.068	0.066	0.065	0.070	0.080	0.104	0.122	0.136	0.148	0.152	0.174	0.188	0.199	0.207	0.210
86	0.076	0.074	0.071	0.071	0.071	0.070	0.068	0.068	0.069	0.070	0.070	0.071	0.071	0.071	0.071	0.072	0.073	0.076	0.080	0.088
87	0.067	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.068	0.068	0.068	0.068	0.068	0.069	0.068	0.069	0.069	0.070	0.070	0.070
88	0.060	0.059	0.058	0.060	0.060	0.060	0.061	0.064	0.067	0.066	0.066	0.066	0.066	0.066	0.066	0.067	0.066	0.067	0.067	0.068
89	0.057	0.056	0.056	0.057	0.057	0.058	0.060	0.063	0.066	0.066	0.066	0.065	0.066	0.065	0.066	0.065	0.066	0.065	0.066	0.066
90	0.055	0.054	0.055	0.056	0.057	0.057	0.058	0.060	0.065	0.066	0.066	0.065	0.065	0.065	0.065	0.065	0.064	0.065	0.065	0.065
91	0.054	0.054	0.054	0.055	0.056	0.057	0.057	0.060	0.064	0.065	0.065	0.065	0.065	0.065	0.065	0.064	0.064	0.064	0.064	0.064
92	0.054	0.054	0.055	0.054	0.056	0.055	0.057	0.058	0.062	0.064	0.064	0.064	0.065	0.064	0.065	0.064	0.064	0.064	0.064	0.064
93	0.055	0.055	0.055	0.056	0.056	0.057	0.057	0.059	0.062	0.065	0.064	0.065	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
94	0.059	0.059	0.059	0.057	0.058	0.058	0.058	0.058	0.062	0.064	0.064	0.064	0.065	0.064	0.064	0.064	0.064	0.064	0.064	0.064
95	0.060	0.060	0.060	0.060	0.059	0.059	0.059	0.060	0.062	0.064	0.064	0.064	0.063	0.065	0.065	0.065	0.065	0.064	0.064	0.063
96	0.062	0.062	0.062	0.062	0.061	0.060	0.059	0.060	0.064	0.065	0.065	0.065	0.066	0.065	0.066	0.066	0.066	0.065	0.064	0.063
97	0.062	0.062	0.062	0.063	0.062	0.061	0.059	0.060	0.064	0.064	0.064	0.065	0.066	0.066	0.067	0.067	0.066	0.065	0.064	0.064
98	0.064	0.063	0.063	0.063	0.063	0.061	0.060	0.060	0.063	0.064	0.064	0.065	0.066	0.067	0.067	0.066	0.066	0.064	0.064	0.064

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 11.62 SEC
HRFR = 0.398E-01

GROUP 24

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	0.237	0.244	0.253	0.260	0.272	0.286	0.301	0.319	0.339	0.353	0.364	0.380	0.402	0.413	0.421	0.428	0.431	0.435	0.439	0.438
65	0.233	0.241	0.249	0.257	0.268	0.281	0.295	0.312	0.331	0.349	0.358	0.376	0.396	0.404	0.407	0.418	0.424	0.433	0.433	0.437
66	0.230	0.238	0.247	0.256	0.267	0.280	0.293	0.309	0.327	0.349	0.361	0.369	0.383	0.393	0.400	0.409	0.419	0.423	0.422	0.427
67	0.227	0.234	0.243	0.252	0.263	0.275	0.289	0.304	0.320	0.339	0.356	0.366	0.371	0.381	0.392	0.400	0.408	0.412	0.416	0.424
68	0.221	0.227	0.236	0.243	0.253	0.264	0.275	0.289	0.305	0.322	0.339	0.353	0.360	0.364	0.374	0.387	0.392	0.395	0.402	0.409
69	0.215	0.222	0.229	0.236	0.246	0.255	0.265	0.277	0.291	0.307	0.323	0.340	0.350	0.358	0.365	0.370	0.377	0.387	0.397	0.404
70	0.212	0.218	0.226	0.234	0.244	0.256	0.264	0.274	0.287	0.302	0.319	0.333	0.342	0.349	0.355	0.358	0.362	0.369	0.377	0.382
71	0.212	0.217	0.226	0.233	0.239	0.251	0.262	0.271	0.281	0.296	0.311	0.322	0.333	0.339	0.343	0.346	0.353	0.358	0.363	0.366
72	0.211	0.216	0.223	0.230	0.237	0.246	0.257	0.266	0.277	0.291	0.302	0.313	0.321	0.327	0.330	0.333	0.339	0.346	0.350	0.354
73	0.208	0.214	0.220	0.227	0.237	0.245	0.256	0.268	0.277	0.286	0.297	0.306	0.315	0.322	0.324	0.324	0.326	0.329	0.335	0.339
74	0.208	0.214	0.220	0.226	0.235	0.245	0.255	0.264	0.275	0.284	0.293	0.301	0.312	0.320	0.319	0.317	0.317	0.318	0.322	0.328
75	0.204	0.210	0.217	0.224	0.230	0.239	0.248	0.258	0.267	0.277	0.285	0.292	0.297	0.303	0.306	0.309	0.312	0.313	0.312	0.313
76	0.202	0.206	0.212	0.219	0.227	0.236	0.244	0.252	0.260	0.270	0.280	0.287	0.293	0.297	0.300	0.301	0.303	0.303	0.305	0.305
77	0.199	0.205	0.210	0.216	0.223	0.231	0.240	0.249	0.258	0.266	0.273	0.283	0.290	0.295	0.297	0.300	0.302	0.304	0.305	0.308
78	0.195	0.201	0.206	0.213	0.220	0.227	0.238	0.247	0.256	0.264	0.271	0.277	0.282	0.286	0.289	0.293	0.297	0.300	0.303	0.305
79	0.194	0.199	0.205	0.210	0.217	0.225	0.234	0.242	0.251	0.260	0.268	0.273	0.279	0.282	0.287	0.289	0.293	0.296	0.299	0.301
80	0.191	0.196	0.202	0.209	0.215	0.222	0.231	0.240	0.250	0.259	0.268	0.275	0.281	0.284	0.287	0.289	0.291	0.292	0.295	0.297
81	0.187	0.191	0.196	0.203	0.210	0.218	0.226	0.234	0.243	0.254	0.263	0.271	0.277	0.282	0.285	0.288	0.290	0.292	0.293	0.295
82	0.183	0.187	0.193	0.200	0.206	0.213	0.220	0.228	0.237	0.246	0.254	0.260	0.267	0.273	0.276	0.279	0.282	0.286	0.288	0.290
83	0.181	0.184	0.189	0.195	0.202	0.210	0.217	0.226	0.234	0.242	0.249	0.256	0.261	0.267	0.270	0.272	0.275	0.277	0.280	0.282
84	0.178	0.181	0.185	0.189	0.196	0.203	0.212	0.219	0.227	0.235	0.243	0.249	0.255	0.259	0.263	0.265	0.267	0.270	0.272	0.275
85	0.202	0.193	0.186	0.184	0.186	0.190	0.196	0.203	0.210	0.217	0.226	0.232	0.238	0.242	0.246	0.249	0.252	0.254	0.256	0.259
86	0.097	0.108	0.107	0.107	0.109	0.111	0.111	0.115	0.116	0.119	0.122	0.127	0.133	0.139	0.142	0.147	0.150	0.155	0.159	0.164
87	0.070	0.071	0.070	0.071	0.071	0.071	0.071	0.071	0.071	0.072	0.072	0.073	0.073	0.074	0.074	0.075	0.074	0.075	0.075	0.076
88	0.068	0.068	0.068	0.069	0.068	0.069	0.069	0.069	0.069	0.069	0.069	0.070	0.069	0.070	0.070	0.071	0.070	0.071	0.071	0.072
89	0.066	0.066	0.066	0.066	0.067	0.067	0.068	0.067	0.068	0.067	0.068	0.068	0.068	0.068	0.069	0.069	0.069	0.069	0.070	0.069
90	0.064	0.065	0.065	0.066	0.065	0.066	0.066	0.066	0.066	0.067	0.066	0.068	0.067	0.068	0.067	0.068	0.068	0.068	0.068	0.069
91	0.064	0.064	0.065	0.065	0.065	0.065	0.065	0.065	0.066	0.067	0.069	0.081	0.093	0.081	0.071	0.068	0.068	0.067	0.068	0.067
92	0.064	0.064	0.064	0.064	0.064	0.064	0.065	0.064	0.065	0.065	0.071	0.107	0.136	0.119	0.084	0.071	0.068	0.066	0.067	0.067
93	0.062	0.064	0.063	0.064	0.062	0.064	0.063	0.064	0.064	0.065	0.064	0.067	0.071	0.071	0.066	0.067	0.066	0.066	0.066	0.066
94	0.063	0.064	0.063	0.064	0.064	0.064	0.063	0.064	0.065	0.065	0.064	0.065	0.064	0.065	0.064	0.064	0.065	0.065	0.065	0.065
95	0.063	0.062	0.063	0.063	0.063	0.063	0.064	0.064	0.064	0.064	0.065	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
96	0.063	0.063	0.063	0.062	0.064	0.064	0.064	0.064	0.064	0.064	0.065	0.064	0.064	0.064	0.064	0.063	0.064	0.064	0.064	0.064
97	0.063	0.063	0.063	0.063	0.063	0.064	0.064	0.064	0.064	0.064	0.065	0.064	0.064	0.064	0.064	0.063	0.064	0.064	0.064	0.064
98	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.065	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 11.62 SEC
GROUP 24 HRFR = 0.398E-01

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	0.436	0.421	0.401	0.379	0.362	0.352	0.352	0.361	0.378	0.380	0.327	0.281	0.252	0.229	0.217	0.213	0.210	0.195	0.151	0.103
65	0.441	0.443	0.439	0.419	0.384	0.338	0.302	0.289	0.291	0.276	0.258	0.252	0.241	0.226	0.212	0.202	0.198	0.197	0.168	0.153
66	0.429	0.428	0.419	0.406	0.392	0.377	0.354	0.322	0.292	0.250	0.225	0.216	0.212	0.208	0.205	0.198	0.192	0.187	0.183	0.173
67	0.428	0.428	0.425	0.413	0.397	0.372	0.339	0.318	0.310	0.269	0.236	0.224	0.216	0.210	0.204	0.202	0.203	0.202	0.198	0.191
68	0.416	0.423	0.428	0.427	0.428	0.434	0.430	0.408	0.367	0.311	0.272	0.251	0.239	0.231	0.227	0.223	0.217	0.213	0.211	0.210
69	0.410	0.418	0.428	0.434	0.434	0.444	0.465	0.493	0.490	0.433	0.383	0.336	0.292	0.260	0.242	0.234	0.229	0.229	0.225	0.217
70	0.389	0.395	0.403	0.409	0.418	0.430	0.448	0.475	0.490	0.445	0.413	0.397	0.384	0.363	0.328	0.291	0.262	0.242	0.231	0.227
71	0.370	0.375	0.382	0.387	0.388	0.388	0.396	0.416	0.419	0.397	0.383	0.377	0.370	0.358	0.340	0.319	0.304	0.289	0.270	0.251
72	0.358	0.360	0.364	0.367	0.365	0.365	0.373	0.389	0.383	0.353	0.335	0.320	0.308	0.300	0.294	0.290	0.286	0.279	0.270	0.260
73	0.342	0.345	0.341	0.335	0.336	0.340	0.354	0.376	0.386	0.362	0.343	0.330	0.315	0.295	0.277	0.262	0.246	0.234	0.229	0.224
74	0.336	0.340	0.339	0.337	0.336	0.340	0.358	0.379	0.391	0.362	0.330	0.314	0.299	0.284	0.270	0.261	0.249	0.240	0.233	0.223
75	0.315	0.320	0.328	0.332	0.330	0.334	0.346	0.371	0.397	0.373	0.326	0.309	0.297	0.287	0.276	0.265	0.254	0.243	0.233	0.223
76	0.306	0.308	0.311	0.313	0.316	0.318	0.323	0.331	0.344	0.332	0.304	0.292	0.284	0.276	0.270	0.262	0.256	0.249	0.240	0.231
77	0.310	0.312	0.314	0.314	0.313	0.312	0.313	0.317	0.323	0.313	0.293	0.284	0.279	0.273	0.266	0.260	0.255	0.250	0.244	0.239
78	0.307	0.308	0.310	0.310	0.309	0.309	0.310	0.316	0.324	0.320	0.301	0.293	0.287	0.280	0.274	0.267	0.261	0.255	0.249	0.242
79	0.303	0.305	0.305	0.306	0.307	0.306	0.307	0.313	0.323	0.323	0.304	0.295	0.293	0.288	0.283	0.278	0.273	0.267	0.262	0.257
80	0.299	0.301	0.304	0.303	0.303	0.303	0.305	0.312	0.325	0.330	0.311	0.300	0.299	0.295	0.291	0.287	0.283	0.279	0.274	0.269
81	0.296	0.300	0.302	0.303	0.304	0.304	0.305	0.311	0.322	0.331	0.316	0.303	0.302	0.301	0.298	0.296	0.293	0.289	0.285	0.281
82	0.293	0.295	0.296	0.299	0.300	0.302	0.304	0.310	0.321	0.333	0.322	0.309	0.308	0.307	0.304	0.302	0.300	0.295	0.293	0.290
83	0.285	0.287	0.290	0.293	0.296	0.299	0.303	0.309	0.320	0.334	0.326	0.310	0.309	0.308	0.307	0.306	0.306	0.304	0.302	0.299
84	0.278	0.281	0.284	0.287	0.290	0.292	0.295	0.300	0.308	0.317	0.313	0.304	0.306	0.306	0.306	0.305	0.305	0.303	0.304	0.305
85	0.263	0.266	0.270	0.274	0.277	0.281	0.286	0.292	0.301	0.315	0.322	0.306	0.298	0.298	0.299	0.299	0.300	0.300	0.299	0.299
86	0.169	0.175	0.180	0.187	0.194	0.202	0.208	0.217	0.228	0.246	0.265	0.253	0.237	0.239	0.242	0.245	0.247	0.249	0.252	0.255
87	0.076	0.077	0.076	0.078	0.077	0.078	0.078	0.079	0.079	0.080	0.080	0.080	0.079	0.080	0.079	0.080	0.080	0.080	0.080	0.081
88	0.072	0.072	0.072	0.073	0.073	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.073	0.073	0.073	0.072	0.073	0.072	0.073
89	0.070	0.070	0.071	0.070	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.070	0.070	0.070	0.070	0.070	0.069
90	0.069	0.069	0.069	0.070	0.069	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.069	0.069	0.068	0.069	0.068	0.069
91	0.068	0.068	0.068	0.068	0.069	0.068	0.069	0.069	0.069	0.069	0.070	0.074	0.077	0.071	0.069	0.068	0.068	0.068	0.068	0.068
92	0.068	0.067	0.068	0.067	0.068	0.068	0.069	0.068	0.069	0.069	0.080	0.120	0.138	0.111	0.081	0.071	0.069	0.067	0.067	0.067
93	0.066	0.067	0.066	0.067	0.067	0.068	0.068	0.068	0.067	0.068	0.068	0.079	0.091	0.083	0.071	0.069	0.068	0.068	0.067	0.067
94	0.065	0.065	0.066	0.067	0.066	0.067	0.067	0.068	0.067	0.066	0.066	0.066	0.066	0.067	0.067	0.067	0.066	0.066	0.065	0.066
95	0.064	0.064	0.065	0.065	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.065	0.065	0.065	0.064	0.065	0.064
96	0.064	0.064	0.064	0.064	0.065	0.066	0.066	0.066	0.066	0.066	0.066	0.065	0.065	0.065	0.065	0.065	0.065	0.064	0.064	0.064
97	0.064	0.064	0.064	0.064	0.065	0.065	0.066	0.066	0.066	0.066	0.066	0.065	0.065	0.065	0.065	0.064	0.064	0.063	0.064	0.064
98	0.064	0.064	0.064	0.064	0.064	0.065	0.065	0.065	0.065	0.065	0.065	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 11.62 SEC
GROUP 24 HREF = 0.398E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.094	0.077	0.075	0.072	0.069	0.067	0.067	0.066	0.066	0.065	0.065	0.065	0.064	0.064	0.065	0.064	0.064	0.064	0.063	0.063
65	0.107	0.084	0.078	0.075	0.073	0.070	0.067	0.067	0.066	0.066	0.065	0.065	0.064	0.065	0.064	0.064	0.064	0.064	0.063	0.063
66	0.148	0.109	0.085	0.077	0.074	0.073	0.070	0.067	0.066	0.065	0.065	0.065	0.065	0.064	0.064	0.063	0.064	0.063	0.063	0.062
67	0.179	0.159	0.120	0.089	0.078	0.075	0.073	0.070	0.067	0.066	0.065	0.064	0.064	0.064	0.064	0.064	0.063	0.063	0.061	0.063
68	0.207	0.200	0.184	0.146	0.102	0.082	0.076	0.073	0.071	0.067	0.065	0.064	0.064	0.064	0.063	0.063	0.062	0.062	0.062	0.061
69	0.211	0.208	0.207	0.204	0.179	0.130	0.092	0.080	0.074	0.072	0.069	0.066	0.064	0.064	0.064	0.064	0.062	0.063	0.062	0.062
70	0.223	0.220	0.218	0.214	0.212	0.205	0.166	0.111	0.085	0.076	0.073	0.070	0.067	0.065	0.064	0.064	0.064	0.063	0.062	0.062
71	0.238	0.232	0.229	0.226	0.225	0.219	0.209	0.180	0.128	0.090	0.079	0.074	0.072	0.068	0.065	0.064	0.063	0.063	0.062	0.062
72	0.246	0.236	0.230	0.224	0.217	0.212	0.209	0.204	0.187	0.144	0.099	0.081	0.074	0.072	0.069	0.066	0.064	0.064	0.063	0.063
73	0.222	0.218	0.214	0.210	0.207	0.206	0.206	0.206	0.203	0.192	0.159	0.111	0.084	0.075	0.072	0.070	0.066	0.064	0.064	0.063
74	0.215	0.209	0.207	0.202	0.201	0.201	0.201	0.199	0.198	0.195	0.189	0.166	0.126	0.089	0.078	0.072	0.071	0.067	0.064	0.063
75	0.216	0.210	0.206	0.203	0.201	0.198	0.195	0.193	0.190	0.189	0.188	0.184	0.172	0.139	0.099	0.080	0.073	0.071	0.068	0.066
76	0.225	0.217	0.212	0.207	0.203	0.201	0.198	0.195	0.192	0.189	0.187	0.183	0.178	0.170	0.148	0.109	0.082	0.074	0.071	0.069
77	0.234	0.229	0.222	0.215	0.207	0.202	0.197	0.194	0.191	0.186	0.182	0.181	0.179	0.176	0.169	0.154	0.121	0.088	0.076	0.071
78	0.237	0.231	0.227	0.223	0.219	0.215	0.211	0.206	0.200	0.196	0.192	0.188	0.184	0.180	0.176	0.170	0.160	0.138	0.103	0.080
79	0.253	0.249	0.242	0.236	0.229	0.221	0.219	0.215	0.212	0.207	0.202	0.197	0.194	0.189	0.186	0.182	0.178	0.171	0.154	0.120
80	0.265	0.259	0.253	0.249	0.242	0.233	0.227	0.223	0.220	0.217	0.212	0.205	0.199	0.197	0.194	0.190	0.185	0.179	0.173	0.161
81	0.275	0.269	0.261	0.256	0.252	0.247	0.238	0.231	0.227	0.224	0.221	0.220	0.213	0.206	0.200	0.196	0.191	0.185	0.179	0.174
82	0.283	0.277	0.268	0.262	0.257	0.253	0.248	0.243	0.237	0.233	0.229	0.225	0.222	0.218	0.210	0.205	0.202	0.195	0.187	0.181
83	0.292	0.285	0.279	0.271	0.263	0.258	0.255	0.251	0.246	0.240	0.235	0.232	0.228	0.224	0.218	0.214	0.212	0.206	0.199	0.195
84	0.303	0.299	0.295	0.289	0.282	0.276	0.273	0.269	0.263	0.257	0.251	0.245	0.238	0.232	0.227	0.222	0.217	0.211	0.204	0.200
85	0.299	0.299	0.298	0.296	0.294	0.289	0.285	0.280	0.275	0.271	0.268	0.264	0.259	0.253	0.246	0.238	0.231	0.222	0.215	0.208
86	0.258	0.260	0.261	0.264	0.265	0.265	0.264	0.262	0.260	0.257	0.254	0.252	0.249	0.246	0.243	0.240	0.236	0.231	0.227	0.223
87	0.081	0.083	0.084	0.086	0.087	0.088	0.089	0.091	0.091	0.093	0.094	0.096	0.097	0.099	0.102	0.105	0.107	0.108	0.109	0.110
88	0.072	0.073	0.072	0.073	0.072	0.072	0.071	0.072	0.071	0.071	0.070	0.071	0.070	0.071	0.071	0.072	0.073	0.074	0.073	0.073
89	0.070	0.069	0.070	0.069	0.070	0.069	0.069	0.069	0.069	0.069	0.069	0.068	0.068	0.068	0.069	0.070	0.071	0.071	0.071	0.069
90	0.068	0.068	0.068	0.069	0.068	0.069	0.068	0.068	0.068	0.068	0.067	0.068	0.066	0.067	0.068	0.071	0.071	0.071	0.070	0.071
91	0.068	0.068	0.068	0.067	0.067	0.067	0.067	0.067	0.067	0.068	0.069	0.068	0.065	0.065	0.069	0.074	0.072	0.070	0.071	0.071
92	0.067	0.066	0.067	0.066	0.066	0.066	0.066	0.066	0.069	0.094	0.129	0.123	0.089	0.072	0.068	0.068	0.069	0.070	0.070	0.070
93	0.067	0.067	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.073	0.091	0.095	0.077	0.069	0.066	0.068	0.068	0.070	0.070	0.070
94	0.066	0.066	0.066	0.066	0.066	0.065	0.065	0.065	0.065	0.065	0.065	0.065	0.065	0.064	0.065	0.066	0.068	0.070	0.070	0.070
95	0.065	0.064	0.065	0.064	0.064	0.064	0.064	0.063	0.064	0.064	0.064	0.064	0.064	0.064	0.065	0.066	0.069	0.070	0.071	0.070
96	0.064	0.064	0.064	0.064	0.064	0.063	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.063	0.065	0.067	0.070	0.071	0.072	0.072
97	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.063	0.064	0.064	0.064	0.064	0.063	0.064	0.065	0.069	0.072	0.074	0.075	0.075
98	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.070	0.081	0.086	0.082	0.081	0.080

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP COPP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 11.62 SEC
HRFR = 0.398E-01

GROUP 24

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.063	0.062	0.063	0.062	0.062	0.062	0.061	0.061	0.061	0.060	0.060	0.060	0.060	0.060	0.060	0.059	0.059	0.059	0.059	0.059
65	0.063	0.062	0.062	0.062	0.062	0.062	0.061	0.062	0.061	0.060	0.060	0.060	0.060	0.060	0.059	0.060	0.059	0.058	0.058	0.059
66	0.062	0.062	0.062	0.062	0.062	0.061	0.061	0.060	0.060	0.060	0.060	0.059	0.059	0.059	0.059	0.058	0.058	0.058	0.058	0.058
67	0.062	0.062	0.062	0.061	0.061	0.060	0.060	0.060	0.060	0.059	0.059	0.059	0.059	0.059	0.059	0.058	0.058	0.058	0.058	0.057
68	0.061	0.060	0.061	0.060	0.060	0.059	0.060	0.059	0.059	0.059	0.059	0.058	0.059	0.057	0.058	0.057	0.058	0.058	0.057	0.057
69	0.061	0.061	0.060	0.060	0.060	0.060	0.059	0.059	0.059	0.059	0.059	0.059	0.058	0.059	0.058	0.058	0.057	0.057	0.057	0.057
70	0.062	0.062	0.061	0.060	0.061	0.060	0.060	0.060	0.060	0.059	0.059	0.058	0.059	0.058	0.058	0.058	0.058	0.057	0.057	0.057
71	0.062	0.061	0.061	0.060	0.060	0.060	0.060	0.060	0.060	0.059	0.059	0.059	0.059	0.056	0.059	0.058	0.058	0.058	0.058	0.057
72	0.062	0.062	0.061	0.061	0.060	0.061	0.060	0.060	0.060	0.060	0.059	0.059	0.059	0.059	0.059	0.059	0.058	0.058	0.057	0.058
73	0.062	0.062	0.061	0.061	0.061	0.060	0.060	0.060	0.060	0.060	0.060	0.059	0.059	0.059	0.059	0.058	0.058	0.058	0.058	0.057
74	0.063	0.062	0.062	0.061	0.061	0.061	0.061	0.060	0.060	0.060	0.060	0.059	0.059	0.059	0.059	0.058	0.058	0.058	0.058	0.057
75	0.062	0.062	0.061	0.062	0.060	0.061	0.059	0.061	0.059	0.060	0.059	0.059	0.058	0.059	0.057	0.059	0.059	0.058	0.057	0.057
76	0.067	0.064	0.062	0.062	0.061	0.061	0.061	0.060	0.060	0.060	0.059	0.059	0.059	0.059	0.059	0.058	0.058	0.057	0.058	0.057
77	0.070	0.069	0.066	0.064	0.062	0.061	0.060	0.060	0.060	0.060	0.059	0.059	0.059	0.059	0.058	0.059	0.058	0.058	0.057	0.058
78	0.072	0.069	0.068	0.068	0.067	0.063	0.062	0.060	0.060	0.060	0.059	0.059	0.059	0.059	0.059	0.058	0.058	0.057	0.058	0.057
79	0.087	0.075	0.070	0.068	0.058	0.057	0.066	0.064	0.062	0.060	0.059	0.059	0.059	0.058	0.058	0.058	0.058	0.057	0.058	0.057
80	0.133	0.097	0.077	0.071	0.069	0.068	0.068	0.067	0.066	0.065	0.064	0.062	0.061	0.060	0.060	0.060	0.060	0.059	0.060	0.059
81	0.164	0.140	0.103	0.079	0.071	0.069	0.067	0.067	0.066	0.065	0.064	0.064	0.064	0.063	0.062	0.061	0.060	0.059	0.058	0.058
82	0.174	0.167	0.150	0.115	0.093	0.072	0.067	0.067	0.065	0.066	0.065	0.065	0.064	0.064	0.064	0.064	0.064	0.064	0.062	0.062
83	0.189	0.184	0.177	0.163	0.130	0.093	0.074	0.069	0.066	0.066	0.065	0.065	0.064	0.064	0.064	0.064	0.062	0.064	0.061	0.063
84	0.196	0.192	0.189	0.187	0.181	0.159	0.115	0.080	0.070	0.066	0.065	0.064	0.064	0.064	0.064	0.063	0.063	0.063	0.063	0.063
85	0.203	0.197	0.193	0.190	0.186	0.177	0.155	0.114	0.082	0.069	0.066	0.064	0.064	0.063	0.063	0.062	0.063	0.062	0.063	0.062
86	0.218	0.213	0.210	0.204	0.198	0.190	0.179	0.161	0.129	0.092	0.071	0.066	0.063	0.063	0.062	0.063	0.062	0.062	0.062	0.062
87	0.110	0.110	0.109	0.109	0.109	0.109	0.108	0.107	0.102	0.088	0.071	0.065	0.062	0.062	0.061	0.061	0.060	0.061	0.060	0.061
88	0.071	0.070	0.068	0.067	0.066	0.066	0.065	0.065	0.064	0.064	0.062	0.062	0.061	0.061	0.060	0.061	0.060	0.060	0.060	0.060
89	0.069	0.066	0.066	0.064	0.064	0.064	0.064	0.062	0.063	0.061	0.062	0.061	0.061	0.060	0.060	0.060	0.060	0.059	0.060	0.059
90	0.072	0.070	0.065	0.064	0.063	0.063	0.062	0.062	0.061	0.062	0.060	0.060	0.060	0.060	0.059	0.060	0.059	0.060	0.059	0.059
91	0.076	0.075	0.068	0.064	0.063	0.062	0.062	0.061	0.061	0.060	0.060	0.060	0.060	0.060	0.060	0.059	0.059	0.059	0.059	0.059
92	0.069	0.067	0.065	0.063	0.063	0.062	0.062	0.061	0.061	0.060	0.060	0.060	0.060	0.060	0.060	0.059	0.059	0.058	0.059	0.059
93	0.069	0.068	0.065	0.064	0.063	0.062	0.062	0.061	0.061	0.061	0.061	0.061	0.060	0.060	0.059	0.059	0.059	0.059	0.059	0.059
94	0.071	0.070	0.066	0.062	0.062	0.061	0.061	0.061	0.061	0.060	0.060	0.060	0.060	0.059	0.060	0.059	0.059	0.059	0.058	0.058
95	0.070	0.070	0.067	0.063	0.062	0.061	0.061	0.061	0.060	0.060	0.060	0.059	0.059	0.059	0.059	0.059	0.059	0.058	0.058	0.058
96	0.072	0.070	0.067	0.062	0.062	0.060	0.061	0.060	0.060	0.059	0.060	0.059	0.059	0.059	0.059	0.059	0.059	0.058	0.058	0.057
97	0.074	0.072	0.068	0.063	0.061	0.060	0.061	0.060	0.060	0.060	0.060	0.058	0.059	0.057	0.059	0.057	0.059	0.057	0.058	0.057
98	0.084	0.089	0.079	0.066	0.062	0.061	0.060	0.060	0.060	0.060	0.060	0.059	0.059	0.058	0.059	0.058	0.059	0.058	0.058	0.058

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 11.62 SEC
HRFR = 0.398E-01

.GROUP 24

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.059	0.058	0.059	0.058	0.058	0.057	0.058	0.057	0.057	0.057
65	0.058	0.058	0.058	0.058	0.057	0.058	0.057	0.057	0.057	0.057
66	0.058	0.057	0.057	0.057	0.057	0.057	0.057	0.056	0.057	0.056
67	0.057	0.057	0.056	0.057	0.056	0.056	0.057	0.057	0.056	0.056
68	0.057	0.057	0.056	0.056	0.056	0.056	0.056	0.055	0.055	0.055
69	0.055	0.057	0.056	0.057	0.055	0.056	0.054	0.056	0.054	0.055
70	0.057	0.057	0.057	0.056	0.056	0.055	0.056	0.055	0.056	0.055
71	0.057	0.057	0.057	0.057	0.057	0.056	0.056	0.055	0.056	0.055
72	0.057	0.057	0.057	0.057	0.057	0.057	0.056	0.056	0.055	0.055
73	0.057	0.057	0.057	0.056	0.056	0.056	0.056	0.055	0.055	0.055
74	0.057	0.057	0.057	0.056	0.056	0.056	0.056	0.055	0.055	0.055
75	0.057	0.057	0.057	0.057	0.056	0.056	0.055	0.056	0.055	0.055
76	0.058	0.056	0.057	0.055	0.056	0.055	0.055	0.055	0.055	0.054
77	0.057	0.057	0.057	0.057	0.056	0.057	0.055	0.036	0.055	0.056
78	0.057	0.057	0.057	0.056	0.056	0.056	0.055	0.055	0.055	0.055
79	0.057	0.057	0.057	0.057	0.057	0.056	0.056	0.056	0.056	0.055
80	0.060	0.059	0.060	0.059	0.060	0.059	0.059	0.059	0.059	0.058
81	0.057	0.057	0.057	0.056	0.057	0.056	0.055	0.056	0.055	0.055
82	0.060	0.060	0.058	0.059	0.057	0.057	0.056	0.056	0.055	0.055
83	0.061	0.063	0.060	0.062	0.059	0.060	0.058	0.059	0.057	0.057
84	0.062	0.062	0.062	0.062	0.062	0.061	0.061	0.060	0.060	0.060
85	0.062	0.062	0.062	0.061	0.061	0.061	0.061	0.060	0.061	0.061
86	0.061	0.061	0.061	0.061	0.060	0.061	0.060	0.060	0.060	0.060
87	0.060	0.060	0.060	0.060	0.060	0.060	0.059	0.060	0.059	0.059
88	0.059	0.060	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059
89	0.060	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059
90	0.058	0.059	0.058	0.059	0.058	0.059	0.058	0.059	0.058	0.059
91	0.059	0.059	0.059	0.058	0.059	0.058	0.058	0.058	0.058	0.058
92	0.059	0.059	0.059	0.058	0.058	0.058	0.059	0.058	0.058	0.058
93	0.058	0.059	0.058	0.059	0.058	0.058	0.058	0.058	0.058	0.058
94	0.059	0.057	0.058	0.058	0.058	0.058	0.058	0.058	0.057	0.057
95	0.058	0.058	0.058	0.057	0.058	0.058	0.058	0.058	0.058	0.058
96	0.058	0.057	0.058	0.057	0.058	0.058	0.058	0.058	0.058	0.058
97	0.058	0.056	0.058	0.057	0.058	0.057	0.058	0.058	0.058	0.058
98	0.058	0.058	0.058	0.058	0.058	0.057	0.058	0.058	0.058	0.057

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

GROUP 25

TIME,SEC		TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
2100	8	593.892	593.936	593.936	593.936	0.000	591.671
2100	9	594.415	594.545	593.936	594.371	0.000	591.671
2100	10	594.632	594.894	593.936	594.806	0.000	591.671
2100	11	595.024	595.198	593.936	595.155	0.000	591.671
2100	12	595.329	595.547	593.936	595.459	0.000	591.671
2100	12	595.329	595.547	593.936	595.459	0.000	591.671
2100	13	595.590	595.721	593.936	595.677	0.000	591.671
2100	14	595.721	595.895	593.936	595.851	0.000	591.671
2100	15	595.895	596.025	593.936	595.982	0.000	591.671
2100	16	595.982	596.069	593.936	596.069	0.000	591.671
2100	16	595.982	596.156	593.936	596.069	0.000	591.671
2100	16	596.069	596.156	593.936	596.112	0.000	591.671
2100	17	596.156	596.330	593.936	596.199	0.000	591.671
2100	18	596.243	596.417	593.936	596.286	0.000	591.671
2100	19	596.373	596.504	593.936	596.373	0.000	591.671
2100	20	596.417	596.591	593.936	596.460	0.000	591.671

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

GROUP	* * * * TITLE TYPE	MODEL DESCRIPTION * * * * GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
25	RSI FORWARD	0.00	0.000	-10.09	40.09	0.053	20	59	38

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/F FT-1	HRFR BTU/FT2-SEC-R	INITIAL TEMP DEG R
8.00	798.56	1343.67	97.37	0.0818	3870.	0.705E-04	0.784E-07	0.348E+07	0.398E-01	529.7

IR CAMERA INFORMATION

MOUNTING LOCATION	260
F STOP	2.5
LENS-DEG	15
SENSITIVITY	1000.
BLACK LEVEL VOLTAGE	2.3788
LINE SCAN PHI	90
MODEL EMISSIVITY	0.96
REF EMISSIVITY	0.94
WINDOW FACTOR	0.840

TIME RECORDS

LIFT OFF	0.00
CENTER LINE	1.00
IR SCAN TIME	7.67
DELTA TIME,SEC	7.12
PHOTO 1 TIME	2100
PHOTO 2 TIME	0
PHOTO 3 TIME	0
PHOTO 4 TIME	0

REFERENCE TARGET INFORMATION

TCR5	1033.62
TCR6	-228.49

DIGITAL DATA AREA PRINTOUT LOCATION

LINE 29 THROUGH 98
POINT 1 THROUGH 110

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP COPP. CO.
VFF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 25

IR SCAN TIME 7.12 SEC
INITIAL TEMP 529.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	1.145	1.157	1.163	1.164	1.167	1.163	1.158	1.157	1.159	1.162	1.159	1.154	1.161	1.164	1.164	1.166	1.168	1.171	1.173	1.169
30	1.161	1.164	1.168	1.166	1.158	1.154	1.152	1.158	1.161	1.166	1.166	1.167	1.166	1.168	1.167	1.169	1.168	1.172	1.171	1.171
31	1.164	1.162	1.157	1.157	1.154	1.157	1.159	1.166	1.166	1.168	1.166	1.168	1.167	1.171	1.168	1.171	1.169	1.166	1.158	1.153
32	1.158	1.157	1.157	1.161	1.166	1.167	1.169	1.168	1.168	1.166	1.167	1.168	1.169	1.168	1.166	1.157	1.150	1.145	1.140	1.139
33	1.159	1.161	1.163	1.166	1.168	1.167	1.167	1.164	1.167	1.167	1.166	1.161	1.153	1.146	1.142	1.140	1.145	1.145	1.147	1.149
34	1.168	1.168	1.167	1.162	1.161	1.162	1.162	1.157	1.156	1.150	1.142	1.138	1.133	1.138	1.142	1.149	1.153	1.156	1.156	1.158
35	1.168	1.167	1.159	1.161	1.153	1.154	1.145	1.145	1.133	1.138	1.135	1.142	1.140	1.147	1.145	1.154	1.156	1.161	1.158	1.161
36	1.158	1.156	1.153	1.149	1.140	1.138	1.132	1.136	1.136	1.142	1.142	1.147	1.149	1.152	1.152	1.156	1.157	1.157	1.146	1.135
37	1.149	1.140	1.135	1.133	1.133	1.135	1.139	1.140	1.143	1.145	1.149	1.150	1.154	1.153	1.154	1.145	1.135	1.121	1.105	1.090
38	1.132	1.129	1.130	1.136	1.139	1.142	1.143	1.147	1.147	1.152	1.152	1.154	1.149	1.140	1.124	1.107	1.090	1.084	1.080	1.082
39	1.133	1.135	1.135	1.139	1.140	1.145	1.146	1.149	1.150	1.152	1.140	1.127	1.107	1.094	1.082	1.084	1.080	1.084	1.080	1.084
40	1.138	1.139	1.140	1.142	1.143	1.145	1.147	1.143	1.129	1.112	1.096	1.086	1.082	1.082	1.080	1.084	1.082	1.084	1.084	1.086
41	1.143	1.146	1.149	1.149	1.146	1.133	1.117	1.101	1.090	1.082	1.084	1.082	1.082	1.080	1.084	1.084	1.084	1.086	1.084	1.084
42	1.153	1.158	1.152	1.139	1.112	1.098	1.082	1.082	1.075	1.082	1.077	1.086	1.080	1.090	1.086	1.090	1.088	1.090	1.088	1.090
43	1.161	1.140	1.112	1.098	1.086	1.086	1.086	1.086	1.086	1.090	1.088	1.088	1.090	1.092	1.090	1.094	1.086	1.094	1.090	1.096
44	1.117	1.096	1.088	1.090	1.086	1.090	1.088	1.090	1.086	1.092	1.090	1.094	1.092	1.096	1.094	1.098	1.098	1.100	1.100	1.103
45	1.096	1.092	1.094	1.094	1.094	1.096	1.096	1.098	1.098	1.098	1.100	1.100	1.101	1.101	1.105	1.103	1.109	1.110	1.121	1.138
46	1.101	1.101	1.101	1.103	1.101	1.105	1.105	1.105	1.105	1.109	1.109	1.110	1.112	1.116	1.114	1.119	1.121	1.135	1.234	1.401
47	1.105	1.105	1.107	1.109	1.112	1.112	1.112	1.109	1.112	1.114	1.114	1.117	1.117	1.121	1.121	1.125	1.130	1.152	1.295	1.468
48	1.109	1.110	1.112	1.114	1.117	1.117	1.117	1.116	1.117	1.119	1.121	1.121	1.122	1.125	1.129	1.129	1.139	1.187	1.367	1.511
49	1.114	1.116	1.114	1.117	1.116	1.122	1.117	1.119	1.117	1.122	1.119	1.125	1.129	1.132	1.132	1.138	1.145	1.222	1.410	1.527
50	1.114	1.116	1.117	1.117	1.119	1.121	1.122	1.122	1.124	1.125	1.129	1.129	1.132	1.132	1.136	1.136	1.154	1.269	1.454	1.544
51	1.117	1.116	1.117	1.119	1.119	1.121	1.122	1.125	1.125	1.129	1.129	1.133	1.133	1.140	1.142	1.149	1.171	1.320	1.484	1.554
52	1.107	1.109	1.109	1.110	1.110	1.112	1.112	1.117	1.117	1.121	1.121	1.124	1.125	1.130	1.130	1.140	1.168	1.333	1.491	1.554
53	1.088	1.090	1.094	1.094	1.098	1.098	1.100	1.100	1.101	1.101	1.103	1.107	1.110	1.112	1.119	1.125	1.168	1.348	1.498	1.552
54	1.077	1.080	1.082	1.086	1.082	1.086	1.086	1.090	1.092	1.098	1.098	1.101	1.101	1.107	1.110	1.121	1.173	1.364	1.503	1.553
55	1.075	1.077	1.082	1.082	1.086	1.088	1.088	1.094	1.094	1.098	1.098	1.101	1.103	1.109	1.112	1.125	1.211	1.409	1.520	1.560
56	1.077	1.080	1.080	1.084	1.086	1.090	1.092	1.094	1.103	1.098	1.100	1.103	1.103	1.110	1.114	1.139	1.272	1.457	1.538	1.569
57	1.075	1.077	1.082	1.082	1.084	1.084	1.086	1.090	1.096	1.094	1.100	1.098	1.105	1.105	1.117	1.147	1.322	1.482	1.544	1.569
58	1.071	1.071	1.073	1.073	1.077	1.077	1.082	1.086	1.088	1.090	1.094	1.098	1.100	1.105	1.114	1.179	1.373	1.504	1.550	1.573
59	1.064	1.066	1.068	1.068	1.073	1.075	1.077	1.082	1.084	1.086	1.090	1.094	1.098	1.101	1.116	1.212	1.409	1.514	1.550	1.569
60	1.064	1.071	1.071	1.071	1.075	1.075	1.080	1.082	1.084	1.084	1.086	1.090	1.098	1.098	1.112	1.212	1.409	1.508	1.544	1.564
61	1.064	1.064	1.068	1.068	1.068	1.075	1.077	1.082	1.080	1.086	1.086	1.096	1.098	1.103	1.114	1.227	1.413	1.506	1.541	1.562
62	1.059	1.061	1.064	1.064	1.068	1.068	1.075	1.077	1.082	1.082	1.088	1.092	1.098	1.101	1.117	1.240	1.423	1.504	1.538	1.557
63	1.051	1.059	1.048	1.061	1.054	1.066	1.066	1.077	1.077	1.082	1.084	1.090	1.096	1.101	1.121	1.277	1.442	1.509	1.537	1.553

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 25

IR SCAN TIME 7.12 SEC
INITIAL TEMP 529.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	1.173	1.173	1.174	1.169	1.169	1.158	1.157	1.150	1.150	1.146	1.147	1.142	1.146	1.143	1.149	1.154	1.156	1.157	1.161	1.163
30	1.168	1.164	1.157	1.154	1.149	1.146	1.140	1.140	1.142	1.150	1.154	1.158	1.161	1.163	1.162	1.167	1.168	1.171	1.166	1.171
31	1.147	1.143	1.139	1.146	1.149	1.153	1.150	1.154	1.154	1.162	1.164	1.171	1.169	1.171	1.169	1.169	1.164	1.156	1.146	1.139
32	1.142	1.143	1.149	1.153	1.159	1.162	1.164	1.162	1.164	1.168	1.169	1.168	1.163	1.150	1.140	1.125	1.114	1.098	1.088	1.077
33	1.154	1.154	1.158	1.162	1.164	1.167	1.164	1.161	1.157	1.146	1.135	1.124	1.105	1.090	1.077	1.071	1.068	1.066	1.066	1.064
34	1.161	1.162	1.162	1.161	1.153	1.145	1.129	1.114	1.100	1.088	1.073	1.071	1.064	1.066	1.066	1.066	1.064	1.068	1.066	1.068
35	1.156	1.149	1.133	1.121	1.105	1.090	1.075	1.073	1.066	1.068	1.064	1.071	1.068	1.071	1.068	1.071	1.071	1.073	1.068	1.073
36	1.116	1.105	1.084	1.080	1.068	1.075	1.071	1.075	1.066	1.073	1.064	1.071	1.066	1.075	1.071	1.073	1.068	1.075	1.073	1.075
37	1.082	1.075	1.077	1.073	1.075	1.075	1.077	1.071	1.075	1.073	1.073	1.075	1.075	1.075	1.077	1.066	1.077	1.064	1.077	1.066
38	1.080	1.082	1.080	1.082	1.077	1.084	1.077	1.080	1.077	1.080	1.075	1.082	1.077	1.082	1.077	1.082	1.080	1.084	1.082	1.082
39	1.082	1.086	1.082	1.086	1.080	1.084	1.084	1.086	1.082	1.086	1.082	1.086	1.084	1.090	1.082	1.086	1.084	1.088	1.082	1.086
40	1.082	1.086	1.084	1.088	1.086	1.088	1.086	1.088	1.086	1.090	1.086	1.090	1.088	1.090	1.088	1.090	1.086	1.088	1.086	1.088
41	1.086	1.088	1.088	1.090	1.090	1.090	1.092	1.092	1.094	1.092	1.094	1.092	1.094	1.092	1.092	1.090	1.094	1.090	1.090	1.088
42	1.090	1.094	1.094	1.096	1.096	1.098	1.098	1.100	1.098	1.098	1.096	1.100	1.098	1.100	1.096	1.098	1.096	1.098	1.094	1.096
43	1.094	1.100	1.092	1.101	1.098	1.101	1.098	1.101	1.098	1.103	1.098	1.103	1.101	1.103	1.100	1.103	1.100	1.101	1.101	1.100
44	1.103	1.107	1.107	1.110	1.109	1.109	1.109	1.112	1.110	1.112	1.110	1.110	1.109	1.109	1.103	1.109	1.101	1.107	1.100	1.105
45	1.147	1.145	1.142	1.136	1.135	1.129	1.130	1.129	1.129	1.127	1.127	1.124	1.124	1.121	1.122	1.121	1.119	1.119	1.117	1.119
46	1.484	1.507	1.508	1.497	1.470	1.430	1.373	1.306	1.243	1.199	1.171	1.158	1.146	1.145	1.138	1.138	1.133	1.136	1.132	1.133
47	1.548	1.581	1.601	1.621	1.638	1.654	1.669	1.676	1.664	1.629	1.564	1.462	1.337	1.241	1.189	1.166	1.152	1.146	1.142	1.143
48	1.567	1.592	1.609	1.628	1.648	1.667	1.686	1.705	1.720	1.730	1.733	1.723	1.693	1.624	1.504	1.353	1.241	1.185	1.163	1.153
49	1.571	1.597	1.615	1.631	1.646	1.667	1.688	1.708	1.719	1.726	1.732	1.735	1.739	1.744	1.737	1.693	1.553	1.359	1.245	1.191
50	1.579	1.601	1.618	1.633	1.649	1.668	1.686	1.702	1.717	1.736	1.748	1.753	1.756	1.763	1.766	1.763	1.742	1.621	1.411	1.272
51	1.580	1.597	1.610	1.628	1.645	1.663	1.682	1.703	1.721	1.734	1.741	1.747	1.750	1.757	1.765	1.771	1.772	1.764	1.667	1.459
52	1.578	1.596	1.609	1.621	1.638	1.656	1.674	1.695	1.717	1.729	1.734	1.742	1.747	1.753	1.757	1.761	1.770	1.776	1.776	1.723
53	1.576	1.591	1.602	1.614	1.629	1.646	1.666	1.687	1.708	1.723	1.732	1.738	1.743	1.750	1.759	1.769	1.775	1.774	1.774	1.769
54	1.575	1.590	1.600	1.611	1.626	1.645	1.665	1.684	1.704	1.722	1.734	1.741	1.744	1.750	1.754	1.758	1.762	1.768	1.773	1.777
55	1.580	1.593	1.602	1.613	1.627	1.645	1.663	1.682	1.702	1.720	1.733	1.741	1.746	1.751	1.753	1.758	1.764	1.768	1.774	1.779
56	1.585	1.596	1.605	1.616	1.629	1.645	1.663	1.683	1.702	1.716	1.724	1.730	1.734	1.739	1.745	1.753	1.761	1.767	1.773	1.777
57	1.584	1.593	1.603	1.613	1.627	1.642	1.660	1.677	1.693	1.708	1.719	1.724	1.731	1.738	1.741	1.743	1.749	1.756	1.763	1.770
58	1.585	1.592	1.599	1.611	1.625	1.641	1.658	1.678	1.695	1.708	1.713	1.722	1.733	1.738	1.737	1.739	1.743	1.748	1.755	1.760
59	1.581	1.588	1.595	1.608	1.621	1.634	1.651	1.669	1.686	1.698	1.704	1.714	1.726	1.732	1.732	1.738	1.744	1.743	1.744	1.751
60	1.577	1.584	1.593	1.603	1.612	1.626	1.644	1.661	1.679	1.691	1.698	1.710	1.724	1.732	1.729	1.733	1.740	1.741	1.740	1.744
61	1.575	1.580	1.587	1.599	1.608	1.620	1.636	1.653	1.670	1.681	1.689	1.701	1.716	1.724	1.727	1.731	1.731	1.733	1.737	1.741
62	1.569	1.576	1.583	1.592	1.602	1.612	1.626	1.642	1.659	1.670	1.678	1.689	1.705	1.715	1.724	1.730	1.732	1.728	1.728	1.738
63	1.564	1.571	1.578	1.588	1.596	1.605	1.617	1.635	1.654	1.666	1.673	1.686	1.701	1.712	1.717	1.721	1.726	1.730	1.728	1.733

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 25

IR SCAN TIME 7.12 SEC
INITIAL TEMP 529.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	1.168	1.168	1.168	1.166	1.167	1.167	1.167	1.162	1.157	1.146	1.140	1.133	1.130	1.124	1.121	1.116	1.109	1.103	1.101	1.094
30	1.166	1.168	1.158	1.153	1.139	1.135	1.125	1.122	1.107	1.101	1.086	1.086	1.073	1.075	1.071	1.066	1.064	1.064	1.064	1.064
31	1.127	1.117	1.107	1.098	1.082	1.080	1.068	1.066	1.064	1.064	1.059	1.061	1.059	1.061	1.059	1.061	1.054	1.064	1.054	1.061
32	1.073	1.068	1.066	1.064	1.064	1.064	1.064	1.059	1.061	1.061	1.061	1.059	1.059	1.059	1.059	1.059	1.059	1.059	1.061	1.059
33	1.066	1.064	1.064	1.064	1.064	1.064	1.064	1.064	1.064	1.064	1.064	1.061	1.061	1.061	1.061	1.061	1.061	1.059	1.061	1.059
34	1.066	1.068	1.064	1.068	1.066	1.068	1.066	1.066	1.064	1.066	1.064	1.064	1.061	1.064	1.061	1.064	1.061	1.061	1.059	1.061
35	1.071	1.073	1.073	1.073	1.071	1.071	1.068	1.071	1.066	1.068	1.064	1.068	1.064	1.064	1.061	1.064	1.059	1.064	1.059	1.061
36	1.071	1.075	1.071	1.075	1.071	1.073	1.068	1.071	1.071	1.073	1.071	1.073	1.068	1.068	1.064	1.068	1.066	1.066	1.064	1.066
37	1.080	1.064	1.077	1.066	1.080	1.064	1.075	1.064	1.073	1.064	1.075	1.071	1.068	1.068	1.068	1.066	1.068	1.066	1.068	1.064
38	1.080	1.082	1.080	1.082	1.077	1.080	1.075	1.080	1.075	1.077	1.073	1.075	1.066	1.073	1.064	1.073	1.064	1.068	1.061	1.071
39	1.082	1.084	1.080	1.082	1.080	1.082	1.075	1.080	1.077	1.077	1.073	1.077	1.075	1.075	1.075	1.080	1.073	1.075	1.073	1.073
40	1.084	1.088	1.080	1.086	1.080	1.082	1.080	1.084	1.080	1.082	1.077	1.080	1.077	1.080	1.075	1.077	1.073	1.077	1.075	1.075
41	1.090	1.086	1.088	1.088	1.088	1.086	1.086	1.084	1.086	1.084	1.082	1.080	1.080	1.080	1.082	1.077	1.082	1.077	1.080	1.077
42	1.090	1.094	1.090	1.094	1.090	1.092	1.088	1.090	1.088	1.090	1.086	1.088	1.084	1.086	1.082	1.086	1.084	1.086	1.080	1.082
43	1.098	1.101	1.098	1.098	1.098	1.098	1.096	1.096	1.094	1.096	1.090	1.092	1.088	1.090	1.084	1.086	1.084	1.086	1.082	1.086
44	1.096	1.101	1.096	1.101	1.094	1.101	1.094	1.098	1.092	1.096	1.094	1.094	1.092	1.092	1.090	1.092	1.088	1.090	1.086	1.090
45	1.116	1.110	1.112	1.110	1.109	1.107	1.105	1.103	1.103	1.101	1.101	1.096	1.101	1.094	1.098	1.092	1.098	1.090	1.096	1.092
46	1.129	1.130	1.125	1.125	1.122	1.121	1.117	1.119	1.114	1.114	1.110	1.114	1.110	1.112	1.109	1.109	1.107	1.107	1.103	1.107
47	1.138	1.140	1.135	1.138	1.130	1.130	1.124	1.125	1.121	1.121	1.119	1.121	1.117	1.117	1.114	1.116	1.112	1.114	1.112	1.112
48	1.150	1.147	1.147	1.142	1.142	1.135	1.133	1.129	1.130	1.127	1.127	1.122	1.122	1.121	1.121	1.117	1.121	1.117	1.117	1.114
49	1.166	1.158	1.152	1.150	1.145	1.145	1.139	1.139	1.133	1.135	1.130	1.132	1.129	1.130	1.125	1.127	1.124	1.125	1.121	1.121
50	1.212	1.176	1.162	1.153	1.152	1.149	1.147	1.142	1.142	1.139	1.138	1.135	1.135	1.132	1.132	1.129	1.130	1.129	1.127	1.124
51	1.289	1.219	1.181	1.167	1.156	1.156	1.149	1.150	1.146	1.146	1.142	1.142	1.138	1.139	1.135	1.136	1.130	1.132	1.129	1.130
52	1.547	1.341	1.238	1.195	1.163	1.156	1.149	1.149	1.140	1.142	1.135	1.136	1.129	1.133	1.127	1.130	1.124	1.129	1.122	1.129
53	1.756	1.645	1.422	1.272	1.203	1.167	1.147	1.135	1.132	1.125	1.121	1.119	1.117	1.114	1.112	1.110	1.109	1.107	1.107	1.109
54	1.781	1.776	1.679	1.461	1.290	1.216	1.174	1.152	1.136	1.132	1.125	1.122	1.117	1.117	1.112	1.114	1.109	1.110	1.109	1.114
55	1.782	1.783	1.776	1.695	1.499	1.313	1.228	1.182	1.157	1.143	1.135	1.129	1.129	1.124	1.121	1.117	1.117	1.116	1.117	1.124
56	1.779	1.781	1.779	1.783	1.741	1.557	1.339	1.242	1.188	1.163	1.143	1.139	1.132	1.132	1.125	1.125	1.121	1.124	1.125	1.132
57	1.771	1.772	1.774	1.774	1.777	1.747	1.582	1.356	1.249	1.193	1.167	1.145	1.138	1.130	1.129	1.125	1.124	1.124	1.129	1.130
58	1.763	1.764	1.766	1.765	1.764	1.765	1.735	1.576	1.357	1.249	1.192	1.166	1.142	1.135	1.129	1.129	1.125	1.129	1.127	1.130
59	1.754	1.756	1.760	1.762	1.761	1.761	1.764	1.738	1.606	1.388	1.257	1.197	1.167	1.140	1.130	1.124	1.119	1.114	1.114	1.109
60	1.752	1.756	1.756	1.758	1.761	1.760	1.761	1.761	1.752	1.657	1.445	1.279	1.211	1.174	1.150	1.132	1.129	1.121	1.117	1.114
61	1.744	1.752	1.758	1.760	1.760	1.759	1.763	1.772	1.786	1.787	1.693	1.497	1.308	1.222	1.179	1.158	1.135	1.129	1.121	1.119
62	1.740	1.740	1.745	1.752	1.756	1.758	1.761	1.776	1.797	1.780	1.748	1.693	1.535	1.335	1.234	1.184	1.163	1.139	1.132	1.124
63	1.739	1.743	1.742	1.741	1.745	1.750	1.759	1.783	1.788	1.766	1.760	1.752	1.713	1.580	1.375	1.251	1.194	1.166	1.143	1.133

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 25

IR SCAN TIME 7.12 SEC
INITIAL TEMP 529.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	1.088	1.082	1.082	1.075	1.077	1.075	1.073	1.073	1.071	1.068	1.068	1.066	1.068	1.066	1.066	1.064	1.066	1.064	1.066	1.064
30	1.061	1.064	1.061	1.064	1.061	1.061	1.061	1.064	1.059	1.059	1.061	1.061	1.061	1.059	1.059	1.061	1.061	1.061	1.064	1.061
31	1.054	1.061	1.054	1.061	1.051	1.056	1.048	1.056	1.048	1.054	1.048	1.056	1.054	1.056	1.054	1.056	1.054	1.054	1.054	1.056
32	1.059	1.059	1.059	1.059	1.059	1.054	1.051	1.051	1.054	1.051	1.051	1.048	1.051	1.040	1.054	1.043	1.051	1.043	1.054	1.046
33	1.059	1.056	1.054	1.054	1.056	1.051	1.051	1.051	1.051	1.048	1.051	1.048	1.051	1.051	1.051	1.051	1.051	1.048	1.048	1.048
34	1.056	1.059	1.056	1.059	1.054	1.056	1.054	1.054	1.051	1.054	1.051	1.054	1.048	1.054	1.048	1.054	1.048	1.054	1.048	1.051
35	1.059	1.061	1.059	1.061	1.054	1.056	1.056	1.059	1.056	1.059	1.056	1.059	1.054	1.056	1.054	1.059	1.051	1.054	1.048	1.054
36	1.064	1.064	1.064	1.064	1.061	1.064	1.059	1.061	1.059	1.059	1.056	1.059	1.054	1.059	1.056	1.059	1.054	1.056	1.054	1.056
37	1.066	1.064	1.066	1.064	1.064	1.064	1.066	1.064	1.064	1.064	1.064	1.059	1.064	1.061	1.059	1.059	1.059	1.056	1.059	1.054
38	1.061	1.068	1.064	1.068	1.064	1.068	1.064	1.068	1.059	1.066	1.064	1.068	1.064	1.064	1.061	1.064	1.059	1.061	1.059	1.061
39	1.075	1.073	1.068	1.071	1.068	1.068	1.068	1.068	1.064	1.068	1.064	1.066	1.059	1.064	1.059	1.064	1.059	1.064	1.056	1.064
40	1.073	1.075	1.073	1.075	1.071	1.073	1.068	1.071	1.066	1.071	1.068	1.066	1.064	1.068	1.064	1.066	1.064	1.064	1.064	1.064
41	1.080	1.075	1.075	1.075	1.073	1.071	1.073	1.071	1.073	1.068	1.073	1.068	1.071	1.068	1.068	1.066	1.068	1.065	1.066	1.068
42	1.080	1.080	1.077	1.077	1.077	1.077	1.075	1.077	1.073	1.075	1.073	1.073	1.071	1.075	1.071	1.073	1.071	1.073	1.068	1.071
43	1.080	1.082	1.077	1.082	1.080	1.080	1.077	1.082	1.077	1.077	1.077	1.077	1.075	1.075	1.075	1.077	1.071	1.077	1.071	1.075
44	1.086	1.088	1.084	1.086	1.082	1.082	1.082	1.084	1.080	1.082	1.080	1.080	1.077	1.077	1.077	1.080	1.077	1.077	1.075	1.077
45	1.094	1.090	1.094	1.086	1.092	1.086	1.094	1.094	1.092	1.090	1.092	1.090	1.090	1.088	1.090	1.086	1.088	1.084	1.086	1.082
46	1.101	1.105	1.100	1.105	1.101	1.101	1.100	1.101	1.098	1.103	1.090	1.101	1.090	1.100	1.090	1.101	1.090	1.101	1.088	1.098
47	1.110	1.110	1.109	1.110	1.107	1.109	1.105	1.105	1.103	1.105	1.101	1.103	1.101	1.101	1.100	1.101	1.100	1.101	1.098	1.100
48	1.116	1.114	1.114	1.112	1.114	1.112	1.112	1.109	1.110	1.107	1.107	1.105	1.109	1.105	1.107	1.103	1.105	1.103	1.103	1.103
49	1.121	1.122	1.119	1.119	1.116	1.117	1.114	1.116	1.112	1.114	1.112	1.112	1.110	1.110	1.109	1.110	1.107	1.109	1.107	1.109
50	1.124	1.122	1.122	1.119	1.119	1.117	1.117	1.117	1.117	1.114	1.114	1.112	1.114	1.112	1.114	1.110	1.110	1.110	1.110	1.109
51	1.127	1.129	1.124	1.125	1.122	1.125	1.122	1.122	1.121	1.121	1.117	1.119	1.117	1.117	1.117	1.119	1.117	1.116	1.117	1.116
52	1.124	1.129	1.124	1.129	1.124	1.129	1.124	1.127	1.124	1.124	1.122	1.121	1.121	1.121	1.121	1.119	1.117	1.117	1.116	1.117
53	1.114	1.119	1.122	1.124	1.125	1.125	1.127	1.122	1.129	1.124	1.127	1.124	1.127	1.124	1.125	1.121	1.122	1.117	1.121	1.114
54	1.119	1.125	1.127	1.130	1.129	1.132	1.129	1.132	1.130	1.133	1.132	1.135	1.130	1.133	1.129	1.132	1.127	1.129	1.124	1.122
55	1.130	1.133	1.135	1.138	1.139	1.140	1.140	1.140	1.145	1.140	1.139	1.136	1.138	1.138	1.133	1.138	1.135	1.130	1.130	1.125
56	1.135	1.138	1.139	1.142	1.140	1.140	1.139	1.142	1.140	1.142	1.139	1.139	1.136	1.138	1.133	1.133	1.130	1.132	1.127	1.127
57	1.133	1.132	1.133	1.132	1.132	1.130	1.132	1.129	1.130	1.127	1.127	1.122	1.122	1.117	1.121	1.119	1.117	1.114	1.114	1.112
58	1.129	1.130	1.125	1.127	1.125	1.125	1.122	1.124	1.124	1.125	1.125	1.124	1.121	1.124	1.122	1.122	1.121	1.119	1.117	1.116
59	1.109	1.101	1.105	1.101	1.103	1.100	1.101	1.098	1.100	1.096	1.096	1.092	1.094	1.090	1.092	1.088	1.090	1.086	1.088	1.084
60	1.112	1.109	1.107	1.103	1.101	1.098	1.103	1.094	1.100	1.090	1.096	1.088	1.094	1.086	1.090	1.082	1.088	1.082	1.086	1.077
61	1.114	1.114	1.110	1.110	1.107	1.107	1.101	1.101	1.098	1.100	1.098	1.098	1.094	1.098	1.090	1.094	1.088	1.090	1.086	1.088
62	1.117	1.117	1.114	1.110	1.110	1.105	1.105	1.101	1.101	1.098	1.100	1.098	1.098	1.094	1.094	1.092	1.092	1.090	1.090	1.086
63	1.125	1.121	1.117	1.117	1.112	1.112	1.107	1.107	1.103	1.103	1.101	1.101	1.098	1.098	1.094	1.096	1.090	1.096	1.088	1.090

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 25

IR SCAN TIME 7.12 SEC
INITIAL TEMP 529.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	1.066	1.064	1.064	1.061	1.064	1.061	1.064	1.059	1.061	1.059	1.061	1.056	1.059	1.056	1.056	1.054	1.054	1.051	1.054	1.054
30	1.059	1.061	1.061	1.064	1.061	1.061	1.061	1.059	1.056	1.059	1.056	1.059	1.056	1.056	1.054	1.054	1.051	1.054	1.048	1.051
31	1.054	1.056	1.056	1.059	1.059	1.061	1.059	1.061	1.056	1.059	1.056	1.059	1.054	1.056	1.051	1.051	1.048	1.048	1.046	1.046
32	1.051	1.040	1.051	1.040	1.054	1.048	1.054	1.051	1.056	1.056	1.054	1.051	1.051	1.051	1.051	1.048	1.048	1.046	1.046	1.040
33	1.048	1.048	1.054	1.051	1.051	1.048	1.048	1.051	1.051	1.048	1.051	1.046	1.046	1.040	1.043	1.034	1.043	1.031	1.040	1.037
34	1.048	1.051	1.048	1.051	1.048	1.048	1.046	1.048	1.048	1.048	1.043	1.046	1.043	1.046	1.040	1.043	1.040	1.043	1.037	1.040
35	1.048	1.051	1.048	1.048	1.048	1.051	1.048	1.048	1.048	1.048	1.043	1.046	1.043	1.048	1.043	1.046	1.040	1.043	1.043	1.046
36	1.051	1.054	1.048	1.051	1.051	1.054	1.048	1.054	1.051	1.051	1.046	1.048	1.043	1.051	1.046	1.046	1.043	1.046	1.043	1.043
37	1.056	1.054	1.056	1.054	1.054	1.051	1.054	1.051	1.051	1.048	1.051	1.048	1.048	1.051	1.051	1.051	1.051	1.048	1.048	1.051
38	1.059	1.059	1.059	1.059	1.059	1.059	1.054	1.056	1.054	1.059	1.054	1.056	1.051	1.056	1.054	1.054	1.051	1.054	1.054	1.056
39	1.054	1.064	1.054	1.061	1.054	1.061	1.054	1.061	1.059	1.061	1.056	1.059	1.056	1.061	1.056	1.056	1.054	1.059	1.054	1.056
40	1.064	1.064	1.064	1.064	1.064	1.061	1.061	1.064	1.059	1.061	1.054	1.064	1.051	1.061	1.054	1.059	1.051	1.056	1.048	1.056
41	1.066	1.064	1.066	1.064	1.064	1.064	1.064	1.064	1.064	1.056	1.061	1.059	1.064	1.059	1.061	1.059	1.059	1.059	1.059	1.056
42	1.064	1.068	1.066	1.068	1.061	1.068	1.064	1.066	1.064	1.066	1.061	1.064	1.061	1.064	1.061	1.064	1.059	1.064	1.059	1.061
43	1.071	1.073	1.071	1.073	1.068	1.071	1.071	1.066	1.066	1.068	1.064	1.068	1.066	1.066	1.064	1.066	1.064	1.066	1.064	1.064
44	1.075	1.077	1.075	1.077	1.073	1.077	1.073	1.075	1.073	1.075	1.073	1.073	1.071	1.071	1.066	1.071	1.066	1.068	1.068	1.071
45	1.086	1.086	1.086	1.086	1.090	1.082	1.084	1.082	1.084	1.082	1.082	1.082	1.084	1.082	1.082	1.080	1.082	1.077	1.082	1.080
46	1.088	1.100	1.090	1.098	1.090	1.098	1.094	1.096	1.092	1.096	1.090	1.096	1.094	1.094	1.090	1.092	1.090	1.094	1.092	1.094
47	1.100	1.101	1.101	1.103	1.100	1.101	1.098	1.101	1.094	1.101	1.094	1.100	1.094	1.100	1.094	1.100	1.096	1.098	1.092	1.098
48	1.105	1.107	1.109	1.107	1.107	1.103	1.103	1.101	1.103	1.101	1.101	1.101	1.101	1.100	1.101	1.100	1.101	1.098	1.100	1.098
49	1.107	1.109	1.107	1.110	1.109	1.110	1.103	1.107	1.103	1.107	1.103	1.105	1.103	1.105	1.101	1.103	1.101	1.103	1.101	1.101
50	1.112	1.110	1.110	1.109	1.110	1.109	1.109	1.109	1.109	1.107	1.107	1.105	1.107	1.103	1.107	1.103	1.105	1.101	1.103	1.101
51	1.114	1.114	1.114	1.114	1.112	1.112	1.109	1.110	1.107	1.110	1.107	1.109	1.109	1.107	1.105	1.107	1.105	1.107	1.105	1.107
52	1.114	1.116	1.114	1.114	1.110	1.109	1.109	1.107	1.105	1.105	1.103	1.105	1.101	1.103	1.100	1.101	1.098	1.098	1.096	1.098
53	1.116	1.110	1.112	1.109	1.105	1.100	1.098	1.090	1.090	1.088	1.088	1.090	1.088	1.084	1.082	1.082	1.082	1.080	1.084	1.082
54	1.119	1.117	1.112	1.112	1.105	1.101	1.090	1.090	1.082	1.084	1.077	1.082	1.075	1.082	1.075	1.080	1.071	1.077	1.071	1.077
55	1.122	1.121	1.116	1.117	1.112	1.114	1.100	1.096	1.092	1.090	1.090	1.080	1.082	1.090	1.080	1.068	1.088	1.082	1.075	1.082
56	1.121	1.119	1.114	1.114	1.110	1.109	1.100	1.098	1.090	1.090	1.086	1.084	1.082	1.084	1.077	1.082	1.077	1.075	1.073	1.075
57	1.109	1.107	1.105	1.101	1.101	1.098	1.098	1.090	1.090	1.084	1.086	1.082	1.082	1.077	1.082	1.077	1.077	1.073	1.073	1.071
58	1.114	1.114	1.110	1.112	1.110	1.114	1.110	1.109	1.105	1.105	1.101	1.101	1.098	1.094	1.098	1.098	1.096	1.092	1.094	
59	1.084	1.082	1.082	1.080	1.077	1.075	1.077	1.075	1.068	1.068	1.066	1.066	1.066	1.064	1.064	1.059	1.061	1.059	1.059	1.056
60	1.082	1.077	1.080	1.075	1.077	1.073	1.073	1.068	1.073	1.068	1.068	1.064	1.066	1.064	1.066	1.064	1.066	1.061	1.059	1.056
61	1.084	1.086	1.080	1.082	1.073	1.077	1.068	1.075	1.066	1.073	1.064	1.068	1.059	1.064	1.059	1.064	1.054	1.064	1.054	1.064
62	1.068	1.084	1.084	1.080	1.084	1.080	1.080	1.075	1.073	1.071	1.071	1.068	1.068	1.064	1.064	1.064	1.064	1.059	1.059	1.059
63	1.086	1.088	1.082	1.086	1.080	1.082	1.075	1.080	1.075	1.075	1.068	1.073	1.068	1.071	1.066	1.068	1.064	1.064	1.061	1.064

NASA/RI OH90 TRANSITION TEST
V41R-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 25

IR SCAN TIME 7.12 SEC
INITIAL TEMP 529.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	1.051	1.046	1.046	1.046	1.046	1.043	1.043	1.043	1.043	1.043
30	1.048	1.049	1.043	1.043	1.040	1.043	1.040	1.043	1.037	1.043
31	1.043	1.043	1.040	1.040	1.040	1.043	1.037	1.040	1.037	1.043
32	1.040	1.040	1.043	1.037	1.040	1.040	1.037	1.037	1.037	1.037
33	1.040	1.031	1.037	1.028	1.037	1.031	1.037	1.040	1.040	1.037
34	1.037	1.043	1.037	1.040	1.037	1.040	1.037	1.040	1.037	1.040
35	1.040	1.043	1.040	1.043	1.040	1.040	1.040	1.043	1.040	1.040
36	1.040	1.046	1.043	1.046	1.043	1.043	1.040	1.043	1.037	1.043
37	1.051	1.048	1.048	1.048	1.048	1.043	1.048	1.043	1.046	1.043
38	1.051	1.054	1.051	1.054	1.054	1.054	1.048	1.051	1.048	1.051
39	1.054	1.056	1.051	1.056	1.054	1.054	1.051	1.054	1.051	1.054
40	1.051	1.054	1.048	1.054	1.048	1.059	1.054	1.056	1.054	1.059
41	1.059	1.056	1.059	1.064	1.059	1.059	1.061	1.051	1.059	1.048
42	1.059	1.061	1.059	1.061	1.059	1.061	1.059	1.061	1.059	1.061
43	1.064	1.064	1.064	1.066	1.064	1.064	1.064	1.066	1.064	1.068
44	1.068	1.068	1.066	1.068	1.064	1.066	1.066	1.068	1.066	1.068
45	1.080	1.077	1.082	1.077	1.080	1.077	1.080	1.075	1.077	1.075
46	1.090	1.094	1.090	1.090	1.090	1.092	1.090	1.090	1.088	1.090
47	1.090	1.096	1.090	1.096	1.094	1.096	1.090	1.094	1.090	1.094
48	1.100	1.098	1.098	1.096	1.098	1.094	1.098	1.090	1.096	1.090
49	1.101	1.101	1.098	1.101	1.098	1.101	1.098	1.101	1.098	1.100
50	1.103	1.101	1.101	1.101	1.101	1.101	1.101	1.100	1.101	1.100
51	1.103	1.105	1.103	1.105	1.101	1.103	1.101	1.101	1.100	1.101
52	1.094	1.098	1.094	1.096	1.092	1.094	1.090	1.092	1.088	1.092
53	1.082	1.082	1.080	1.080	1.077	1.075	1.077	1.075	1.075	1.073
54	1.068	1.073	1.068	1.068	1.066	1.068	1.064	1.068	1.064	1.064
55	1.080	1.075	1.066	1.071	1.068	1.064	1.064	1.059	1.061	1.059
56	1.068	1.068	1.064	1.064	1.061	1.064	1.059	1.059	1.054	1.056
57	1.068	1.066	1.068	1.064	1.064	1.059	1.061	1.059	1.056	1.054
58	1.086	1.090	1.086	1.084	1.071	1.066	1.066	1.080	1.077	1.082
59	1.056	1.056	1.056	1.054	1.054	1.048	1.051	1.048	1.051	1.051
60	1.056	1.054	1.054	1.048	1.051	1.048	1.048	1.043	1.046	1.046
61	1.056	1.059	1.054	1.054	1.051	1.054	1.051	1.054	1.048	1.051
62	1.059	1.051	1.054	1.046	1.051	1.043	1.051	1.043	1.048	1.043
63	1.059	1.064	1.056	1.059	1.054	1.054	1.048	1.051	1.046	1.048

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 25

IR SCAN TIME 7.12 SEC
INITIAL TEMP 529.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	1.048	1.051	1.054	1.056	1.056	1.064	1.068	1.075	1.075	1.082	1.077	1.090	1.092	1.105	1.152	1.344	1.469	1.514	1.536	1.553
65	1.048	1.051	1.054	1.056	1.061	1.064	1.073	1.075	1.080	1.077	1.082	1.086	1.095	1.105	1.202	1.389	1.482	1.516	1.538	1.550
66	1.046	1.051	1.054	1.059	1.061	1.064	1.071	1.077	1.077	1.084	1.080	1.088	1.094	1.114	1.250	1.421	1.489	1.519	1.537	1.550
67	1.051	1.051	1.054	1.054	1.061	1.066	1.071	1.077	1.080	1.080	1.080	1.086	1.098	1.127	1.295	1.440	1.493	1.520	1.536	1.545
68	1.054	1.061	1.059	1.056	1.061	1.064	1.075	1.080	1.082	1.080	1.084	1.084	1.098	1.136	1.311	1.443	1.491	1.515	1.531	1.539
69	1.059	1.061	1.059	1.059	1.059	1.064	1.071	1.080	1.080	1.082	1.082	1.088	1.096	1.147	1.325	1.447	1.490	1.515	1.530	1.541
70	1.056	1.051	1.061	1.048	1.059	1.064	1.071	1.077	1.082	1.082	1.082	1.082	1.096	1.152	1.333	1.448	1.488	1.511	1.525	1.535
71	1.054	1.056	1.056	1.056	1.059	1.064	1.073	1.075	1.082	1.077	1.084	1.077	1.098	1.179	1.362	1.456	1.490	1.510	1.524	1.533
72	1.051	1.054	1.054	1.059	1.059	1.066	1.075	1.086	1.086	1.084	1.082	1.088	1.107	1.235	1.398	1.466	1.493	1.511	1.522	1.532
73	1.048	1.051	1.056	1.059	1.059	1.068	1.077	1.086	1.084	1.082	1.086	1.088	1.124	1.281	1.419	1.470	1.494	1.510	1.520	1.528
74	1.048	1.048	1.051	1.056	1.056	1.066	1.075	1.084	1.080	1.082	1.080	1.092	1.162	1.336	1.439	1.477	1.497	1.510	1.518	1.527
75	1.048	1.051	1.051	1.054	1.056	1.066	1.077	1.082	1.082	1.080	1.082	1.098	1.203	1.370	1.448	1.478	1.496	1.507	1.516	1.524
76	1.048	1.048	1.054	1.054	1.059	1.066	1.080	1.084	1.084	1.082	1.084	1.098	1.219	1.381	1.449	1.476	1.493	1.504	1.514	1.519
77	1.048	1.054	1.046	1.056	1.059	1.068	1.075	1.084	1.082	1.082	1.080	1.101	1.235	1.391	1.450	1.475	1.491	1.502	1.510	1.517
78	1.051	1.073	1.082	1.088	1.092	1.088	1.096	1.094	1.092	1.075	1.082	1.098	1.241	1.391	1.449	1.472	1.487	1.496	1.504	1.510
79	1.075	1.092	1.084	1.107	1.109	1.105	1.101	1.088	1.090	1.092	1.090	1.114	1.271	1.406	1.450	1.472	1.485	1.493	1.500	1.505
80	1.084	1.101	1.112	1.159	1.139	1.109	1.107	1.103	1.098	1.090	1.098	1.153	1.321	1.424	1.457	1.475	1.485	1.490	1.495	1.500
81	1.105	1.116	1.138	1.201	1.205	1.150	1.110	1.100	1.098	1.103	1.109	1.196	1.358	1.435	1.461	1.477	1.484	1.489	1.494	1.498
82	1.233	1.178	1.165	1.246	1.288	1.218	1.156	1.124	1.101	1.096	1.114	1.243	1.384	1.437	1.459	1.473	1.480	1.487	1.490	1.492
83	1.346	1.223	1.207	1.259	1.326	1.252	1.175	1.117	1.101	1.105	1.138	1.283	1.398	1.436	1.454	1.465	1.472	1.479	1.484	1.487
84	1.289	1.194	1.171	1.176	1.229	1.207	1.152	1.109	1.088	1.101	1.161	1.318	1.437	1.476	1.488	1.489	1.486	1.484	1.482	1.481
85	1.143	1.129	1.122	1.125	1.142	1.140	1.152	1.139	1.133	1.132	1.152	1.152	1.178	1.214	1.258	1.306	1.359	1.406	1.448	1.476
86	1.138	1.125	1.112	1.114	1.129	1.138	1.135	1.135	1.127	1.129	1.135	1.136	1.132	1.136	1.135	1.140	1.140	1.143	1.145	1.150
87	1.110	1.101	1.096	1.092	1.094	1.100	1.098	1.098	1.100	1.109	1.129	1.130	1.122	1.122	1.122	1.124	1.125	1.129	1.127	1.129
88	1.075	1.071	1.064	1.064	1.066	1.068	1.077	1.086	1.101	1.121	1.140	1.124	1.114	1.112	1.114	1.114	1.116	1.117	1.119	1.119
89	1.051	1.051	1.054	1.059	1.061	1.066	1.073	1.080	1.096	1.121	1.129	1.116	1.114	1.114	1.112	1.114	1.110	1.112	1.110	1.112
90	1.043	1.048	1.054	1.056	1.059	1.061	1.064	1.066	1.077	1.103	1.114	1.112	1.110	1.112	1.107	1.109	1.107	1.109	1.107	1.110
91	1.040	1.046	1.048	1.048	1.048	1.051	1.056	1.059	1.071	1.090	1.103	1.105	1.105	1.105	1.105	1.105	1.105	1.105	1.105	1.105
92	1.043	1.040	1.046	1.040	1.046	1.043	1.054	1.043	1.059	1.071	1.096	1.101	1.103	1.101	1.105	1.101	1.105	1.103	1.103	1.101
93	1.046	1.048	1.048	1.054	1.048	1.054	1.059	1.066	1.064	1.071	1.092	1.107	1.101	1.105	1.101	1.101	1.098	1.101	1.100	1.101
94	1.073	1.068	1.068	1.066	1.064	1.064	1.064	1.064	1.064	1.068	1.088	1.100	1.101	1.100	1.101	1.100	1.098	1.098	1.098	1.098
95	1.086	1.082	1.082	1.080	1.082	1.077	1.077	1.071	1.073	1.080	1.096	1.101	1.100	1.100	1.101	1.100	1.101	1.098	1.098	1.098
96	1.086	1.082	1.082	1.082	1.088	1.086	1.073	1.075	1.071	1.090	1.105	1.107	1.101	1.103	1.101	1.103	1.103	1.103	1.101	1.101
97	1.086	1.084	1.086	1.086	1.090	1.086	1.077	1.075	1.071	1.096	1.107	1.109	1.098	1.103	1.103	1.110	1.112	1.110	1.107	1.103
98	1.082	1.080	1.086	1.090	1.090	1.086	1.080	1.071	1.075	1.094	1.107	1.098	1.100	1.101	1.109	1.114	1.116	1.114	1.109	1.101

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
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VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 25

IR SCAN TIME 7.12 SEC
INITIAL TEMP 529.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	1.562	1.569	1.576	1.584	1.591	1.604	1.617	1.632	1.649	1.661	1.668	1.680	1.696	1.704	1.712	1.717	1.720	1.727	1.729	1.733
65	1.558	1.563	1.573	1.581	1.589	1.600	1.613	1.625	1.644	1.656	1.664	1.675	1.689	1.693	1.701	1.706	1.715	1.717	1.723	1.730
66	1.557	1.562	1.570	1.579	1.587	1.598	1.609	1.621	1.636	1.654	1.665	1.671	1.681	1.687	1.693	1.701	1.706	1.707	1.712	1.719
67	1.554	1.560	1.567	1.575	1.584	1.594	1.606	1.619	1.634	1.649	1.663	1.669	1.673	1.681	1.689	1.695	1.701	1.702	1.707	1.711
68	1.548	1.555	1.563	1.572	1.580	1.590	1.600	1.613	1.627	1.642	1.657	1.668	1.672	1.673	1.682	1.690	1.691	1.694	1.701	1.706
69	1.550	1.556	1.563	1.571	1.578	1.589	1.597	1.606	1.618	1.633	1.647	1.662	1.670	1.674	1.676	1.677	1.682	1.688	1.692	1.694
70	1.544	1.551	1.558	1.566	1.575	1.586	1.597	1.603	1.611	1.624	1.639	1.653	1.662	1.666	1.670	1.671	1.673	1.678	1.682	1.684
71	1.541	1.546	1.553	1.563	1.571	1.577	1.590	1.600	1.607	1.618	1.635	1.646	1.657	1.661	1.663	1.666	1.671	1.675	1.678	1.681
72	1.539	1.544	1.550	1.557	1.566	1.572	1.582	1.594	1.603	1.618	1.630	1.641	1.651	1.656	1.658	1.660	1.666	1.671	1.672	1.675
73	1.536	1.541	1.548	1.555	1.563	1.573	1.582	1.594	1.605	1.614	1.626	1.636	1.644	1.651	1.653	1.653	1.657	1.662	1.667	1.671
74	1.535	1.542	1.548	1.555	1.563	1.574	1.586	1.597	1.607	1.617	1.626	1.635	1.644	1.653	1.652	1.651	1.650	1.655	1.661	1.669
75	1.531	1.536	1.543	1.553	1.561	1.569	1.580	1.592	1.604	1.615	1.624	1.633	1.641	1.648	1.651	1.652	1.652	1.651	1.653	1.657
76	1.526	1.533	1.539	1.547	1.556	1.566	1.577	1.587	1.597	1.607	1.620	1.630	1.637	1.641	1.643	1.645	1.649	1.652	1.654	1.654
77	1.522	1.530	1.536	1.543	1.550	1.560	1.571	1.582	1.592	1.603	1.611	1.623	1.633	1.640	1.644	1.649	1.652	1.654	1.656	1.659
78	1.518	1.523	1.530	1.537	1.545	1.554	1.564	1.577	1.589	1.598	1.607	1.615	1.622	1.627	1.633	1.637	1.642	1.645	1.648	1.649
79	1.511	1.519	1.527	1.533	1.542	1.549	1.561	1.571	1.582	1.593	1.604	1.611	1.618	1.622	1.626	1.630	1.634	1.636	1.638	1.640
80	1.505	1.511	1.519	1.527	1.536	1.545	1.554	1.566	1.579	1.590	1.602	1.612	1.620	1.623	1.625	1.627	1.628	1.629	1.631	1.633
81	1.500	1.504	1.509	1.517	1.524	1.536	1.547	1.558	1.569	1.582	1.594	1.604	1.612	1.618	1.621	1.623	1.624	1.625	1.626	1.627
82	1.493	1.496	1.501	1.508	1.516	1.527	1.537	1.548	1.559	1.571	1.582	1.590	1.598	1.604	1.609	1.612	1.614	1.618	1.620	1.623
83	1.488	1.490	1.493	1.498	1.505	1.514	1.524	1.537	1.548	1.561	1.572	1.581	1.587	1.594	1.599	1.601	1.603	1.606	1.609	1.612
84	1.482	1.484	1.487	1.489	1.494	1.502	1.510	1.521	1.532	1.542	1.554	1.564	1.571	1.577	1.581	1.585	1.587	1.590	1.593	1.596
85	1.504	1.522	1.524	1.526	1.529	1.528	1.526	1.521	1.518	1.522	1.529	1.538	1.549	1.557	1.561	1.562	1.565	1.567	1.568	1.571
86	1.152	1.158	1.166	1.193	1.234	1.273	1.285	1.283	1.257	1.249	1.255	1.268	1.281	1.324	1.344	1.355	1.364	1.377	1.386	1.388
87	1.129	1.133	1.132	1.135	1.135	1.138	1.136	1.139	1.136	1.139	1.138	1.142	1.142	1.146	1.146	1.149	1.149	1.152	1.150	1.156
88	1.119	1.117	1.119	1.121	1.122	1.122	1.125	1.125	1.127	1.124	1.125	1.124	1.130	1.129	1.132	1.132	1.135	1.133	1.136	1.135
89	1.110	1.112	1.110	1.112	1.110	1.112	1.112	1.116	1.117	1.119	1.117	1.119	1.119	1.122	1.121	1.124	1.122	1.127	1.127	1.130
90	1.107	1.107	1.105	1.107	1.103	1.105	1.105	1.109	1.109	1.114	1.114	1.116	1.117	1.119	1.119	1.121	1.121	1.122	1.121	1.122
91	1.105	1.103	1.101	1.101	1.103	1.101	1.105	1.103	1.107	1.109	1.114	1.156	1.247	1.243	1.166	1.129	1.121	1.117	1.119	1.119
92	1.103	1.101	1.101	1.100	1.101	1.098	1.101	1.100	1.103	1.103	1.112	1.191	1.336	1.354	1.250	1.154	1.129	1.114	1.114	1.114
93	1.094	1.101	1.094	1.100	1.092	1.100	1.094	1.101	1.094	1.101	1.098	1.110	1.145	1.180	1.138	1.117	1.114	1.110	1.109	1.112
94	1.101	1.100	1.100	1.096	1.096	1.094	1.094	1.092	1.096	1.096	1.100	1.098	1.098	1.098	1.101	1.103	1.103	1.101	1.105	1.101
95	1.098	1.098	1.101	1.094	1.092	1.094	1.094	1.092	1.092	1.090	1.094	1.094	1.096	1.094	1.100	1.100	1.101	1.101	1.103	1.101
96	1.098	1.098	1.096	1.096	1.090	1.092	1.088	1.090	1.090	1.094	1.094	1.094	1.092	1.096	1.094	1.098	1.098	1.101	1.100	1.103
97	1.098	1.100	1.098	1.094	1.090	1.094	1.090	1.092	1.090	1.094	1.090	1.094	1.090	1.094	1.090	1.096	1.094	1.100	1.098	1.100
98	1.100	1.098	1.098	1.094	1.098	1.096	1.098	1.098	1.098	1.096	1.098	1.092	1.094	1.090	1.090	1.090	1.094	1.094	1.098	1.098

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 7.12 SEC
GROUP 25 INITIAL TEMP 529.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	1.735	1.738	1.741	1.744	1.743	1.748	1.767	1.784	1.764	1.761	1.764	1.759	1.748	1.717	1.609	1.416	1.270	1.205	1.168	1.149
65	1.735	1.736	1.739	1.742	1.745	1.754	1.780	1.776	1.759	1.755	1.754	1.753	1.750	1.741	1.719	1.628	1.432	1.275	1.211	1.172
66	1.726	1.730	1.731	1.733	1.736	1.753	1.775	1.763	1.751	1.748	1.744	1.744	1.743	1.740	1.735	1.720	1.649	1.473	1.292	1.219
67	1.714	1.719	1.723	1.727	1.732	1.754	1.779	1.762	1.747	1.741	1.738	1.734	1.735	1.739	1.741	1.737	1.719	1.655	1.487	1.302
68	1.709	1.709	1.709	1.715	1.726	1.741	1.760	1.750	1.742	1.740	1.737	1.736	1.734	1.732	1.733	1.736	1.735	1.724	1.685	1.555
69	1.699	1.706	1.707	1.706	1.716	1.736	1.754	1.742	1.732	1.733	1.733	1.733	1.736	1.738	1.739	1.740	1.734	1.730	1.725	1.713
70	1.686	1.690	1.694	1.699	1.708	1.723	1.742	1.736	1.723	1.720	1.723	1.724	1.725	1.728	1.728	1.728	1.730	1.731	1.731	1.730
71	1.684	1.688	1.692	1.692	1.699	1.714	1.732	1.723	1.714	1.712	1.713	1.716	1.713	1.712	1.717	1.719	1.720	1.724	1.725	1.726
72	1.677	1.682	1.686	1.686	1.688	1.705	1.729	1.721	1.709	1.707	1.706	1.707	1.705	1.705	1.706	1.708	1.708	1.707	1.714	1.722
73	1.676	1.676	1.672	1.671	1.678	1.696	1.717	1.708	1.702	1.701	1.699	1.696	1.696	1.696	1.693	1.696	1.699	1.699	1.701	1.700
74	1.672	1.669	1.666	1.668	1.678	1.697	1.713	1.708	1.699	1.696	1.693	1.689	1.689	1.689	1.688	1.693	1.694	1.694	1.694	1.693
75	1.664	1.672	1.672	1.667	1.672	1.690	1.711	1.708	1.696	1.691	1.687	1.684	1.685	1.686	1.686	1.688	1.685	1.684	1.685	1.686
76	1.657	1.663	1.666	1.669	1.675	1.684	1.699	1.704	1.690	1.686	1.686	1.686	1.683	1.681	1.680	1.678	1.674	1.673	1.672	1.673
77	1.661	1.665	1.667	1.669	1.670	1.677	1.693	1.707	1.688	1.676	1.675	1.675	1.675	1.677	1.680	1.682	1.681	1.681	1.678	1.672
78	1.651	1.653	1.655	1.656	1.657	1.662	1.679	1.702	1.690	1.671	1.670	1.668	1.667	1.666	1.665	1.664	1.663	1.664	1.666	1.669
79	1.643	1.644	1.647	1.648	1.648	1.651	1.662	1.676	1.670	1.661	1.664	1.664	1.664	1.662	1.661	1.661	1.662	1.663	1.663	1.660
80	1.636	1.639	1.639	1.638	1.639	1.641	1.652	1.666	1.664	1.656	1.660	1.661	1.661	1.660	1.660	1.659	1.659	1.661	1.662	1.661
81	1.630	1.633	1.634	1.635	1.634	1.636	1.645	1.659	1.658	1.651	1.654	1.657	1.658	1.660	1.661	1.662	1.662	1.660	1.657	1.655
82	1.626	1.626	1.628	1.629	1.630	1.632	1.639	1.652	1.653	1.647	1.649	1.651	1.652	1.654	1.655	1.657	1.659	1.658	1.656	1.651
83	1.614	1.619	1.622	1.626	1.629	1.631	1.637	1.647	1.650	1.643	1.643	1.646	1.646	1.648	1.650	1.651	1.653	1.651	1.648	1.646
84	1.600	1.605	1.609	1.613	1.616	1.620	1.625	1.635	1.642	1.640	1.643	1.646	1.647	1.647	1.645	1.645	1.647	1.649	1.647	1.646
85	1.574	1.579	1.584	1.590	1.595	1.599	1.606	1.615	1.627	1.625	1.621	1.625	1.630	1.635	1.641	1.646	1.650	1.652	1.653	1.653
86	1.395	1.410	1.428	1.450	1.466	1.484	1.503	1.515	1.526	1.538	1.546	1.557	1.566	1.573	1.576	1.579	1.586	1.596	1.611	1.625
87	1.153	1.159	1.157	1.164	1.162	1.168	1.167	1.173	1.172	1.176	1.175	1.180	1.180	1.185	1.188	1.194	1.198	1.209	1.221	1.235
88	1.139	1.139	1.142	1.143	1.149	1.149	1.150	1.150	1.153	1.153	1.156	1.156	1.158	1.158	1.159	1.159	1.162	1.158	1.164	1.162
89	1.129	1.133	1.130	1.135	1.133	1.138	1.138	1.142	1.140	1.143	1.143	1.146	1.143	1.146	1.143	1.147	1.145	1.149	1.146	1.150
90	1.124	1.127	1.125	1.130	1.129	1.133	1.130	1.136	1.135	1.140	1.139	1.142	1.138	1.140	1.138	1.140	1.138	1.142	1.136	1.140
91	1.121	1.119	1.121	1.121	1.125	1.127	1.132	1.132	1.138	1.149	1.169	1.153	1.142	1.135	1.136	1.135	1.135	1.132	1.133	1.132
92	1.116	1.117	1.119	1.121	1.122	1.127	1.132	1.133	1.149	1.251	1.350	1.313	1.209	1.154	1.139	1.130	1.130	1.129	1.130	1.129
93	1.116	1.119	1.116	1.119	1.119	1.124	1.125	1.130	1.130	1.175	1.261	1.262	1.185	1.149	1.136	1.132	1.129	1.132	1.132	1.135
94	1.110	1.107	1.114	1.112	1.119	1.119	1.122	1.121	1.122	1.121	1.124	1.121	1.125	1.124	1.125	1.124	1.127	1.129	1.133	1.132
95	1.101	1.101	1.107	1.109	1.114	1.117	1.119	1.119	1.119	1.119	1.122	1.122	1.125	1.124	1.124	1.122	1.127	1.125	1.132	1.127
96	1.100	1.103	1.103	1.109	1.112	1.117	1.117	1.117	1.117	1.117	1.119	1.122	1.122	1.129	1.127	1.129	1.129	1.130	1.130	1.133
97	1.098	1.105	1.103	1.110	1.114	1.116	1.114	1.117	1.117	1.121	1.121	1.124	1.125	1.127	1.124	1.129	1.127	1.130	1.129	1.135
98	1.098	1.100	1.103	1.107	1.110	1.112	1.114	1.114	1.119	1.121	1.121	1.122	1.125	1.127	1.129	1.125	1.130	1.130	1.135	1.133

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 25

IR SCAN TIME 7.12 SEC
INITIAL TEMP 529.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	1.132	1.127	1.121	1.117	1.114	1.114	1.109	1.109	1.103	1.105	1.100	1.100	1.098	1.101	1.098	1.098	1.092	1.094	1.090	1.094
65	1.149	1.132	1.127	1.122	1.119	1.116	1.112	1.109	1.107	1.105	1.101	1.101	1.100	1.098	1.100	1.096	1.096	1.092	1.092	1.086
66	1.171	1.150	1.133	1.125	1.121	1.117	1.112	1.110	1.105	1.105	1.101	1.101	1.098	1.098	1.094	1.096	1.090	1.094	1.090	1.088
67	1.221	1.176	1.150	1.125	1.122	1.112	1.112	1.103	1.110	1.098	1.101	1.098	1.096	1.092	1.094	1.088	1.090	1.082	1.088	1.086
68	1.357	1.241	1.190	1.158	1.135	1.121	1.114	1.110	1.107	1.105	1.100	1.098	1.096	1.092	1.090	1.088	1.090	1.086	1.084	1.077
69	1.644	1.460	1.282	1.212	1.167	1.139	1.121	1.114	1.109	1.105	1.101	1.100	1.096	1.096	1.090	1.092	1.086	1.088	1.086	1.086
70	1.721	1.668	1.509	1.317	1.226	1.178	1.147	1.124	1.110	1.109	1.107	1.101	1.098	1.098	1.094	1.090	1.090	1.086	1.086	1.082
71	1.726	1.721	1.686	1.546	1.345	1.238	1.184	1.149	1.125	1.114	1.110	1.107	1.103	1.098	1.098	1.092	1.092	1.088	1.090	1.084
72	1.726	1.724	1.715	1.686	1.565	1.364	1.243	1.190	1.152	1.129	1.114	1.110	1.105	1.101	1.098	1.098	1.094	1.092	1.088	1.089
73	1.700	1.702	1.704	1.702	1.685	1.592	1.402	1.257	1.195	1.156	1.129	1.114	1.109	1.101	1.101	1.098	1.096	1.090	1.090	1.086
74	1.688	1.686	1.691	1.695	1.692	1.676	1.582	1.394	1.249	1.193	1.152	1.127	1.107	1.105	1.094	1.100	1.088	1.092	1.088	1.088
75	1.684	1.685	1.686	1.685	1.682	1.679	1.667	1.602	1.440	1.277	1.203	1.161	1.130	1.110	1.103	1.098	1.096	1.092	1.092	1.084
76	1.678	1.680	1.681	1.677	1.674	1.672	1.669	1.659	1.621	1.493	1.309	1.215	1.171	1.138	1.117	1.105	1.100	1.096	1.094	1.090
77	1.666	1.665	1.667	1.670	1.672	1.670	1.668	1.665	1.654	1.625	1.522	1.348	1.228	1.180	1.149	1.127	1.105	1.100	1.096	1.096
78	1.673	1.672	1.670	1.667	1.665	1.663	1.660	1.660	1.660	1.655	1.635	1.567	1.415	1.262	1.192	1.157	1.139	1.116	1.103	1.094
79	1.658	1.657	1.660	1.664	1.665	1.662	1.660	1.658	1.656	1.653	1.648	1.636	1.598	1.476	1.303	1.205	1.164	1.142	1.130	1.112
80	1.661	1.655	1.653	1.656	1.660	1.661	1.659	1.657	1.656	1.651	1.646	1.638	1.626	1.594	1.487	1.317	1.210	1.163	1.142	1.133
81	1.656	1.656	1.650	1.648	1.650	1.655	1.658	1.656	1.652	1.652	1.649	1.642	1.629	1.613	1.581	1.488	1.327	1.212	1.162	1.142
82	1.651	1.651	1.650	1.646	1.643	1.644	1.649	1.654	1.658	1.655	1.650	1.650	1.644	1.632	1.614	1.591	1.519	1.367	1.229	1.168
83	1.642	1.642	1.644	1.647	1.648	1.649	1.650	1.652	1.654	1.653	1.651	1.655	1.652	1.646	1.637	1.622	1.605	1.546	1.401	1.251
84	1.642	1.640	1.640	1.644	1.646	1.647	1.650	1.653	1.655	1.658	1.661	1.664	1.662	1.657	1.653	1.647	1.635	1.624	1.583	1.462
85	1.651	1.646	1.642	1.639	1.637	1.637	1.639	1.642	1.646	1.650	1.653	1.656	1.657	1.658	1.659	1.656	1.650	1.645	1.640	1.621
86	1.640	1.657	1.669	1.675	1.677	1.673	1.664	1.654	1.643	1.636	1.632	1.630	1.630	1.630	1.631	1.633	1.638	1.644	1.645	1.644
87	1.254	1.292	1.336	1.388	1.434	1.474	1.500	1.515	1.510	1.486	1.461	1.446	1.431	1.431	1.440	1.456	1.474	1.489	1.491	1.497
88	1.169	1.166	1.172	1.171	1.174	1.171	1.175	1.173	1.174	1.173	1.179	1.179	1.187	1.188	1.187	1.182	1.175	1.171	1.169	1.169
89	1.149	1.150	1.149	1.152	1.149	1.152	1.150	1.152	1.150	1.154	1.158	1.164	1.167	1.171	1.168	1.166	1.154	1.150	1.146	1.149
90	1.136	1.140	1.138	1.140	1.139	1.143	1.142	1.142	1.139	1.143	1.152	1.159	1.162	1.167	1.164	1.166	1.154	1.147	1.140	1.143
91	1.133	1.133	1.136	1.135	1.140	1.139	1.142	1.138	1.139	1.143	1.174	1.181	1.167	1.166	1.184	1.213	1.192	1.156	1.146	1.138
92	1.132	1.129	1.133	1.133	1.143	1.202	1.289	1.281	1.202	1.157	1.150	1.153	1.158	1.162	1.166	1.164	1.159	1.149	1.145	1.140
93	1.135	1.136	1.133	1.138	1.142	1.190	1.294	1.315	1.234	1.171	1.154	1.157	1.158	1.163	1.164	1.166	1.158	1.152	1.143	1.143
94	1.135	1.133	1.138	1.135	1.139	1.140	1.143	1.142	1.143	1.143	1.149	1.156	1.163	1.167	1.171	1.171	1.168	1.157	1.153	1.149
95	1.133	1.130	1.133	1.130	1.138	1.136	1.142	1.140	1.143	1.142	1.152	1.159	1.169	1.172	1.178	1.179	1.176	1.168	1.166	1.161
96	1.132	1.136	1.135	1.140	1.140	1.143	1.143	1.146	1.143	1.149	1.152	1.164	1.173	1.181	1.185	1.192	1.185	1.178	1.168	1.169
97	1.135	1.139	1.138	1.140	1.140	1.150	1.146	1.150	1.146	1.152	1.158	1.175	1.185	1.195	1.199	1.202	1.194	1.183	1.174	1.174
98	1.139	1.138	1.142	1.140	1.145	1.146	1.149	1.146	1.150	1.153	1.174	1.194	1.203	1.208	1.217	1.222	1.219	1.195	1.181	1.178

NASA/RI OH90 TRANSITION TEST
V41B-P4A
APO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 25

IR SCAN TIME 7.12 SEC
INITIAL TEMP 529.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	1.088	1.090	1.084	1.086	1.080	1.084	1.080	1.080	1.075	1.077	1.073	1.073	1.068	1.068	1.066	1.071	1.066	1.068	1.064	1.064
65	1.090	1.088	1.084	1.084	1.084	1.080	1.080	1.077	1.077	1.075	1.077	1.073	1.073	1.068	1.068	1.066	1.064	1.064	1.064	1.059
66	1.086	1.086	1.084	1.084	1.080	1.082	1.077	1.082	1.077	1.075	1.071	1.073	1.068	1.068	1.064	1.066	1.059	1.064	1.051	1.059
67	1.084	1.084	1.084	1.080	1.080	1.077	1.077	1.075	1.073	1.071	1.068	1.066	1.064	1.064	1.061	1.061	1.059	1.056	1.061	1.051
68	1.082	1.075	1.077	1.068	1.075	1.068	1.071	1.064	1.068	1.061	1.064	1.059	1.061	1.054	1.056	1.051	1.056	1.054	1.051	1.054
69	1.080	1.082	1.077	1.080	1.077	1.075	1.071	1.073	1.064	1.066	1.061	1.061	1.059	1.056	1.054	1.054	1.048	1.051	1.046	1.051
70	1.084	1.086	1.082	1.077	1.077	1.073	1.075	1.071	1.068	1.064	1.064	1.061	1.061	1.059	1.056	1.054	1.051	1.048	1.048	1.043
71	1.084	1.080	1.080	1.077	1.077	1.075	1.073	1.068	1.068	1.064	1.064	1.061	1.064	1.059	1.059	1.056	1.056	1.051	1.051	1.048
72	1.082	1.086	1.077	1.080	1.075	1.077	1.073	1.073	1.066	1.068	1.064	1.064	1.061	1.061	1.059	1.059	1.054	1.056	1.048	1.051
73	1.084	1.082	1.082	1.077	1.077	1.075	1.075	1.073	1.068	1.068	1.068	1.064	1.066	1.059	1.059	1.056	1.056	1.054	1.054	1.051
74	1.084	1.084	1.080	1.080	1.075	1.077	1.073	1.075	1.071	1.071	1.064	1.066	1.061	1.064	1.061	1.059	1.059	1.056	1.054	1.054
75	1.086	1.077	1.082	1.077	1.080	1.071	1.077	1.071	1.073	1.066	1.068	1.064	1.064	1.059	1.061	1.059	1.059	1.054	1.054	1.051
76	1.090	1.084	1.084	1.080	1.082	1.077	1.077	1.073	1.073	1.068	1.068	1.066	1.064	1.061	1.064	1.059	1.061	1.054	1.059	1.046
77	1.090	1.090	1.086	1.086	1.082	1.084	1.077	1.080	1.073	1.075	1.068	1.071	1.064	1.066	1.056	1.064	1.059	1.059	1.056	1.056
78	1.092	1.088	1.088	1.084	1.084	1.080	1.077	1.077	1.075	1.073	1.071	1.066	1.066	1.064	1.064	1.059	1.059	1.054	1.056	1.051
79	1.100	1.090	1.090	1.082	1.082	1.075	1.077	1.073	1.073	1.068	1.066	1.064	1.064	1.059	1.059	1.056	1.059	1.051	1.051	1.048
80	1.124	1.109	1.096	1.088	1.086	1.086	1.077	1.077	1.077	1.073	1.073	1.068	1.071	1.068	1.068	1.066	1.068	1.068	1.068	1.066
81	1.130	1.129	1.119	1.112	1.100	1.088	1.077	1.073	1.068	1.068	1.061	1.064	1.061	1.059	1.056	1.056	1.054	1.051	1.048	1.051
82	1.142	1.129	1.125	1.121	1.117	1.112	1.103	1.101	1.096	1.084	1.077	1.064	1.066	1.061	1.059	1.056	1.051	1.051	1.051	1.043
83	1.176	1.147	1.129	1.124	1.117	1.117	1.110	1.114	1.109	1.110	1.101	1.100	1.092	1.086	1.075	1.073	1.051	1.059	1.040	1.048
84	1.295	1.197	1.152	1.133	1.121	1.117	1.110	1.112	1.107	1.107	1.105	1.105	1.101	1.101	1.098	1.098	1.092	1.088	1.080	1.073
85	1.530	1.361	1.226	1.164	1.140	1.124	1.116	1.114	1.109	1.105	1.107	1.103	1.105	1.101	1.101	1.100	1.100	1.098	1.098	1.096
86	1.638	1.589	1.445	1.275	1.183	1.145	1.125	1.117	1.112	1.110	1.107	1.107	1.105	1.105	1.103	1.105	1.101	1.101	1.098	1.098
87	1.508	1.525	1.487	1.350	1.216	1.161	1.133	1.122	1.114	1.112	1.109	1.107	1.103	1.103	1.100	1.100	1.098	1.100	1.096	1.098
88	1.173	1.175	1.172	1.156	1.140	1.129	1.127	1.119	1.121	1.116	1.116	1.110	1.109	1.103	1.101	1.101	1.100	1.098	1.094	1.090
89	1.146	1.149	1.140	1.139	1.127	1.125	1.119	1.119	1.114	1.114	1.109	1.110	1.105	1.105	1.101	1.103	1.098	1.100	1.094	1.094
90	1.138	1.140	1.132	1.130	1.125	1.127	1.122	1.124	1.121	1.117	1.114	1.114	1.109	1.110	1.101	1.105	1.098	1.103	1.094	1.098
91	1.136	1.133	1.132	1.129	1.129	1.125	1.125	1.124	1.124	1.121	1.119	1.117	1.116	1.114	1.112	1.109	1.107	1.101	1.100	1.098
92	1.140	1.133	1.132	1.129	1.130	1.129	1.129	1.124	1.125	1.122	1.122	1.119	1.121	1.119	1.116	1.110	1.109	1.107	1.103	1.100
93	1.138	1.139	1.133	1.136	1.135	1.136	1.135	1.138	1.132	1.133	1.129	1.130	1.127	1.129	1.124	1.122	1.121	1.116	1.112	1.112
94	1.147	1.146	1.147	1.146	1.146	1.143	1.143	1.142	1.143	1.140	1.140	1.138	1.139	1.135	1.135	1.130	1.132	1.127	1.122	1.117
95	1.161	1.158	1.162	1.161	1.163	1.161	1.161	1.159	1.158	1.156	1.155	1.152	1.152	1.149	1.149	1.146	1.143	1.140	1.138	1.135
96	1.167	1.171	1.169	1.174	1.173	1.175	1.173	1.173	1.171	1.175	1.173	1.174	1.171	1.171	1.168	1.169	1.167	1.167	1.166	1.166
97	1.174	1.179	1.181	1.184	1.187	1.191	1.193	1.198	1.200	1.203	1.207	1.210	1.205	1.207	1.202	1.204	1.199	1.201	1.197	1.200
98	1.181	1.184	1.191	1.193	1.199	1.206	1.214	1.216	1.221	1.222	1.225	1.226	1.227	1.224	1.223	1.220	1.220	1.219	1.218	1.216

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 25

IR SCAN TIME 7.12 SEC
INITIAL TEMP 529.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	1.054	1.064	1.059	1.059	1.054	1.056	1.051	1.051	1.048	1.048
65	1.059	1.054	1.054	1.051	1.054	1.048	1.051	1.048	1.046	1.043
66	1.054	1.054	1.048	1.048	1.046	1.046	1.043	1.043	1.037	1.040
67	1.051	1.048	1.048	1.043	1.043	1.040	1.040	1.040	1.037	1.034
68	1.048	1.046	1.043	1.040	1.040	1.037	1.037	1.034	1.031	1.028
69	1.031	1.043	1.021	1.043	1.025	1.037	1.025	1.034	1.021	1.028
70	1.048	1.043	1.043	1.037	1.037	1.034	1.031	1.028	1.028	1.028
71	1.048	1.043	1.043	1.037	1.040	1.037	1.034	1.031	1.034	1.034
72	1.046	1.048	1.043	1.043	1.037	1.040	1.037	1.037	1.028	1.028
73	1.048	1.043	1.043	1.040	1.040	1.034	1.034	1.031	1.031	1.028
74	1.046	1.046	1.043	1.040	1.040	1.037	1.031	1.034	1.028	1.028
75	1.051	1.046	1.043	1.040	1.040	1.034	1.037	1.031	1.034	1.028
76	1.054	1.040	1.046	1.040	1.043	1.034	1.037	1.028	1.031	1.025
77	1.051	1.051	1.048	1.048	1.043	1.043	1.037	1.037	1.034	1.034
78	1.054	1.048	1.048	1.046	1.043	1.040	1.040	1.034	1.034	1.028
79	1.048	1.048	1.048	1.043	1.043	1.043	1.040	1.037	1.034	1.034
80	1.066	1.064	1.064	1.064	1.064	1.064	1.064	1.064	1.061	1.059
81	1.046	1.048	1.046	1.046	1.037	1.037	1.034	1.034	1.031	1.031
82	1.048	1.043	1.043	1.040	1.037	1.034	1.034	1.034	1.028	1.028
83	1.031	1.043	1.025	1.040	1.025	1.034	1.021	1.031	1.014	1.028
84	1.061	1.059	1.048	1.046	1.037	1.034	1.031	1.034	1.028	1.031
85	1.092	1.088	1.084	1.077	1.071	1.064	1.059	1.043	1.040	1.034
86	1.098	1.096	1.096	1.096	1.090	1.090	1.086	1.082	1.077	1.068
87	1.094	1.096	1.092	1.094	1.090	1.090	1.086	1.086	1.082	1.086
88	1.088	1.084	1.086	1.086	1.084	1.080	1.080	1.075	1.077	1.075
89	1.086	1.088	1.082	1.086	1.080	1.080	1.075	1.077	1.075	1.075
90	1.090	1.094	1.086	1.094	1.088	1.090	1.077	1.080	1.068	1.077
91	1.098	1.094	1.096	1.094	1.096	1.094	1.092	1.086	1.086	1.080
92	1.098	1.098	1.098	1.098	1.100	1.098	1.098	1.098	1.098	1.098
93	1.105	1.107	1.103	1.105	1.105	1.107	1.105	1.109	1.107	1.109
94	1.117	1.119	1.116	1.116	1.114	1.116	1.119	1.117	1.119	1.114
95	1.135	1.133	1.133	1.132	1.133	1.130	1.136	1.135	1.136	1.133
96	1.162	1.166	1.163	1.166	1.163	1.166	1.166	1.166	1.163	1.162
97	1.195	1.198	1.196	1.200	1.197	1.200	1.196	1.198	1.195	1.195
98	1.218	1.217	1.219	1.219	1.221	1.223	1.226	1.227	1.230	1.229

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 7.12 SEC
GROUP 25 HREF = 0.398E-01

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	0.055	0.060	0.063	0.063	0.065	0.063	0.061	0.060	0.061	0.062	0.061	0.059	0.062	0.063	0.063	0.064	0.065	0.066	0.067	0.066
30	0.062	0.063	0.065	0.064	0.061	0.059	0.058	0.061	0.062	0.064	0.064	0.065	0.064	0.065	0.065	0.066	0.065	0.067	0.066	0.066
31	0.063	0.062	0.060	0.060	0.059	0.060	0.061	0.064	0.064	0.065	0.064	0.065	0.065	0.066	0.065	0.066	0.066	0.064	0.061	0.059
32	0.061	0.060	0.060	0.062	0.064	0.065	0.066	0.065	0.065	0.064	0.065	0.065	0.066	0.065	0.064	0.060	0.057	0.055	0.053	0.053
33	0.061	0.062	0.063	0.064	0.065	0.065	0.065	0.063	0.065	0.065	0.064	0.062	0.059	0.056	0.054	0.053	0.055	0.055	0.056	0.057
34	0.065	0.065	0.065	0.062	0.062	0.062	0.062	0.060	0.060	0.057	0.054	0.052	0.050	0.052	0.054	0.057	0.059	0.060	0.060	0.061
35	0.065	0.065	0.061	0.062	0.059	0.059	0.055	0.055	0.050	0.052	0.051	0.054	0.053	0.056	0.055	0.059	0.060	0.062	0.061	0.062
36	0.061	0.060	0.059	0.057	0.053	0.052	0.050	0.051	0.051	0.054	0.054	0.056	0.057	0.058	0.058	0.060	0.060	0.060	0.056	0.051
37	0.057	0.053	0.051	0.050	0.050	0.051	0.053	0.053	0.054	0.055	0.057	0.057	0.059	0.059	0.059	0.055	0.051	0.045	0.039	0.033
38	0.050	0.048	0.049	0.051	0.053	0.054	0.054	0.056	0.056	0.058	0.058	0.059	0.057	0.053	0.046	0.040	0.033	0.031	0.029	0.030
39	0.050	0.051	0.051	0.053	0.053	0.055	0.056	0.057	0.057	0.058	0.053	0.048	0.040	0.035	0.030	0.031	0.029	0.031	0.029	0.031
40	0.052	0.053	0.053	0.054	0.054	0.055	0.056	0.054	0.048	0.042	0.035	0.031	0.030	0.030	0.029	0.031	0.030	0.031	0.031	0.031
41	0.054	0.056	0.057	0.057	0.056	0.050	0.044	0.038	0.033	0.030	0.031	0.030	0.030	0.029	0.031	0.031	0.031	0.031	0.031	0.031
42	0.059	0.061	0.058	0.053	0.042	0.036	0.030	0.030	0.027	0.030	0.028	0.031	0.029	0.033	0.031	0.033	0.032	0.033	0.032	0.033
43	0.062	0.053	0.042	0.036	0.031	0.031	0.031	0.031	0.031	0.033	0.032	0.032	0.033	0.034	0.033	0.035	0.032	0.035	0.033	0.035
44	0.044	0.035	0.032	0.033	0.031	0.033	0.032	0.033	0.031	0.034	0.033	0.035	0.034	0.035	0.035	0.036	0.036	0.037	0.037	0.038
45	0.035	0.034	0.035	0.035	0.035	0.035	0.035	0.036	0.036	0.036	0.037	0.037	0.038	0.038	0.039	0.038	0.040	0.041	0.045	0.052
46	0.038	0.038	0.038	0.038	0.038	0.039	0.039	0.039	0.039	0.040	0.040	0.041	0.042	0.043	0.042	0.044	0.045	0.051	0.095	0.186
47	0.039	0.039	0.040	0.040	0.042	0.042	0.042	0.040	0.042	0.042	0.042	0.044	0.044	0.045	0.045	0.047	0.049	0.058	0.125	0.232
48	0.040	0.041	0.042	0.042	0.044	0.044	0.044	0.043	0.044	0.044	0.045	0.045	0.046	0.047	0.048	0.048	0.053	0.073	0.166	0.265
49	0.042	0.043	0.042	0.044	0.043	0.046	0.044	0.044	0.044	0.046	0.044	0.047	0.048	0.050	0.050	0.052	0.055	0.089	0.192	0.277
50	0.042	0.043	0.044	0.044	0.044	0.045	0.045	0.046	0.046	0.047	0.048	0.048	0.050	0.050	0.051	0.051	0.059	0.112	0.222	0.292
51	0.044	0.043	0.044	0.044	0.044	0.045	0.046	0.047	0.047	0.048	0.048	0.050	0.050	0.053	0.054	0.057	0.066	0.139	0.244	0.300
52	0.040	0.040	0.040	0.041	0.041	0.042	0.042	0.044	0.044	0.045	0.045	0.046	0.047	0.049	0.049	0.053	0.065	0.146	0.249	0.300
53	0.032	0.033	0.035	0.035	0.036	0.036	0.037	0.037	0.038	0.038	0.038	0.040	0.041	0.042	0.044	0.047	0.065	0.155	0.254	0.299
54	0.028	0.029	0.030	0.031	0.030	0.031	0.031	0.033	0.034	0.036	0.036	0.038	0.038	0.040	0.041	0.045	0.067	0.164	0.259	0.299
55	0.027	0.028	0.030	0.030	0.031	0.032	0.032	0.035	0.035	0.036	0.036	0.038	0.038	0.040	0.042	0.047	0.084	0.192	0.272	0.306
56	0.028	0.029	0.029	0.031	0.031	0.033	0.034	0.035	0.038	0.036	0.037	0.038	0.038	0.041	0.042	0.053	0.114	0.224	0.286	0.313
57	0.027	0.028	0.030	0.030	0.031	0.031	0.031	0.033	0.035	0.035	0.037	0.036	0.039	0.039	0.044	0.056	0.140	0.243	0.292	0.314
58	0.026	0.026	0.026	0.026	0.028	0.028	0.030	0.031	0.032	0.033	0.035	0.036	0.037	0.039	0.042	0.070	0.169	0.259	0.297	0.317
59	0.023	0.024	0.025	0.025	0.026	0.027	0.028	0.030	0.031	0.031	0.033	0.035	0.036	0.038	0.043	0.085	0.192	0.267	0.297	0.314
60	0.023	0.026	0.026	0.026	0.027	0.027	0.029	0.030	0.031	0.031	0.032	0.033	0.036	0.036	0.042	0.085	0.192	0.262	0.292	0.309
61	0.023	0.023	0.025	0.025	0.025	0.027	0.026	0.030	0.029	0.031	0.031	0.035	0.036	0.038	0.042	0.091	0.195	0.261	0.289	0.307
62	0.021	0.022	0.023	0.023	0.025	0.025	0.027	0.028	0.030	0.030	0.032	0.034	0.036	0.036	0.044	0.098	0.201	0.259	0.287	0.303
63	0.018	0.021	0.017	0.022	0.019	0.024	0.024	0.028	0.028	0.030	0.031	0.033	0.035	0.038	0.045	0.116	0.214	0.263	0.286	0.299

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 7.12 SEC
HRFR = 0.398E-01

GROUP 25

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	0.067	0.067	0.068	0.066	0.066	0.061	0.060	0.057	0.057	0.056	0.056	0.054	0.056	0.054	0.057	0.059	0.060	0.060	0.062	0.063
30	0.065	0.063	0.060	0.059	0.057	0.056	0.053	0.053	0.054	0.057	0.059	0.061	0.062	0.063	0.062	0.065	0.065	0.066	0.064	0.066
31	0.056	0.054	0.053	0.056	0.057	0.059	0.057	0.059	0.059	0.062	0.063	0.066	0.066	0.066	0.066	0.066	0.063	0.060	0.056	0.053
32	0.054	0.054	0.057	0.059	0.061	0.062	0.063	0.062	0.063	0.065	0.066	0.065	0.063	0.057	0.053	0.047	0.042	0.036	0.032	0.028
33	0.059	0.059	0.061	0.062	0.063	0.065	0.063	0.062	0.060	0.056	0.051	0.046	0.039	0.033	0.028	0.026	0.025	0.024	0.024	0.023
34	0.062	0.062	0.062	0.062	0.059	0.055	0.048	0.042	0.037	0.032	0.026	0.026	0.023	0.024	0.024	0.024	0.023	0.025	0.024	0.025
35	0.060	0.057	0.050	0.045	0.039	0.033	0.027	0.026	0.024	0.025	0.023	0.026	0.025	0.026	0.025	0.026	0.026	0.026	0.025	0.026
36	0.043	0.039	0.031	0.029	0.025	0.027	0.026	0.027	0.024	0.026	0.023	0.026	0.024	0.027	0.026	0.026	0.025	0.027	0.026	0.027
37	0.030	0.027	0.028	0.026	0.027	0.027	0.028	0.026	0.027	0.026	0.026	0.027	0.027	0.027	0.028	0.024	0.028	0.023	0.028	0.024
38	0.029	0.030	0.029	0.030	0.028	0.031	0.026	0.029	0.028	0.029	0.027	0.030	0.028	0.030	0.028	0.030	0.029	0.031	0.030	0.030
39	0.030	0.031	0.030	0.031	0.029	0.031	0.031	0.031	0.030	0.031	0.030	0.031	0.031	0.033	0.030	0.031	0.031	0.032	0.030	0.031
40	0.030	0.031	0.031	0.032	0.031	0.032	0.031	0.032	0.031	0.033	0.031	0.033	0.032	0.033	0.032	0.033	0.031	0.032	0.031	0.032
41	0.031	0.032	0.032	0.033	0.033	0.033	0.034	0.034	0.035	0.034	0.035	0.034	0.035	0.034	0.034	0.033	0.035	0.033	0.033	0.032
42	0.033	0.035	0.035	0.035	0.035	0.036	0.036	0.037	0.036	0.036	0.035	0.037	0.036	0.037	0.035	0.036	0.035	0.036	0.035	0.035
43	0.035	0.037	0.034	0.038	0.036	0.036	0.036	0.038	0.036	0.038	0.036	0.038	0.038	0.039	0.037	0.038	0.037	0.038	0.038	0.037
44	0.038	0.040	0.040	0.041	0.040	0.040	0.040	0.042	0.041	0.042	0.041	0.041	0.040	0.040	0.038	0.040	0.038	0.040	0.037	0.039
45	0.056	0.055	0.054	0.051	0.051	0.048	0.049	0.048	0.048	0.048	0.048	0.046	0.046	0.045	0.046	0.045	0.044	0.044	0.044	0.044
46	0.243	0.261	0.262	0.253	0.234	0.206	0.170	0.132	0.099	0.079	0.066	0.061	0.056	0.055	0.052	0.052	0.050	0.051	0.050	0.050
47	0.295	0.325	0.344	0.364	0.382	0.399	0.417	0.425	0.411	0.372	0.309	0.228	0.148	0.098	0.074	0.064	0.058	0.056	0.054	0.054
48	0.312	0.335	0.352	0.371	0.392	0.415	0.438	0.462	0.483	0.496	0.500	0.486	0.447	0.367	0.259	0.158	0.096	0.073	0.063	0.059
49	0.316	0.340	0.358	0.374	0.391	0.414	0.440	0.466	0.480	0.491	0.498	0.503	0.509	0.515	0.506	0.447	0.299	0.161	0.100	0.075
50	0.323	0.344	0.361	0.376	0.394	0.415	0.438	0.458	0.479	0.504	0.522	0.529	0.534	0.544	0.550	0.545	0.514	0.364	0.193	0.114
51	0.324	0.339	0.353	0.371	0.389	0.410	0.433	0.459	0.484	0.501	0.512	0.520	0.525	0.535	0.548	0.558	0.560	0.546	0.414	0.226
52	0.322	0.339	0.351	0.364	0.382	0.402	0.422	0.449	0.478	0.495	0.502	0.512	0.521	0.530	0.535	0.541	0.555	0.566	0.566	0.486
53	0.320	0.334	0.345	0.356	0.372	0.390	0.414	0.439	0.465	0.486	0.498	0.507	0.515	0.525	0.538	0.555	0.564	0.562	0.562	0.554
54	0.320	0.334	0.342	0.353	0.369	0.389	0.411	0.435	0.461	0.485	0.502	0.512	0.516	0.525	0.531	0.536	0.544	0.553	0.561	0.568
55	0.324	0.336	0.345	0.356	0.370	0.390	0.410	0.433	0.458	0.482	0.500	0.511	0.519	0.527	0.530	0.536	0.547	0.553	0.562	0.571
56	0.328	0.339	0.348	0.358	0.372	0.390	0.410	0.434	0.458	0.476	0.487	0.495	0.501	0.509	0.517	0.529	0.542	0.552	0.561	0.567
57	0.328	0.336	0.345	0.355	0.370	0.386	0.406	0.426	0.447	0.466	0.480	0.488	0.497	0.507	0.511	0.514	0.523	0.534	0.545	0.555
58	0.329	0.335	0.341	0.354	0.368	0.385	0.404	0.427	0.449	0.466	0.473	0.485	0.500	0.507	0.505	0.509	0.514	0.522	0.532	0.541
59	0.325	0.331	0.338	0.350	0.364	0.378	0.396	0.416	0.438	0.453	0.460	0.474	0.491	0.499	0.499	0.507	0.516	0.514	0.516	0.527
60	0.321	0.328	0.336	0.345	0.355	0.369	0.388	0.407	0.429	0.443	0.452	0.468	0.487	0.498	0.495	0.499	0.510	0.512	0.510	0.516
61	0.319	0.324	0.330	0.341	0.351	0.363	0.380	0.398	0.418	0.432	0.442	0.457	0.477	0.488	0.492	0.498	0.498	0.500	0.506	0.512
62	0.314	0.320	0.326	0.335	0.344	0.355	0.369	0.386	0.405	0.418	0.428	0.442	0.462	0.475	0.488	0.496	0.499	0.493	0.494	0.507
63	0.309	0.316	0.322	0.331	0.339	0.348	0.359	0.379	0.399	0.413	0.421	0.437	0.457	0.471	0.478	0.483	0.490	0.496	0.494	0.500

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
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MAR 6,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 7.12 SEC
GROUP 25 HRFR = 0.398E-01

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	0.065	0.065	0.065	0.064	0.065	0.065	0.065	0.062	0.060	0.056	0.053	0.050	0.049	0.046	0.045	0.043	0.040	0.038	0.038	0.035
30	0.064	0.065	0.061	0.059	0.053	0.051	0.047	0.046	0.040	0.038	0.031	0.031	0.026	0.027	0.026	0.024	0.023	0.023	0.023	0.023
31	0.048	0.044	0.040	0.036	0.030	0.029	0.025	0.024	0.023	0.023	0.021	0.022	0.021	0.022	0.021	0.022	0.019	0.023	0.019	0.022
32	0.026	0.025	0.024	0.023	0.023	0.023	0.023	0.021	0.022	0.022	0.022	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.022	0.021
33	0.024	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.022	0.022	0.022	0.022	0.022	0.022	0.021	0.022	0.021
34	0.024	0.025	0.023	0.025	0.024	0.025	0.024	0.024	0.023	0.024	0.023	0.023	0.022	0.023	0.022	0.023	0.022	0.022	0.021	0.022
35	0.026	0.026	0.026	0.026	0.026	0.026	0.025	0.026	0.024	0.025	0.023	0.025	0.023	0.023	0.022	0.023	0.021	0.023	0.021	0.022
36	0.026	0.027	0.026	0.027	0.026	0.026	0.025	0.026	0.026	0.026	0.026	0.026	0.025	0.025	0.023	0.025	0.024	0.024	0.023	0.024
37	0.029	0.023	0.028	0.024	0.029	0.023	0.027	0.023	0.026	0.023	0.027	0.026	0.025	0.025	0.025	0.024	0.025	0.024	0.025	0.023
38	0.029	0.030	0.029	0.030	0.028	0.029	0.027	0.029	0.027	0.028	0.026	0.027	0.024	0.026	0.023	0.026	0.023	0.025	0.022	0.026
39	0.030	0.031	0.029	0.030	0.029	0.030	0.027	0.029	0.028	0.028	0.026	0.028	0.027	0.027	0.027	0.029	0.026	0.027	0.026	0.026
40	0.031	0.032	0.029	0.031	0.029	0.030	0.029	0.031	0.029	0.030	0.028	0.029	0.028	0.029	0.027	0.028	0.026	0.028	0.027	0.027
41	0.033	0.031	0.032	0.032	0.032	0.031	0.031	0.031	0.031	0.031	0.030	0.029	0.029	0.029	0.030	0.028	0.030	0.028	0.029	0.028
42	0.033	0.035	0.033	0.035	0.033	0.034	0.032	0.033	0.032	0.033	0.031	0.032	0.031	0.031	0.030	0.031	0.031	0.031	0.029	0.030
43	0.036	0.038	0.036	0.036	0.036	0.036	0.035	0.035	0.035	0.035	0.033	0.034	0.032	0.033	0.031	0.031	0.031	0.031	0.030	0.031
44	0.035	0.038	0.035	0.038	0.035	0.038	0.035	0.036	0.034	0.035	0.035	0.035	0.034	0.034	0.033	0.034	0.032	0.033	0.031	0.033
45	0.043	0.041	0.042	0.041	0.040	0.040	0.039	0.038	0.038	0.038	0.038	0.035	0.038	0.035	0.036	0.034	0.036	0.033	0.035	0.034
46	0.048	0.049	0.047	0.047	0.046	0.045	0.044	0.044	0.042	0.042	0.041	0.042	0.041	0.042	0.040	0.040	0.040	0.040	0.038	0.040
47	0.052	0.053	0.051	0.052	0.049	0.049	0.046	0.047	0.045	0.045	0.044	0.045	0.044	0.044	0.042	0.043	0.042	0.042	0.042	0.042
48	0.057	0.056	0.056	0.054	0.054	0.051	0.050	0.048	0.049	0.048	0.048	0.046	0.046	0.045	0.045	0.044	0.045	0.044	0.044	0.042
49	0.064	0.061	0.058	0.057	0.055	0.055	0.053	0.053	0.050	0.051	0.049	0.050	0.048	0.049	0.047	0.048	0.046	0.047	0.045	0.045
50	0.085	0.069	0.062	0.059	0.058	0.057	0.056	0.054	0.054	0.053	0.052	0.051	0.051	0.050	0.050	0.048	0.049	0.048	0.048	0.046
51	0.122	0.088	0.071	0.065	0.060	0.060	0.057	0.057	0.056	0.056	0.054	0.054	0.052	0.053	0.051	0.051	0.049	0.050	0.048	0.049
52	0.294	0.151	0.097	0.073	0.063	0.060	0.057	0.057	0.053	0.054	0.051	0.051	0.048	0.050	0.048	0.049	0.046	0.048	0.046	0.048
53	0.534	0.390	0.201	0.114	0.081	0.065	0.056	0.051	0.050	0.047	0.045	0.044	0.044	0.042	0.042	0.041	0.040	0.040	0.040	0.040
54	0.575	0.565	0.429	0.227	0.123	0.086	0.066	0.058	0.051	0.050	0.047	0.046	0.044	0.044	0.042	0.042	0.040	0.041	0.040	0.042
55	0.576	0.577	0.566	0.449	0.255	0.135	0.092	0.071	0.060	0.054	0.051	0.048	0.048	0.046	0.045	0.044	0.044	0.043	0.044	0.046
56	0.571	0.574	0.571	0.577	0.511	0.303	0.150	0.099	0.074	0.063	0.054	0.053	0.050	0.050	0.047	0.047	0.045	0.046	0.047	0.050
57	0.558	0.559	0.563	0.562	0.567	0.521	0.326	0.159	0.102	0.076	0.065	0.056	0.052	0.049	0.048	0.047	0.046	0.046	0.048	0.049
58	0.545	0.547	0.549	0.548	0.546	0.549	0.503	0.320	0.160	0.102	0.076	0.064	0.054	0.051	0.048	0.048	0.047	0.048	0.048	0.049
59	0.531	0.534	0.540	0.543	0.541	0.541	0.546	0.507	0.348	0.178	0.106	0.078	0.065	0.053	0.049	0.046	0.044	0.042	0.042	0.040
60	0.528	0.534	0.534	0.536	0.541	0.540	0.541	0.542	0.528	0.403	0.216	0.117	0.084	0.068	0.057	0.050	0.048	0.045	0.044	0.042
61	0.516	0.528	0.536	0.540	0.539	0.538	0.545	0.559	0.583	0.585	0.447	0.253	0.132	0.089	0.070	0.061	0.051	0.048	0.045	0.044
62	0.510	0.511	0.518	0.527	0.534	0.536	0.542	0.565	0.591	0.572	0.521	0.447	0.284	0.147	0.095	0.072	0.063	0.053	0.050	0.046
63	0.508	0.514	0.512	0.512	0.518	0.525	0.539	0.578	0.585	0.549	0.540	0.528	0.472	0.324	0.171	0.103	0.076	0.064	0.054	0.050

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 7.12 SEC
HRFR = 0.398E-01

GROUP 25

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.032	0.030	0.030	0.027	0.028	0.027	0.026	0.026	0.026	0.025	0.025	0.024	0.025	0.024	0.024	0.023	0.024	0.023	0.024	0.023
30	0.022	0.023	0.022	0.023	0.022	0.022	0.022	0.023	0.021	0.021	0.022	0.022	0.022	0.021	0.021	0.022	0.022	0.022	0.023	0.022
31	0.019	0.022	0.019	0.022	0.018	0.020	0.017	0.020	0.017	0.019	0.017	0.020	0.019	0.020	0.019	0.020	0.019	0.019	0.019	0.020
32	0.021	0.021	0.021	0.021	0.021	0.019	0.018	0.018	0.019	0.018	0.018	0.017	0.018	0.014	0.019	0.015	0.018	0.015	0.019	0.016
33	0.021	0.020	0.019	0.019	0.020	0.018	0.018	0.018	0.018	0.017	0.018	0.017	0.018	0.018	0.018	0.018	0.018	0.017	0.017	0.017
34	0.020	0.021	0.020	0.021	0.019	0.020	0.019	0.019	0.018	0.019	0.018	0.019	0.017	0.019	0.017	0.019	0.017	0.019	0.017	0.018
35	0.021	0.022	0.021	0.022	0.019	0.020	0.020	0.021	0.020	0.021	0.020	0.021	0.019	0.020	0.019	0.021	0.018	0.019	0.017	0.019
36	0.023	0.023	0.023	0.023	0.022	0.023	0.021	0.022	0.021	0.021	0.020	0.021	0.019	0.021	0.020	0.021	0.019	0.020	0.019	0.020
37	0.024	0.023	0.024	0.023	0.023	0.023	0.024	0.023	0.023	0.023	0.023	0.021	0.023	0.022	0.021	0.021	0.021	0.020	0.021	0.019
38	0.022	0.025	0.023	0.025	0.023	0.025	0.023	0.025	0.021	0.024	0.023	0.025	0.023	0.023	0.022	0.023	0.021	0.022	0.021	0.022
39	0.027	0.026	0.025	0.026	0.025	0.025	0.025	0.025	0.023	0.025	0.023	0.024	0.021	0.023	0.021	0.023	0.021	0.023	0.020	0.023
40	0.026	0.027	0.026	0.027	0.026	0.026	0.025	0.026	0.024	0.026	0.025	0.024	0.023	0.025	0.023	0.024	0.023	0.023	0.023	0.023
41	0.029	0.027	0.027	0.027	0.026	0.026	0.026	0.026	0.026	0.025	0.026	0.025	0.026	0.025	0.025	0.024	0.025	0.024	0.024	0.025
42	0.029	0.029	0.028	0.028	0.028	0.028	0.027	0.028	0.026	0.027	0.026	0.026	0.026	0.027	0.026	0.026	0.026	0.026	0.025	0.026
43	0.029	0.030	0.028	0.030	0.029	0.029	0.028	0.030	0.028	0.028	0.028	0.028	0.027	0.027	0.027	0.028	0.026	0.028	0.026	0.027
44	0.031	0.032	0.031	0.031	0.030	0.030	0.030	0.031	0.029	0.030	0.029	0.029	0.028	0.028	0.028	0.029	0.028	0.028	0.027	0.028
45	0.035	0.033	0.035	0.031	0.034	0.031	0.035	0.035	0.034	0.033	0.034	0.033	0.033	0.032	0.033	0.031	0.032	0.031	0.031	0.030
46	0.038	0.039	0.037	0.039	0.038	0.038	0.037	0.038	0.036	0.038	0.033	0.038	0.033	0.037	0.033	0.038	0.033	0.038	0.032	0.036
47	0.041	0.041	0.040	0.041	0.040	0.040	0.039	0.039	0.038	0.039	0.038	0.038	0.038	0.038	0.037	0.038	0.037	0.038	0.036	0.037
48	0.043	0.042	0.042	0.042	0.042	0.042	0.042	0.040	0.041	0.040	0.040	0.039	0.040	0.039	0.040	0.038	0.039	0.038	0.038	0.038
49	0.045	0.046	0.044	0.044	0.043	0.044	0.042	0.043	0.042	0.042	0.042	0.042	0.041	0.041	0.040	0.041	0.040	0.040	0.040	0.040
50	0.046	0.046	0.046	0.044	0.044	0.044	0.044	0.044	0.044	0.042	0.042	0.042	0.042	0.042	0.042	0.041	0.041	0.041	0.041	0.040
51	0.046	0.048	0.046	0.047	0.046	0.047	0.046	0.046	0.045	0.045	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.043	0.044	0.043
52	0.046	0.048	0.046	0.048	0.046	0.048	0.046	0.048	0.046	0.046	0.046	0.045	0.045	0.045	0.045	0.044	0.044	0.044	0.043	0.044
53	0.042	0.044	0.046	0.046	0.047	0.047	0.048	0.046	0.048	0.046	0.048	0.046	0.049	0.046	0.047	0.045	0.046	0.044	0.045	0.042
54	0.044	0.047	0.048	0.049	0.048	0.050	0.048	0.050	0.049	0.050	0.050	0.051	0.049	0.050	0.048	0.050	0.048	0.048	0.046	0.046
55	0.049	0.050	0.051	0.052	0.053	0.053	0.053	0.053	0.055	0.053	0.053	0.051	0.052	0.052	0.050	0.052	0.051	0.049	0.049	0.047
56	0.051	0.052	0.053	0.054	0.053	0.053	0.053	0.054	0.053	0.054	0.053	0.053	0.051	0.052	0.050	0.050	0.049	0.050	0.048	0.048
57	0.050	0.050	0.050	0.050	0.050	0.049	0.050	0.048	0.049	0.048	0.048	0.046	0.046	0.044	0.045	0.044	0.044	0.042	0.042	0.042
58	0.048	0.049	0.047	0.048	0.047	0.047	0.046	0.046	0.046	0.047	0.047	0.046	0.045	0.046	0.046	0.045	0.044	0.044	0.044	0.043
59	0.040	0.038	0.039	0.038	0.038	0.037	0.038	0.036	0.037	0.035	0.035	0.034	0.035	0.033	0.034	0.032	0.033	0.031	0.032	0.031
60	0.042	0.040	0.040	0.038	0.038	0.036	0.038	0.035	0.037	0.033	0.035	0.032	0.035	0.031	0.033	0.030	0.032	0.030	0.031	0.028
61	0.042	0.042	0.041	0.041	0.040	0.040	0.038	0.038	0.036	0.037	0.036	0.036	0.035	0.036	0.033	0.035	0.032	0.033	0.031	0.032
62	0.044	0.044	0.042	0.041	0.041	0.039	0.039	0.038	0.038	0.036	0.037	0.036	0.036	0.035	0.035	0.034	0.034	0.033	0.033	0.031
63	0.047	0.045	0.044	0.044	0.042	0.042	0.040	0.040	0.038	0.038	0.038	0.038	0.036	0.036	0.035	0.035	0.033	0.035	0.032	0.033

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 7.12 SEC
GROUP 25 HREF = 0.398E-01

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.024	0.023	0.023	0.022	0.023	0.022	0.023	0.021	0.022	0.021	0.022	0.020	0.021	0.020	0.020	0.019	0.019	0.018	0.019	0.019
30	0.021	0.022	0.022	0.023	0.022	0.022	0.022	0.021	0.020	0.021	0.020	0.021	0.020	0.020	0.019	0.019	0.018	0.019	0.017	0.018
31	0.019	0.020	0.020	0.021	0.021	0.022	0.021	0.022	0.020	0.021	0.020	0.021	0.019	0.020	0.018	0.018	0.017	0.017	0.016	0.016
32	0.018	0.014	0.018	0.014	0.019	0.017	0.019	0.018	0.020	0.020	0.019	0.018	0.018	0.018	0.018	0.017	0.017	0.016	0.016	0.014
33	0.017	0.017	0.019	0.018	0.018	0.017	0.017	0.018	0.018	0.017	0.018	0.016	0.016	0.014	0.015	0.012	0.015	0.011	0.014	0.013
34	0.017	0.018	0.017	0.018	0.017	0.017	0.016	0.017	0.017	0.017	0.015	0.016	0.015	0.016	0.014	0.015	0.014	0.015	0.013	0.014
35	0.017	0.016	0.017	0.017	0.017	0.018	0.017	0.017	0.017	0.017	0.015	0.016	0.015	0.017	0.015	0.016	0.014	0.015	0.015	0.016
36	0.018	0.019	0.017	0.018	0.018	0.019	0.017	0.019	0.018	0.018	0.016	0.017	0.015	0.018	0.016	0.016	0.015	0.016	0.015	0.015
37	0.020	0.019	0.020	0.019	0.019	0.018	0.019	0.018	0.018	0.017	0.018	0.017	0.017	0.019	0.018	0.018	0.018	0.017	0.017	0.018
38	0.021	0.021	0.021	0.021	0.021	0.021	0.019	0.020	0.019	0.021	0.019	0.020	0.018	0.020	0.019	0.019	0.018	0.019	0.019	0.020
39	0.019	0.023	0.019	0.022	0.019	0.022	0.019	0.022	0.021	0.022	0.020	0.021	0.020	0.022	0.020	0.020	0.019	0.021	0.019	0.020
40	0.023	0.023	0.023	0.023	0.023	0.022	0.022	0.023	0.021	0.022	0.019	0.023	0.018	0.022	0.019	0.021	0.018	0.020	0.017	0.020
41	0.024	0.023	0.024	0.023	0.023	0.023	0.023	0.023	0.023	0.020	0.022	0.021	0.023	0.021	0.022	0.021	0.021	0.021	0.021	0.020
42	0.023	0.025	0.024	0.025	0.022	0.025	0.023	0.024	0.023	0.024	0.022	0.023	0.022	0.023	0.022	0.023	0.021	0.023	0.021	0.022
43	0.026	0.026	0.026	0.026	0.025	0.026	0.026	0.025	0.024	0.025	0.023	0.025	0.024	0.024	0.023	0.024	0.023	0.024	0.023	0.023
44	0.027	0.026	0.027	0.028	0.026	0.028	0.026	0.027	0.026	0.027	0.026	0.026	0.026	0.026	0.024	0.026	0.024	0.025	0.025	0.026
45	0.031	0.031	0.031	0.031	0.033	0.030	0.031	0.030	0.031	0.030	0.030	0.030	0.031	0.030	0.030	0.029	0.030	0.028	0.030	0.029
46	0.032	0.037	0.033	0.036	0.033	0.036	0.035	0.035	0.034	0.035	0.033	0.035	0.035	0.035	0.033	0.034	0.033	0.035	0.034	0.035
47	0.037	0.038	0.038	0.038	0.037	0.038	0.036	0.038	0.035	0.038	0.035	0.037	0.035	0.037	0.035	0.037	0.035	0.036	0.034	0.036
48	0.039	0.040	0.040	0.040	0.040	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.037	0.038	0.037	0.038	0.036	0.037	0.036
49	0.040	0.040	0.040	0.041	0.040	0.041	0.038	0.040	0.038	0.040	0.038	0.039	0.038	0.039	0.038	0.038	0.038	0.038	0.038	0.038
50	0.042	0.041	0.041	0.040	0.041	0.040	0.040	0.040	0.040	0.040	0.040	0.039	0.040	0.038	0.040	0.038	0.039	0.038	0.038	0.038
51	0.042	0.042	0.042	0.042	0.042	0.042	0.040	0.041	0.040	0.041	0.040	0.040	0.040	0.040	0.039	0.040	0.039	0.040	0.039	0.040
52	0.042	0.043	0.042	0.042	0.041	0.040	0.040	0.040	0.039	0.039	0.038	0.039	0.038	0.038	0.037	0.038	0.036	0.036	0.035	0.036
53	0.043	0.041	0.042	0.040	0.039	0.037	0.036	0.033	0.033	0.032	0.032	0.033	0.032	0.031	0.030	0.030	0.030	0.029	0.031	0.030
54	0.044	0.044	0.042	0.042	0.039	0.038	0.033	0.033	0.030	0.031	0.028	0.030	0.027	0.030	0.027	0.029	0.026	0.028	0.026	0.028
55	0.046	0.045	0.043	0.044	0.042	0.042	0.037	0.035	0.034	0.033	0.033	0.029	0.030	0.033	0.029	0.025	0.032	0.030	0.027	0.030
56	0.045	0.044	0.042	0.042	0.041	0.040	0.037	0.036	0.033	0.033	0.031	0.031	0.030	0.031	0.028	0.030	0.028	0.027	0.026	0.027
57	0.040	0.040	0.039	0.038	0.038	0.036	0.036	0.033	0.033	0.031	0.031	0.030	0.030	0.028	0.030	0.028	0.028	0.026	0.026	0.026
58	0.042	0.042	0.041	0.042	0.041	0.042	0.041	0.040	0.039	0.039	0.038	0.038	0.036	0.036	0.035	0.036	0.036	0.035	0.034	0.035
59	0.031	0.030	0.030	0.029	0.028	0.027	0.028	0.027	0.025	0.025	0.024	0.024	0.024	0.023	0.023	0.021	0.022	0.021	0.021	0.020
60	0.030	0.028	0.029	0.027	0.028	0.026	0.026	0.025	0.026	0.025	0.025	0.023	0.024	0.023	0.024	0.023	0.024	0.022	0.021	0.020
61	0.031	0.031	0.029	0.030	0.026	0.028	0.025	0.027	0.024	0.026	0.023	0.025	0.021	0.023	0.021	0.023	0.019	0.023	0.019	0.023
62	0.032	0.031	0.031	0.029	0.031	0.029	0.029	0.027	0.026	0.026	0.026	0.025	0.025	0.023	0.023	0.023	0.023	0.021	0.021	0.021
63	0.031	0.032	0.030	0.031	0.029	0.030	0.027	0.029	0.027	0.027	0.025	0.026	0.025	0.026	0.024	0.025	0.023	0.023	0.022	0.023

IR HEAT TRANSFER COEFFICIENT - H(,9TO)/HRFR
IR SCAN TIME 7.12 SEC
GROUP 25 HRFR = 0.398E-01

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.018	0.016	0.016	0.016	0.016	0.015	0.015	0.015	0.015	0.015
30	0.017	0.017	0.015	0.015	0.014	0.015	0.014	0.015	0.013	0.015
31	0.015	0.015	0.014	0.014	0.014	0.015	0.013	0.014	0.013	0.015
32	0.014	0.014	0.015	0.013	0.014	0.014	0.013	0.013	0.013	0.013
33	0.014	0.011	0.013	0.010	0.013	0.011	0.013	0.014	0.014	0.013
34	0.013	0.015	0.013	0.014	0.013	0.014	0.013	0.014	0.013	0.014
35	0.014	0.015	0.014	0.015	0.014	0.014	0.014	0.015	0.014	0.014
36	0.014	0.016	0.015	0.016	0.015	0.015	0.014	0.015	0.013	0.015
37	0.018	0.017	0.017	0.017	0.017	0.015	0.017	0.015	0.016	0.015
38	0.018	0.019	0.018	0.019	0.019	0.019	0.017	0.018	0.017	0.018
39	0.019	0.020	0.018	0.020	0.019	0.019	0.018	0.019	0.018	0.019
40	0.018	0.019	0.017	0.019	0.017	0.021	0.019	0.020	0.019	0.021
41	0.021	0.020	0.021	0.023	0.021	0.021	0.022	0.018	0.021	0.017
42	0.021	0.022	0.021	0.022	0.021	0.022	0.021	0.022	0.021	0.022
43	0.023	0.023	0.023	0.024	0.023	0.023	0.023	0.024	0.023	0.025
44	0.025	0.025	0.024	0.025	0.023	0.024	0.024	0.025	0.024	0.025
45	0.029	0.028	0.030	0.028	0.029	0.028	0.029	0.027	0.028	0.027
46	0.033	0.035	0.033	0.033	0.033	0.034	0.033	0.033	0.032	0.033
47	0.033	0.035	0.033	0.035	0.035	0.035	0.033	0.035	0.033	0.035
48	0.037	0.036	0.036	0.035	0.036	0.035	0.036	0.033	0.035	0.033
49	0.038	0.038	0.036	0.038	0.036	0.038	0.036	0.036	0.036	0.037
50	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.037	0.038	0.037
51	0.038	0.039	0.038	0.039	0.038	0.038	0.038	0.038	0.037	0.038
52	0.035	0.036	0.035	0.035	0.034	0.035	0.033	0.034	0.032	0.034
53	0.030	0.030	0.029	0.029	0.028	0.027	0.028	0.027	0.027	0.026
54	0.025	0.026	0.025	0.025	0.024	0.025	0.023	0.025	0.023	0.023
55	0.029	0.027	0.024	0.026	0.025	0.023	0.023	0.021	0.022	0.021
56	0.025	0.025	0.023	0.023	0.022	0.023	0.021	0.021	0.019	0.020
57	0.025	0.024	0.025	0.023	0.023	0.021	0.022	0.021	0.020	0.019
58	0.031	0.033	0.031	0.031	0.026	0.024	0.024	0.029	0.028	0.030
59	0.020	0.020	0.020	0.019	0.019	0.017	0.018	0.017	0.018	0.018
60	0.020	0.019	0.019	0.017	0.018	0.017	0.017	0.015	0.016	0.016
61	0.020	0.021	0.019	0.019	0.018	0.019	0.018	0.019	0.017	0.018
62	0.021	0.018	0.019	0.016	0.018	0.015	0.018	0.015	0.017	0.015
63	0.021	0.023	0.020	0.021	0.019	0.019	0.017	0.018	0.016	0.017

NASA/RI OH90 TRANSITION TEST
V418-P4A
APO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 7.12 SEC
GROUP 25 HREF = 0.398E-01

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.017	0.018	0.019	0.020	0.020	0.023	0.025	0.027	0.027	0.030	0.028	0.033	0.034	0.039	0.058	0.152	0.233	0.267	0.285	0.299
65	0.017	0.018	0.019	0.020	0.022	0.023	0.026	0.027	0.029	0.028	0.030	0.031	0.035	0.039	0.080	0.179	0.242	0.269	0.287	0.297
66	0.016	0.018	0.019	0.021	0.022	0.023	0.026	0.028	0.028	0.031	0.029	0.032	0.035	0.042	0.103	0.200	0.248	0.271	0.286	0.297
67	0.019	0.018	0.019	0.019	0.022	0.024	0.026	0.028	0.029	0.029	0.029	0.031	0.036	0.048	0.126	0.213	0.250	0.272	0.285	0.293
68	0.019	0.022	0.021	0.020	0.022	0.023	0.027	0.029	0.030	0.029	0.031	0.031	0.036	0.051	0.134	0.214	0.249	0.268	0.281	0.288
69	0.021	0.022	0.021	0.021	0.021	0.023	0.026	0.029	0.029	0.030	0.030	0.032	0.035	0.056	0.142	0.217	0.248	0.268	0.280	0.289
70	0.020	0.018	0.022	0.017	0.021	0.023	0.026	0.028	0.030	0.030	0.030	0.030	0.035	0.058	0.146	0.218	0.247	0.264	0.276	0.284
71	0.019	0.020	0.020	0.020	0.021	0.023	0.026	0.027	0.030	0.028	0.031	0.028	0.036	0.070	0.163	0.223	0.249	0.264	0.275	0.282
72	0.018	0.019	0.019	0.021	0.021	0.024	0.027	0.031	0.031	0.031	0.030	0.032	0.040	0.096	0.185	0.231	0.251	0.265	0.274	0.281
73	0.017	0.018	0.020	0.021	0.021	0.025	0.028	0.031	0.031	0.030	0.031	0.032	0.046	0.118	0.198	0.234	0.251	0.264	0.272	0.279
74	0.017	0.017	0.018	0.020	0.020	0.024	0.027	0.031	0.029	0.030	0.029	0.034	0.062	0.148	0.212	0.238	0.253	0.263	0.270	0.278
75	0.017	0.018	0.018	0.019	0.020	0.024	0.028	0.030	0.030	0.029	0.030	0.036	0.081	0.167	0.218	0.239	0.253	0.262	0.269	0.275
76	0.017	0.017	0.019	0.019	0.021	0.024	0.029	0.031	0.031	0.030	0.031	0.036	0.088	0.174	0.219	0.238	0.250	0.259	0.267	0.271
77	0.017	0.019	0.016	0.020	0.021	0.025	0.027	0.031	0.030	0.030	0.029	0.038	0.096	0.181	0.219	0.237	0.249	0.258	0.264	0.269
78	0.018	0.026	0.030	0.032	0.034	0.032	0.036	0.035	0.034	0.027	0.030	0.036	0.098	0.180	0.216	0.235	0.246	0.253	0.259	0.264
79	0.027	0.034	0.031	0.040	0.040	0.039	0.038	0.032	0.033	0.034	0.033	0.042	0.113	0.190	0.220	0.235	0.244	0.250	0.256	0.260
80	0.031	0.038	0.042	0.061	0.053	0.040	0.040	0.038	0.036	0.033	0.036	0.059	0.140	0.201	0.224	0.237	0.244	0.248	0.252	0.256
81	0.039	0.043	0.052	0.080	0.082	0.057	0.041	0.037	0.036	0.038	0.040	0.077	0.161	0.209	0.227	0.238	0.244	0.248	0.251	0.254
82	0.094	0.069	0.073	0.101	0.122	0.087	0.060	0.046	0.038	0.035	0.042	0.099	0.176	0.211	0.226	0.236	0.241	0.246	0.248	0.250
83	0.153	0.090	0.082	0.107	0.142	0.104	0.068	0.044	0.038	0.039	0.052	0.119	0.185	0.210	0.222	0.230	0.235	0.240	0.243	0.246
84	0.122	0.076	0.066	0.069	0.093	0.082	0.058	0.040	0.032	0.038	0.062	0.138	0.210	0.238	0.247	0.247	0.245	0.244	0.242	0.242
85	0.054	0.048	0.046	0.047	0.054	0.053	0.058	0.053	0.050	0.050	0.058	0.056	0.069	0.086	0.107	0.131	0.161	0.190	0.218	0.238
86	0.052	0.047	0.042	0.042	0.048	0.052	0.051	0.051	0.048	0.048	0.051	0.051	0.050	0.051	0.051	0.053	0.053	0.054	0.055	0.057
87	0.041	0.038	0.035	0.034	0.035	0.037	0.036	0.036	0.037	0.040	0.048	0.049	0.046	0.046	0.046	0.046	0.047	0.048	0.048	0.048
88	0.027	0.026	0.023	0.023	0.024	0.025	0.028	0.031	0.038	0.045	0.053	0.046	0.042	0.042	0.042	0.042	0.043	0.044	0.044	0.044
89	0.018	0.018	0.019	0.021	0.022	0.024	0.026	0.029	0.035	0.045	0.048	0.043	0.042	0.042	0.042	0.042	0.041	0.042	0.041	0.042
90	0.015	0.017	0.019	0.020	0.021	0.022	0.023	0.024	0.028	0.038	0.042	0.042	0.041	0.042	0.040	0.040	0.040	0.040	0.040	0.041
91	0.014	0.016	0.017	0.017	0.017	0.018	0.020	0.021	0.026	0.033	0.038	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039
92	0.015	0.014	0.016	0.014	0.016	0.015	0.019	0.015	0.021	0.026	0.035	0.038	0.038	0.038	0.039	0.038	0.039	0.038	0.038	0.038
93	0.016	0.017	0.017	0.019	0.017	0.019	0.021	0.024	0.023	0.026	0.034	0.040	0.038	0.039	0.038	0.038	0.036	0.039	0.037	0.038
94	0.026	0.025	0.025	0.024	0.023	0.023	0.023	0.023	0.023	0.025	0.032	0.037	0.036	0.037	0.038	0.037	0.036	0.036	0.036	0.036
95	0.031	0.030	0.030	0.029	0.030	0.028	0.026	0.026	0.026	0.029	0.035	0.038	0.037	0.037	0.036	0.037	0.038	0.036	0.036	0.036
96	0.031	0.030	0.030	0.030	0.032	0.031	0.026	0.027	0.026	0.033	0.039	0.040	0.038	0.038	0.038	0.038	0.038	0.039	0.038	0.038
97	0.031	0.031	0.031	0.032	0.033	0.031	0.028	0.027	0.026	0.035	0.040	0.040	0.036	0.038	0.038	0.038	0.041	0.042	0.041	0.040	0.038
98	0.030	0.029	0.031	0.033	0.033	0.031	0.029	0.026	0.027	0.035	0.040	0.036	0.037	0.038	0.040	0.042	0.043	0.042	0.040	0.038

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 7.12 SEC
HRFR = 0.398E-01

GROUP 25

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	0.308	0.314	0.320	0.328	0.334	0.347	0.360	0.376	0.394	0.408	0.416	0.430	0.450	0.461	0.471	0.478	0.482	0.492	0.495	0.500
65	0.303	0.308	0.317	0.324	0.332	0.343	0.356	0.368	0.388	0.401	0.411	0.423	0.441	0.447	0.457	0.464	0.475	0.479	0.486	0.496
66	0.303	0.308	0.315	0.322	0.331	0.341	0.352	0.364	0.379	0.400	0.411	0.419	0.432	0.439	0.446	0.457	0.464	0.465	0.472	0.481
67	0.301	0.305	0.312	0.319	0.328	0.337	0.348	0.362	0.377	0.394	0.410	0.417	0.421	0.431	0.441	0.449	0.457	0.458	0.465	0.470
68	0.295	0.301	0.308	0.316	0.324	0.333	0.343	0.355	0.370	0.386	0.403	0.415	0.420	0.422	0.433	0.443	0.444	0.448	0.456	0.463
69	0.297	0.302	0.308	0.316	0.322	0.333	0.340	0.348	0.361	0.376	0.392	0.409	0.418	0.422	0.425	0.427	0.432	0.440	0.446	0.448
70	0.291	0.297	0.303	0.311	0.319	0.329	0.340	0.346	0.354	0.367	0.383	0.399	0.408	0.413	0.418	0.419	0.422	0.428	0.433	0.435
71	0.289	0.294	0.300	0.308	0.315	0.321	0.333	0.343	0.350	0.361	0.378	0.391	0.402	0.407	0.409	0.413	0.419	0.424	0.428	0.431
72	0.287	0.292	0.297	0.303	0.311	0.317	0.326	0.337	0.346	0.360	0.373	0.385	0.396	0.401	0.403	0.406	0.413	0.419	0.421	0.424
73	0.285	0.290	0.295	0.301	0.308	0.318	0.326	0.337	0.348	0.357	0.369	0.380	0.388	0.396	0.398	0.399	0.402	0.409	0.415	0.420
74	0.284	0.290	0.295	0.301	0.308	0.319	0.329	0.339	0.350	0.360	0.370	0.379	0.389	0.398	0.397	0.396	0.395	0.400	0.407	0.417
75	0.281	0.285	0.291	0.300	0.306	0.314	0.324	0.335	0.346	0.358	0.367	0.376	0.385	0.393	0.396	0.397	0.397	0.396	0.399	0.403
76	0.277	0.282	0.288	0.295	0.302	0.311	0.321	0.330	0.340	0.350	0.363	0.374	0.380	0.385	0.387	0.389	0.394	0.398	0.399	0.400
77	0.274	0.280	0.285	0.291	0.297	0.305	0.315	0.325	0.335	0.345	0.354	0.366	0.377	0.384	0.389	0.394	0.397	0.400	0.402	0.405
78	0.270	0.274	0.280	0.286	0.293	0.300	0.310	0.321	0.332	0.341	0.350	0.358	0.365	0.370	0.376	0.381	0.386	0.390	0.392	0.394
79	0.265	0.271	0.277	0.283	0.290	0.296	0.306	0.315	0.325	0.336	0.347	0.354	0.361	0.365	0.370	0.373	0.377	0.379	0.382	0.384
80	0.260	0.265	0.271	0.277	0.285	0.292	0.300	0.311	0.322	0.334	0.345	0.355	0.363	0.366	0.368	0.370	0.371	0.372	0.374	0.377
81	0.256	0.259	0.263	0.269	0.275	0.285	0.294	0.304	0.313	0.325	0.337	0.347	0.355	0.361	0.364	0.366	0.367	0.368	0.369	0.371
82	0.251	0.253	0.257	0.262	0.268	0.278	0.286	0.295	0.305	0.316	0.325	0.333	0.341	0.347	0.352	0.354	0.357	0.361	0.363	0.366
83	0.247	0.249	0.251	0.254	0.260	0.267	0.275	0.286	0.295	0.306	0.316	0.324	0.330	0.337	0.342	0.344	0.346	0.349	0.351	0.354
84	0.242	0.244	0.246	0.248	0.252	0.257	0.264	0.273	0.281	0.290	0.300	0.309	0.315	0.321	0.325	0.328	0.330	0.333	0.336	0.339
85	0.259	0.274	0.275	0.277	0.279	0.278	0.277	0.272	0.270	0.273	0.279	0.287	0.296	0.303	0.306	0.308	0.310	0.311	0.313	0.315
86	0.058	0.061	0.064	0.076	0.095	0.114	0.120	0.119	0.106	0.102	0.105	0.111	0.118	0.141	0.152	0.159	0.164	0.172	0.178	0.178
87	0.048	0.050	0.050	0.051	0.051	0.052	0.051	0.053	0.051	0.053	0.052	0.054	0.054	0.056	0.056	0.057	0.057	0.058	0.057	0.060
88	0.044	0.044	0.044	0.045	0.046	0.046	0.047	0.047	0.048	0.046	0.047	0.046	0.049	0.048	0.050	0.050	0.051	0.050	0.051	0.051
89	0.041	0.042	0.041	0.042	0.041	0.042	0.042	0.043	0.044	0.044	0.044	0.044	0.044	0.046	0.045	0.046	0.046	0.048	0.048	0.049
90	0.040	0.040	0.039	0.040	0.038	0.039	0.039	0.040	0.040	0.042	0.042	0.043	0.044	0.044	0.044	0.045	0.045	0.046	0.045	0.046
91	0.039	0.038	0.038	0.038	0.038	0.038	0.039	0.038	0.040	0.040	0.042	0.060	0.101	0.099	0.064	0.048	0.045	0.044	0.044	0.044
92	0.038	0.038	0.038	0.037	0.038	0.036	0.038	0.037	0.038	0.038	0.042	0.075	0.148	0.158	0.103	0.059	0.048	0.042	0.042	0.042
93	0.035	0.038	0.035	0.037	0.034	0.037	0.035	0.038	0.035	0.038	0.036	0.041	0.055	0.070	0.052	0.044	0.042	0.041	0.040	0.042
94	0.038	0.037	0.037	0.035	0.035	0.035	0.035	0.034	0.035	0.035	0.037	0.036	0.036	0.036	0.038	0.038	0.038	0.038	0.039	0.038
95	0.036	0.036	0.038	0.035	0.034	0.035	0.035	0.034	0.034	0.033	0.035	0.035	0.035	0.035	0.037	0.037	0.036	0.038	0.038	0.038
96	0.036	0.036	0.035	0.035	0.033	0.034	0.032	0.033	0.033	0.035	0.035	0.035	0.034	0.035	0.035	0.036	0.036	0.038	0.037	0.038
97	0.036	0.037	0.036	0.035	0.033	0.035	0.033	0.034	0.033	0.035	0.033	0.035	0.033	0.035	0.033	0.035	0.035	0.037	0.036	0.037
98	0.037	0.036	0.036	0.035	0.036	0.035	0.036	0.036	0.036	0.035	0.036	0.034	0.035	0.033	0.033	0.033	0.035	0.035	0.036	0.036

IR HEAT TRANSFER COEFFICIENT - H(,9TO)/HRFR
IR SCAN TIME 7.12 SEC
HRFR = 0.398E-01

GROUP 25

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	0.502	0.508	0.512	0.515	0.514	0.522	0.552	0.580	0.547	0.542	0.547	0.539	0.522	0.478	0.352	0.196	0.113	0.082	0.065	0.057
65	0.502	0.505	0.509	0.514	0.517	0.531	0.572	0.565	0.538	0.533	0.531	0.529	0.524	0.512	0.481	0.371	0.207	0.115	0.084	0.067
66	0.490	0.496	0.498	0.500	0.508	0.529	0.563	0.545	0.527	0.522	0.515	0.516	0.515	0.510	0.503	0.482	0.394	0.236	0.124	0.088
67	0.474	0.480	0.486	0.492	0.498	0.530	0.570	0.543	0.521	0.512	0.507	0.501	0.503	0.509	0.511	0.505	0.481	0.400	0.246	0.129
68	0.468	0.468	0.467	0.475	0.490	0.511	0.541	0.524	0.514	0.510	0.506	0.504	0.502	0.499	0.501	0.505	0.503	0.488	0.436	0.301
69	0.454	0.463	0.464	0.463	0.476	0.505	0.532	0.514	0.498	0.500	0.501	0.500	0.504	0.507	0.509	0.510	0.501	0.495	0.488	0.473
70	0.438	0.442	0.448	0.454	0.466	0.487	0.514	0.505	0.486	0.482	0.486	0.488	0.488	0.493	0.493	0.493	0.496	0.497	0.497	0.496
71	0.435	0.441	0.445	0.446	0.454	0.474	0.499	0.487	0.474	0.472	0.473	0.476	0.472	0.472	0.478	0.480	0.482	0.487	0.489	0.490
72	0.426	0.433	0.438	0.437	0.440	0.462	0.495	0.483	0.467	0.465	0.464	0.465	0.462	0.462	0.463	0.466	0.466	0.465	0.474	0.484
73	0.424	0.425	0.421	0.419	0.427	0.450	0.478	0.466	0.458	0.457	0.454	0.450	0.451	0.450	0.447	0.450	0.455	0.455	0.456	0.456
74	0.421	0.416	0.413	0.415	0.428	0.451	0.473	0.466	0.454	0.450	0.447	0.441	0.441	0.441	0.440	0.446	0.448	0.448	0.446	0.447
75	0.411	0.420	0.420	0.414	0.430	0.443	0.470	0.466	0.450	0.443	0.439	0.435	0.436	0.437	0.438	0.440	0.436	0.435	0.436	0.437
76	0.403	0.410	0.413	0.416	0.424	0.435	0.455	0.461	0.443	0.437	0.438	0.437	0.434	0.431	0.430	0.428	0.423	0.421	0.420	0.422
77	0.407	0.411	0.414	0.416	0.418	0.426	0.446	0.464	0.440	0.425	0.424	0.424	0.424	0.427	0.430	0.433	0.432	0.431	0.427	0.421
78	0.396	0.398	0.400	0.402	0.403	0.409	0.428	0.458	0.442	0.420	0.418	0.415	0.414	0.413	0.412	0.411	0.410	0.411	0.413	0.417
79	0.387	0.389	0.392	0.393	0.392	0.396	0.408	0.425	0.418	0.408	0.411	0.411	0.410	0.408	0.407	0.407	0.408	0.409	0.409	0.406
80	0.380	0.383	0.383	0.382	0.383	0.385	0.397	0.414	0.411	0.402	0.406	0.407	0.407	0.406	0.406	0.405	0.405	0.408	0.409	0.407
81	0.373	0.376	0.377	0.379	0.378	0.380	0.389	0.405	0.404	0.396	0.399	0.403	0.404	0.406	0.407	0.408	0.408	0.406	0.403	0.400
82	0.369	0.370	0.371	0.373	0.373	0.375	0.383	0.397	0.398	0.391	0.393	0.396	0.397	0.399	0.401	0.402	0.405	0.404	0.402	0.396
83	0.357	0.362	0.365	0.369	0.372	0.375	0.380	0.392	0.394	0.387	0.388	0.390	0.390	0.392	0.395	0.396	0.398	0.396	0.393	0.390
84	0.342	0.348	0.352	0.356	0.359	0.363	0.368	0.378	0.387	0.384	0.387	0.390	0.392	0.391	0.390	0.390	0.392	0.394	0.392	0.390
85	0.319	0.323	0.328	0.333	0.338	0.342	0.349	0.358	0.370	0.368	0.364	0.368	0.373	0.379	0.385	0.391	0.395	0.398	0.399	0.399
86	0.183	0.193	0.204	0.220	0.231	0.244	0.256	0.268	0.277	0.286	0.293	0.303	0.311	0.318	0.320	0.323	0.329	0.339	0.353	0.368
87	0.059	0.061	0.060	0.063	0.062	0.065	0.065	0.067	0.067	0.069	0.068	0.070	0.070	0.073	0.074	0.076	0.078	0.083	0.089	0.096
88	0.053	0.053	0.054	0.054	0.057	0.057	0.057	0.057	0.059	0.059	0.060	0.060	0.061	0.061	0.061	0.061	0.062	0.061	0.063	0.062
89	0.048	0.050	0.049	0.051	0.050	0.052	0.052	0.054	0.053	0.054	0.054	0.056	0.054	0.056	0.054	0.056	0.055	0.057	0.056	0.057
90	0.046	0.048	0.047	0.049	0.048	0.050	0.049	0.051	0.051	0.053	0.053	0.054	0.052	0.053	0.052	0.053	0.052	0.054	0.051	0.053
91	0.045	0.044	0.045	0.045	0.047	0.048	0.050	0.050	0.052	0.057	0.066	0.059	0.054	0.051	0.051	0.051	0.051	0.050	0.050	0.050
92	0.043	0.044	0.044	0.045	0.046	0.048	0.050	0.050	0.057	0.103	0.156	0.135	0.083	0.059	0.053	0.049	0.049	0.048	0.049	0.048
93	0.043	0.044	0.043	0.044	0.044	0.046	0.047	0.049	0.049	0.066	0.108	0.109	0.073	0.057	0.051	0.050	0.048	0.050	0.050	0.051
94	0.041	0.040	0.042	0.042	0.044	0.044	0.046	0.045	0.046	0.045	0.046	0.045	0.047	0.046	0.047	0.046	0.048	0.048	0.050	0.050
95	0.038	0.038	0.040	0.040	0.042	0.044	0.044	0.044	0.044	0.044	0.046	0.046	0.047	0.046	0.046	0.046	0.048	0.047	0.050	0.048
96	0.037	0.038	0.038	0.040	0.042	0.044	0.044	0.044	0.044	0.044	0.044	0.046	0.046	0.048	0.048	0.048	0.048	0.049	0.049	0.050
97	0.036	0.039	0.038	0.041	0.042	0.043	0.042	0.044	0.044	0.045	0.045	0.046	0.047	0.048	0.046	0.048	0.048	0.049	0.048	0.051
98	0.036	0.037	0.038	0.040	0.041	0.042	0.042	0.042	0.044	0.045	0.045	0.046	0.047	0.048	0.048	0.047	0.049	0.049	0.051	0.050

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 6,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 7.12 SEC
HRFR = 0.398E-01

GROUP 25

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.050	0.048	0.045	0.044	0.042	0.042	0.040	0.040	0.038	0.039	0.037	0.037	0.036	0.038	0.036	0.036	0.034	0.035	0.033	0.035
65	0.057	0.050	0.048	0.046	0.044	0.043	0.042	0.040	0.040	0.039	0.038	0.038	0.037	0.036	0.037	0.035	0.035	0.034	0.034	0.031
66	0.066	0.057	0.050	0.047	0.045	0.044	0.042	0.041	0.039	0.039	0.038	0.038	0.036	0.036	0.035	0.035	0.033	0.035	0.033	0.032
67	0.089	0.069	0.057	0.047	0.046	0.042	0.042	0.038	0.041	0.036	0.038	0.036	0.035	0.034	0.035	0.032	0.033	0.030	0.032	0.031
68	0.160	0.098	0.075	0.061	0.051	0.045	0.042	0.041	0.040	0.039	0.037	0.036	0.035	0.034	0.033	0.032	0.033	0.031	0.031	0.028
69	0.388	0.226	0.119	0.085	0.065	0.053	0.045	0.042	0.040	0.039	0.038	0.037	0.035	0.035	0.033	0.034	0.031	0.032	0.031	0.031
70	0.483	0.415	0.263	0.138	0.091	0.069	0.056	0.046	0.041	0.040	0.040	0.038	0.036	0.036	0.035	0.033	0.033	0.031	0.031	0.030
71	0.490	0.483	0.437	0.294	0.153	0.097	0.072	0.057	0.047	0.042	0.041	0.040	0.038	0.036	0.036	0.034	0.034	0.032	0.033	0.031
72	0.490	0.487	0.475	0.438	0.310	0.164	0.099	0.075	0.058	0.048	0.042	0.041	0.039	0.038	0.036	0.036	0.035	0.034	0.032	0.032
73	0.456	0.458	0.461	0.458	0.436	0.335	0.188	0.106	0.077	0.060	0.048	0.042	0.040	0.038	0.038	0.036	0.035	0.033	0.033	0.031
74	0.441	0.441	0.443	0.449	0.445	0.425	0.326	0.182	0.102	0.076	0.058	0.048	0.040	0.039	0.035	0.037	0.032	0.034	0.032	0.032
75	0.435	0.436	0.438	0.436	0.432	0.429	0.414	0.345	0.213	0.116	0.081	0.062	0.049	0.041	0.038	0.036	0.035	0.034	0.034	0.031
76	0.427	0.431	0.431	0.427	0.423	0.420	0.417	0.405	0.364	0.251	0.133	0.086	0.066	0.052	0.044	0.039	0.037	0.035	0.035	0.033
77	0.414	0.412	0.414	0.418	0.420	0.417	0.415	0.412	0.399	0.368	0.273	0.155	0.092	0.070	0.057	0.048	0.039	0.037	0.035	0.035
78	0.421	0.421	0.418	0.414	0.411	0.410	0.406	0.406	0.406	0.400	0.379	0.312	0.196	0.109	0.076	0.060	0.053	0.043	0.038	0.035
79	0.404	0.403	0.406	0.410	0.411	0.409	0.406	0.404	0.401	0.398	0.393	0.380	0.341	0.238	0.130	0.082	0.063	0.054	0.049	0.042
80	0.409	0.401	0.398	0.402	0.406	0.408	0.405	0.403	0.401	0.396	0.390	0.381	0.369	0.337	0.246	0.137	0.084	0.063	0.054	0.050
81	0.402	0.402	0.395	0.392	0.395	0.401	0.404	0.402	0.397	0.397	0.394	0.386	0.372	0.356	0.325	0.247	0.143	0.085	0.062	0.054
82	0.396	0.396	0.395	0.391	0.388	0.389	0.393	0.400	0.404	0.400	0.395	0.395	0.389	0.375	0.357	0.334	0.271	0.166	0.093	0.065
83	0.386	0.386	0.389	0.391	0.393	0.393	0.395	0.398	0.400	0.398	0.396	0.400	0.397	0.391	0.381	0.365	0.348	0.293	0.187	0.103
84	0.387	0.384	0.384	0.388	0.391	0.392	0.395	0.398	0.400	0.403	0.407	0.411	0.408	0.403	0.399	0.391	0.379	0.367	0.327	0.228
85	0.396	0.391	0.386	0.382	0.380	0.380	0.383	0.386	0.390	0.395	0.399	0.402	0.403	0.404	0.405	0.401	0.394	0.389	0.384	0.364
86	0.384	0.403	0.416	0.424	0.426	0.422	0.411	0.399	0.387	0.379	0.375	0.374	0.373	0.373	0.374	0.377	0.381	0.388	0.390	0.388
87	0.105	0.124	0.149	0.179	0.209	0.236	0.256	0.268	0.264	0.245	0.227	0.216	0.207	0.207	0.212	0.224	0.236	0.247	0.249	0.253
88	0.066	0.064	0.067	0.066	0.068	0.066	0.068	0.067	0.068	0.067	0.070	0.070	0.073	0.074	0.073	0.071	0.068	0.066	0.066	0.066
89	0.057	0.057	0.057	0.058	0.057	0.058	0.057	0.058	0.057	0.059	0.061	0.063	0.065	0.066	0.065	0.064	0.059	0.057	0.056	0.057
90	0.051	0.053	0.052	0.053	0.053	0.054	0.054	0.054	0.053	0.054	0.058	0.061	0.062	0.065	0.063	0.064	0.059	0.056	0.053	0.054
91	0.050	0.050	0.051	0.051	0.053	0.053	0.054	0.052	0.053	0.054	0.068	0.071	0.065	0.064	0.072	0.085	0.076	0.060	0.056	0.052
92	0.050	0.048	0.050	0.050	0.054	0.080	0.122	0.118	0.080	0.060	0.057	0.059	0.061	0.062	0.064	0.063	0.061	0.057	0.055	0.053
93	0.051	0.051	0.050	0.052	0.054	0.075	0.125	0.136	0.095	0.066	0.059	0.060	0.061	0.063	0.063	0.064	0.061	0.058	0.054	0.054
94	0.051	0.050	0.052	0.051	0.053	0.053	0.054	0.054	0.054	0.054	0.057	0.060	0.063	0.065	0.066	0.066	0.065	0.060	0.059	0.057
95	0.050	0.049	0.050	0.049	0.052	0.051	0.054	0.053	0.054	0.054	0.058	0.061	0.066	0.067	0.069	0.070	0.069	0.065	0.064	0.062
96	0.050	0.051	0.051	0.053	0.053	0.054	0.054	0.056	0.054	0.057	0.058	0.063	0.067	0.071	0.073	0.076	0.073	0.069	0.065	0.066
97	0.051	0.053	0.052	0.053	0.053	0.057	0.056	0.057	0.056	0.058	0.061	0.068	0.073	0.077	0.079	0.080	0.076	0.072	0.068	0.068
98	0.053	0.052	0.054	0.053	0.055	0.056	0.057	0.056	0.057	0.059	0.068	0.076	0.081	0.083	0.087	0.089	0.088	0.077	0.071	0.069

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 7.12 SEC
GROUP 25 HRFR = 0.398E-01

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.032	0.033	0.031	0.031	0.029	0.031	0.029	0.029	0.027	0.028	0.026	0.026	0.025	0.025	0.024	0.026	0.024	0.025	0.023	0.023
65	0.033	0.032	0.031	0.031	0.031	0.029	0.029	0.028	0.028	0.027	0.028	0.026	0.026	0.025	0.025	0.024	0.023	0.023	0.023	0.021
66	0.031	0.031	0.031	0.031	0.029	0.030	0.028	0.030	0.028	0.027	0.026	0.026	0.025	0.025	0.023	0.024	0.021	0.023	0.018	0.021
67	0.031	0.031	0.031	0.029	0.029	0.028	0.028	0.027	0.026	0.026	0.025	0.024	0.023	0.023	0.022	0.022	0.021	0.020	0.022	0.018
68	0.030	0.027	0.028	0.025	0.027	0.025	0.026	0.023	0.025	0.022	0.023	0.021	0.022	0.019	0.020	0.018	0.020	0.019	0.018	0.019
69	0.029	0.030	0.028	0.029	0.028	0.027	0.026	0.026	0.023	0.024	0.022	0.022	0.021	0.020	0.019	0.019	0.017	0.018	0.016	0.018
70	0.031	0.031	0.030	0.028	0.028	0.026	0.027	0.026	0.025	0.023	0.023	0.022	0.022	0.021	0.020	0.019	0.018	0.017	0.017	0.015
71	0.031	0.029	0.029	0.028	0.028	0.027	0.026	0.025	0.025	0.023	0.023	0.022	0.023	0.021	0.021	0.020	0.020	0.018	0.018	0.017
72	0.030	0.031	0.028	0.029	0.027	0.028	0.026	0.026	0.024	0.025	0.023	0.023	0.022	0.022	0.021	0.021	0.019	0.020	0.017	0.018
73	0.031	0.030	0.030	0.028	0.028	0.027	0.027	0.026	0.025	0.025	0.025	0.023	0.024	0.021	0.021	0.020	0.020	0.019	0.019	0.018
74	0.031	0.031	0.029	0.029	0.027	0.028	0.026	0.027	0.026	0.026	0.023	0.024	0.022	0.023	0.022	0.021	0.021	0.020	0.019	0.019
75	0.031	0.028	0.030	0.028	0.029	0.026	0.028	0.026	0.026	0.024	0.025	0.023	0.023	0.021	0.022	0.021	0.021	0.019	0.019	0.018
76	0.033	0.031	0.031	0.029	0.030	0.028	0.028	0.026	0.026	0.025	0.025	0.024	0.023	0.022	0.023	0.021	0.022	0.019	0.021	0.016
77	0.033	0.033	0.031	0.031	0.030	0.031	0.028	0.029	0.026	0.027	0.025	0.026	0.023	0.024	0.020	0.023	0.021	0.021	0.020	0.020
78	0.034	0.032	0.032	0.031	0.031	0.029	0.028	0.028	0.027	0.026	0.026	0.024	0.024	0.023	0.023	0.021	0.021	0.019	0.020	0.018
79	0.037	0.033	0.033	0.030	0.030	0.027	0.026	0.026	0.026	0.025	0.024	0.023	0.023	0.021	0.021	0.020	0.021	0.018	0.018	0.017
80	0.046	0.040	0.036	0.032	0.031	0.031	0.028	0.028	0.028	0.026	0.026	0.025	0.026	0.025	0.025	0.024	0.025	0.025	0.025	0.024
81	0.049	0.048	0.044	0.042	0.037	0.032	0.028	0.026	0.025	0.025	0.022	0.023	0.022	0.021	0.020	0.020	0.019	0.018	0.017	0.018
82	0.054	0.048	0.047	0.045	0.044	0.042	0.038	0.038	0.035	0.031	0.028	0.023	0.024	0.022	0.021	0.020	0.018	0.018	0.018	0.015
83	0.069	0.056	0.049	0.046	0.044	0.044	0.041	0.042	0.040	0.041	0.038	0.037	0.034	0.031	0.027	0.026	0.018	0.021	0.014	0.017
84	0.125	0.078	0.058	0.050	0.045	0.044	0.041	0.042	0.040	0.040	0.039	0.039	0.038	0.038	0.036	0.036	0.034	0.032	0.029	0.026
85	0.290	0.162	0.091	0.063	0.053	0.046	0.043	0.042	0.040	0.039	0.040	0.038	0.039	0.038	0.038	0.037	0.037	0.036	0.036	0.035
86	0.382	0.332	0.216	0.115	0.072	0.055	0.047	0.044	0.042	0.041	0.040	0.040	0.039	0.039	0.038	0.039	0.038	0.038	0.036	0.036
87	0.263	0.276	0.246	0.156	0.086	0.062	0.050	0.046	0.042	0.042	0.040	0.040	0.038	0.038	0.037	0.037	0.036	0.037	0.035	0.036
88	0.067	0.068	0.067	0.060	0.053	0.048	0.048	0.044	0.045	0.043	0.043	0.041	0.040	0.038	0.038	0.038	0.037	0.036	0.035	0.033
89	0.056	0.057	0.053	0.053	0.048	0.047	0.044	0.044	0.042	0.042	0.040	0.041	0.039	0.039	0.038	0.038	0.036	0.037	0.035	0.035
90	0.052	0.053	0.050	0.049	0.047	0.048	0.046	0.046	0.045	0.044	0.042	0.042	0.040	0.041	0.038	0.039	0.036	0.038	0.035	0.036
91	0.051	0.050	0.050	0.048	0.048	0.047	0.047	0.046	0.046	0.045	0.044	0.044	0.043	0.042	0.042	0.040	0.040	0.038	0.037	0.036
92	0.053	0.050	0.050	0.048	0.049	0.048	0.048	0.046	0.047	0.046	0.046	0.044	0.045	0.044	0.043	0.041	0.040	0.040	0.038	0.037
93	0.052	0.053	0.050	0.051	0.051	0.051	0.051	0.052	0.050	0.050	0.048	0.049	0.048	0.048	0.046	0.046	0.045	0.043	0.042	0.042
94	0.056	0.056	0.056	0.056	0.056	0.054	0.054	0.054	0.054	0.053	0.053	0.052	0.053	0.051	0.051	0.049	0.050	0.048	0.046	0.044
95	0.062	0.061	0.062	0.062	0.063	0.062	0.062	0.061	0.061	0.060	0.060	0.058	0.058	0.057	0.057	0.056	0.054	0.053	0.052	0.051
96	0.065	0.066	0.066	0.068	0.067	0.068	0.067	0.067	0.066	0.068	0.067	0.068	0.066	0.066	0.065	0.066	0.065	0.065	0.064	0.064
97	0.068	0.070	0.071	0.072	0.073	0.075	0.076	0.078	0.079	0.082	0.082	0.084	0.082	0.082	0.080	0.081	0.079	0.080	0.078	0.079
98	0.071	0.072	0.075	0.076	0.079	0.082	0.086	0.087	0.089	0.089	0.091	0.091	0.091	0.090	0.090	0.089	0.089	0.088	0.087	0.086

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 7.12 SEC
HRFR = 0.398E-01

GROUP 25

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.019	0.023	0.021	0.021	0.019	0.020	0.018	0.018	0.017	0.017
65	0.021	0.019	0.019	0.018	0.019	0.017	0.018	0.017	0.016	0.015
66	0.019	0.019	0.017	0.017	0.016	0.016	0.015	0.015	0.013	0.014
67	0.018	0.017	0.017	0.015	0.015	0.014	0.014	0.014	0.013	0.012
68	0.017	0.016	0.015	0.014	0.014	0.013	0.013	0.012	0.011	0.010
69	0.011	0.015	0.007	0.015	0.009	0.013	0.009	0.012	0.007	0.010
70	0.017	0.015	0.015	0.013	0.013	0.012	0.011	0.010	0.010	0.010
71	0.017	0.015	0.015	0.013	0.014	0.013	0.012	0.011	0.012	0.012
72	0.016	0.017	0.015	0.015	0.013	0.014	0.013	0.013	0.010	0.010
73	0.017	0.015	0.015	0.014	0.014	0.012	0.012	0.011	0.011	0.010
74	0.016	0.016	0.015	0.014	0.014	0.013	0.011	0.012	0.010	0.010
75	0.018	0.016	0.015	0.014	0.014	0.012	0.013	0.011	0.012	0.010
76	0.019	0.014	0.016	0.014	0.015	0.012	0.013	0.010	0.011	0.009
77	0.018	0.018	0.017	0.017	0.015	0.015	0.013	0.013	0.012	0.012
78	0.019	0.017	0.017	0.016	0.015	0.014	0.014	0.012	0.012	0.010
79	0.017	0.017	0.017	0.015	0.015	0.015	0.014	0.013	0.012	0.012
80	0.024	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.022	0.021
81	0.016	0.017	0.016	0.016	0.013	0.013	0.012	0.012	0.011	0.011
82	0.017	0.015	0.015	0.014	0.013	0.012	0.012	0.012	0.010	0.010
83	0.011	0.015	0.009	0.014	0.009	0.012	0.007	0.011	0.005	0.010
84	0.022	0.021	0.017	0.016	0.013	0.012	0.011	0.012	0.010	0.011
85	0.034	0.032	0.031	0.028	0.026	0.023	0.021	0.015	0.014	0.012
86	0.036	0.035	0.035	0.035	0.033	0.033	0.031	0.030	0.028	0.025
87	0.035	0.035	0.034	0.035	0.033	0.033	0.031	0.031	0.030	0.031
88	0.032	0.031	0.031	0.031	0.031	0.029	0.029	0.027	0.028	0.027
89	0.031	0.032	0.030	0.031	0.029	0.029	0.027	0.028	0.027	0.027
90	0.033	0.035	0.031	0.035	0.032	0.033	0.028	0.029	0.025	0.028
91	0.036	0.035	0.035	0.035	0.035	0.035	0.034	0.031	0.031	0.029
92	0.036	0.036	0.036	0.036	0.037	0.036	0.036	0.036	0.036	0.036
93	0.039	0.040	0.038	0.039	0.039	0.040	0.039	0.040	0.040	0.040
94	0.044	0.044	0.043	0.043	0.042	0.043	0.044	0.044	0.044	0.042
95	0.051	0.050	0.050	0.050	0.050	0.049	0.051	0.051	0.051	0.050
96	0.062	0.064	0.063	0.064	0.063	0.064	0.064	0.064	0.063	0.062
97	0.077	0.078	0.077	0.079	0.078	0.079	0.077	0.078	0.077	0.077
98	0.087	0.087	0.088	0.088	0.089	0.090	0.091	0.092	0.093	0.093

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

GROUP 43

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
426 45	594.023	594.023	594.066	594.066	0.000	591.671
426 46	594.110	594.197	594.066	594.153	0.000	591.671
426 47	594.328	594.328	594.066	594.328	0.000	591.671
426 49	594.458	594.458	594.066	594.458	0.000	591.671
426 50	594.545	594.545	594.066	594.545	0.000	591.671
426 50	594.589	594.589	594.066	594.589	0.000	591.671
426 51	594.632	594.632	594.066	594.632	0.000	591.671
426 52	594.719	594.676	594.066	594.719	0.000	591.671
426 53	594.806	594.763	594.066	594.763	0.000	591.671
426 54	594.850	594.806	594.066	594.850	0.000	591.671
426 55	594.937	594.850	594.066	594.894	0.000	591.671
426 56	594.981	594.894	594.066	594.937	0.000	591.671
426 57	594.981	594.937	594.066	594.937	0.000	591.671
426 58	595.024	594.981	594.066	594.981	0.000	591.671
426 59	595.068	595.024	594.066	594.981	0.000	591.671
427 0	595.111	595.068	594.066	595.024	0.000	591.671
427 1	595.155	595.068	594.066	595.068	0.000	591.671
427 1	595.198	595.111	594.066	595.068	0.000	591.671
427 2	595.198	595.155	594.066	595.111	0.000	591.671
427 3	595.242	595.155	594.066	595.111	0.000	591.671
427 4	595.242	595.155	594.066	595.111	0.000	591.671
427 4	595.242	595.198	594.066	595.111	0.000	591.671
427 5	595.285	595.198	594.066	595.155	0.000	591.671
427 6	595.285	595.242	594.066	595.155	0.000	591.671
427 7	595.329	595.242	594.066	595.198	0.000	591.671
427 8	595.329	595.242	594.066	595.198	0.000	591.671

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

GROUP	* * * * TITLE TYPE	MODEL DESCRIPTION * * * * GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
43	RSI FORWARD	0.01	0.010	-0.03	30.03	0.053	4	25	47

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/F FT-1	HRFR BTU/FT2-SEC-R	INITIAL TEMP DEG R
7.96	320.57	1288.67	94.25	0.0339	3788.	0.302E-04	0.759E-07	0.151E+07	0.253E-01	547.7

IR CAMERA INFORMATION

MOUNTING LOCATION	260
F STOP	2.5
LENS-DEG	15
SENSITIVITY	300.
BLACK LEVEL VOLTAGE	1.2793
LINE SCAN PHI	90
MODEL EMISSIVITY	0.96
REF EMISSIVITY	0.94
WINDOW FACTOR	0.840

TIME RECORDS

LIFT OFF	0.00
CENTER LINE	1.99
IR SCAN TIME	18.47
DELTA TIME,SEC	17.36
PHOTO 1 TIME	427
PHOTO 2 TIME	0
PHOTO 3 TIME	0
PHOTO 4 TIME	0

REFERENCE TARGET INFORMATION

TCR5	591.93
TCR6	591.28

DIGITAL DATA AREA PRINTOUT LOCATION

LINE 29 THROUGH 98
POINT 1 THROUGH 110

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 43

IR SCAN TIME 17.36 SEC
INITIAL TEMP 547.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	1.017	1.014	1.014	1.019	1.014	1.011	1.014	1.011	1.022	1.011	1.014	1.011	1.009	1.011	1.017	1.014	1.014	1.017	1.014	1.019
30	1.017	1.017	1.014	1.017	1.011	1.014	1.011	1.017	1.017	1.019	1.019	1.014	1.017	1.009	1.019	1.014	1.014	1.014	1.017	1.011
31	1.017	1.014	1.011	1.014	1.014	1.017	1.014	1.017	1.017	1.017	1.014	1.017	1.014	1.019	1.017	1.019	1.017	1.017	1.011	1.011
32	1.019	1.014	1.014	1.014	1.017	1.019	1.019	1.017	1.011	1.017	1.017	1.019	1.017	1.017	1.014	1.017	1.014	1.017	1.014	1.017
33	1.011	1.011	1.017	1.011	1.017	1.017	1.022	1.017	1.022	1.003	1.022	1.009	1.014	1.017	1.011	1.019	1.019	1.026	1.017	1.019
34	1.019	1.017	1.017	1.014	1.014	1.011	1.017	1.009	1.014	1.009	1.014	1.009	1.017	1.017	1.017	1.017	1.019	1.019	1.022	1.022
35	1.014	1.014	1.003	1.014	1.000	1.009	1.000	1.011	1.006	1.014	1.009	1.014	1.009	1.014	1.011	1.022	1.019	1.019	1.017	1.014
36	1.014	1.009	1.011	1.009	1.011	1.009	1.014	1.011	1.014	1.014	1.019	1.017	1.022	1.017	1.019	1.014	1.011	1.000	1.000	0.981
37	1.011	1.009	1.009	1.011	1.011	1.017	1.014	1.019	1.017	1.017	1.014	1.017	1.017	1.014	1.006	1.000	0.988	0.985	0.981	0.981
38	1.011	1.009	1.009	1.014	1.014	1.017	1.014	1.019	1.017	1.019	1.014	1.014	1.003	0.997	0.988	0.988	0.985	0.985	0.985	0.985
39	1.011	1.017	1.017	1.017	1.022	1.014	1.019	1.017	1.014	1.006	1.003	0.991	0.988	0.981	0.985	0.981	0.985	0.981	0.988	0.985
40	1.014	1.017	1.019	1.019	1.017	1.019	1.014	1.009	0.994	0.991	0.985	0.988	0.985	0.988	0.985	0.988	0.981	0.985	0.985	0.988
41	1.017	1.017	1.017	1.019	1.011	1.003	0.994	0.991	0.985	0.988	0.985	0.991	0.985	0.988	0.985	0.991	0.985	0.988	0.981	0.988
42	1.019	1.017	1.003	1.000	0.981	0.991	0.981	0.985	0.978	0.985	0.981	0.988	0.978	0.991	0.985	0.991	0.985	0.991	0.985	0.991
43	1.011	1.000	0.994	0.985	0.985	0.981	0.988	0.985	0.988	0.985	0.988	0.985	0.988	0.985	0.988	0.981	0.985	0.981	0.988	0.985
44	0.985	0.988	0.988	0.988	0.985	0.988	0.985	0.988	0.985	0.988	0.988	0.988	0.985	0.991	0.988	0.988	0.991	0.994	0.991	0.994
45	0.991	0.991	0.997	0.991	0.997	0.991	0.997	0.991	0.997	0.991	0.997	0.997	1.000	1.000	1.003	0.997	1.003	1.003	1.026	1.046
46	0.997	0.997	1.003	0.997	1.000	0.997	1.003	0.997	1.003	1.000	1.003	0.997	1.003	0.997	1.006	1.003	1.009	1.029	1.112	1.176
47	0.997	1.000	1.000	1.003	1.003	1.003	1.000	1.003	1.003	1.006	1.003	1.006	1.006	1.009	1.006	1.009	1.009	1.046	1.136	1.194
48	1.000	1.000	1.003	1.003	1.006	1.003	1.006	1.000	1.009	1.006	1.011	1.009	1.009	1.006	1.011	1.011	1.017	1.064	1.155	1.206
49	1.000	1.003	1.006	1.000	1.009	1.003	1.009	1.003	1.009	1.000	1.009	1.006	1.009	1.009	1.011	1.009	1.022	1.084	1.177	1.217
50	1.003	1.003	1.006	1.003	1.009	1.006	1.006	1.003	1.009	1.006	1.009	1.006	1.011	1.003	1.014	1.009	1.033	1.119	1.201	1.231
51	1.003	1.003	1.003	1.006	1.003	1.003	1.003	1.006	1.006	1.009	1.006	1.006	1.006	1.009	1.009	1.017	1.046	1.147	1.212	1.238
52	0.991	0.994	1.000	0.994	1.000	0.994	0.997	0.997	1.000	0.997	1.003	0.997	1.003	1.000	1.006	1.009	1.076	1.174	1.223	1.241
53	0.981	0.985	0.978	0.985	0.981	0.985	0.981	0.988	0.985	0.988	0.985	0.988	0.985	0.994	0.994	1.014	1.104	1.193	1.227	1.244
54	0.971	0.971	0.971	0.971	0.978	0.978	0.978	0.978	0.985	0.985	0.985	0.981	0.985	0.985	0.994	1.022	1.126	1.201	1.230	1.242
55	0.971	0.974	0.971	0.978	0.971	0.978	0.974	0.981	0.978	0.985	0.981	0.988	0.985	0.991	0.994	1.046	1.146	1.209	1.233	1.246
56	0.974	0.978	0.981	0.955	0.981	0.959	0.981	0.963	0.985	0.981	0.985	0.981	0.991	0.988	1.003	1.060	1.157	1.212	1.235	1.245
57	0.971	0.971	0.974	0.974	0.981	0.974	0.981	0.978	0.985	0.978	0.985	0.981	0.988	0.985	1.011	1.081	1.176	1.219	1.238	1.247
58	0.971	0.974	0.978	0.971	0.978	0.978	0.981	0.978	0.985	0.978	0.988	0.985	0.991	0.988	1.017	1.110	1.195	1.229	1.246	1.256
59	0.978	0.981	0.974	0.985	0.981	0.985	0.981	0.988	0.985	0.991	0.988	0.991	0.988	0.997	1.033	1.138	1.203	1.229	1.241	1.251
60	0.974	0.985	0.988	0.988	0.988	0.988	0.991	0.991	0.985	0.997	0.994	1.000	0.997	1.006	1.071	1.166	1.211	1.231	1.242	1.251
61	0.985	0.988	0.988	0.988	0.985	0.991	0.988	0.991	0.991	0.997	0.994	0.997	0.997	1.022	1.099	1.179	1.212	1.229	1.240	1.249
62	0.985	0.988	0.986	0.991	0.988	0.994	0.991	0.994	0.994	0.994	0.994	0.997	1.000	1.019	1.109	1.183	1.212	1.227	1.236	1.244
63	0.988	0.994	0.994	0.985	0.994	0.988	0.997	0.991	1.000	0.994	1.000	0.997	1.006	1.029	1.125	1.187	1.212	1.224	1.234	1.239

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 43

IR SCAN TIME 17.36 SEC
INITIAL TEMP 547.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	1.011	1.019	1.011	1.017	1.006	1.011	1.003	1.014	1.006	1.014	1.009	1.011	1.006	1.017	1.009	1.022	1.017	1.019	1.019	1.024
30	1.017	1.011	1.011	1.009	1.009	1.009	1.014	1.011	1.017	1.017	1.022	1.022	1.024	1.022	1.024	1.024	1.026	1.019	1.022	1.014
31	1.011	1.014	1.014	1.017	1.017	1.019	1.017	1.019	1.019	1.024	1.022	1.026	1.024	1.022	1.017	1.019	1.009	1.006	1.000	0.997
32	1.017	1.019	1.019	1.022	1.019	1.022	1.022	1.024	1.024	1.024	1.014	1.017	1.006	1.003	0.994	0.991	0.981	0.981	0.981	0.978
33	1.022	1.019	1.019	1.019	1.024	1.014	1.014	1.009	1.003	1.000	0.988	0.985	0.981	0.978	0.978	0.971	0.967	0.974	0.974	0.974
34	1.024	1.019	1.017	1.006	1.003	0.994	0.991	0.981	0.978	0.971	0.978	0.971	0.974	0.971	0.974	0.971	0.978	0.971	0.978	0.971
35	1.006	1.003	0.991	0.981	0.978	0.978	0.971	0.978	0.971	0.971	0.971	0.981	0.974	0.978	0.971	0.978	0.974	0.978	0.978	0.981
36	0.985	0.967	0.978	0.971	0.978	0.971	0.978	0.971	0.978	0.971	0.974	0.971	0.978	0.981	0.981	0.981	0.985	0.978	0.985	0.974
37	0.978	0.981	0.978	0.985	0.978	0.978	0.974	0.978	0.978	0.985	0.985	0.985	0.981	0.981	0.978	0.988	0.971	0.988	0.971	0.988
38	0.978	0.988	0.981	0.985	0.981	0.985	0.978	0.985	0.981	0.985	0.981	0.985	0.985	0.981	0.981	0.981	0.981	0.985	0.985	0.988
39	0.988	0.981	0.988	0.985	0.988	0.985	0.991	0.985	0.988	0.985	0.991	0.985	0.988	0.985	0.991	0.985	0.991	0.985	0.988	0.985
40	0.985	0.988	0.985	0.988	0.985	0.988	0.985	0.991	0.988	0.991	0.988	0.988	0.988	0.988	0.988	0.991	0.988	0.994	0.988	0.991
41	0.985	0.991	0.988	0.991	0.988	0.994	0.991	0.994	0.988	0.991	0.988	0.991	0.985	0.991	0.985	0.991	0.988	0.988	0.988	0.991
42	0.985	0.994	0.991	0.994	0.991	0.994	0.988	0.994	0.991	0.997	0.991	0.994	0.991	0.994	0.988	0.994	0.988	0.994	0.991	0.991
43	0.991	0.994	0.991	0.988	0.991	0.988	0.997	0.988	0.991	0.988	0.997	0.991	0.997	0.991	0.991	0.991	0.997	0.988	0.991	0.988
44	0.994	0.997	0.997	1.000	0.997	1.000	0.997	0.997	0.997	1.000	0.994	1.000	0.997	1.000	0.988	0.994	0.988	0.994	0.988	0.994
45	1.056	1.048	1.048	1.031	1.031	1.019	1.019	1.014	1.011	1.006	1.009	1.006	1.006	1.003	1.009	1.003	1.006	1.003	1.006	1.000
46	1.204	1.217	1.231	1.239	1.247	1.251	1.250	1.233	1.207	1.170	1.129	1.079	1.048	1.024	1.019	1.011	1.014	1.009	1.011	1.006
47	1.217	1.231	1.241	1.256	1.270	1.286	1.303	1.318	1.326	1.326	1.324	1.318	1.293	1.249	1.185	1.112	1.056	1.031	1.017	1.024
48	1.229	1.240	1.252	1.264	1.276	1.287	1.300	1.312	1.323	1.330	1.335	1.328	1.320	1.324	1.329	1.311	1.258	1.160	1.081	1.042
49	1.237	1.251	1.264	1.274	1.286	1.298	1.312	1.323	1.325	1.327	1.332	1.335	1.335	1.329	1.328	1.336	1.340	1.305	1.212	1.107
50	1.248	1.259	1.271	1.281	1.293	1.305	1.319	1.331	1.342	1.349	1.355	1.353	1.350	1.348	1.348	1.344	1.343	1.357	1.364	1.301
51	1.251	1.262	1.271	1.284	1.296	1.309	1.323	1.336	1.350	1.358	1.359	1.360	1.357	1.352	1.345	1.340	1.333	1.331	1.339	1.372
52	1.255	1.265	1.276	1.287	1.302	1.314	1.328	1.341	1.354	1.359	1.361	1.364	1.368	1.369	1.370	1.366	1.356	1.341	1.327	1.318
53	1.254	1.263	1.271	1.284	1.295	1.311	1.329	1.346	1.360	1.369	1.370	1.369	1.367	1.369	1.374	1.383	1.384	1.379	1.370	1.348
54	1.252	1.259	1.268	1.278	1.292	1.307	1.323	1.337	1.354	1.368	1.379	1.383	1.382	1.379	1.377	1.374	1.376	1.380	1.385	1.385
55	1.254	1.261	1.268	1.277	1.288	1.303	1.316	1.331	1.345	1.359	1.368	1.376	1.380	1.385	1.389	1.388	1.387	1.385	1.384	1.389
56	1.254	1.260	1.269	1.276	1.286	1.299	1.312	1.326	1.339	1.348	1.354	1.358	1.363	1.366	1.372	1.378	1.387	1.396	1.403	1.401
57	1.255	1.259	1.268	1.275	1.286	1.296	1.309	1.321	1.332	1.341	1.348	1.348	1.354	1.360	1.366	1.367	1.368	1.371	1.376	1.384
58	1.264	1.267	1.276	1.285	1.295	1.306	1.319	1.332	1.343	1.350	1.353	1.354	1.361	1.364	1.364	1.363	1.369	1.372	1.373	1.373
59	1.257	1.263	1.271	1.282	1.293	1.307	1.321	1.335	1.348	1.357	1.358	1.362	1.367	1.371	1.368	1.364	1.367	1.371	1.368	1.366
60	1.256	1.262	1.270	1.278	1.283	1.294	1.305	1.317	1.330	1.341	1.349	1.362	1.374	1.381	1.379	1.376	1.374	1.373	1.371	1.367
61	1.252	1.258	1.266	1.275	1.283	1.294	1.304	1.314	1.320	1.319	1.316	1.319	1.327	1.339	1.352	1.367	1.374	1.374	1.372	1.376
62	1.249	1.254	1.261	1.269	1.275	1.284	1.296	1.309	1.320	1.326	1.327	1.329	1.326	1.316	1.301	1.292	1.294	1.307	1.323	1.344
63	1.246	1.252	1.260	1.266	1.274	1.282	1.293	1.306	1.318	1.323	1.330	1.340	1.352	1.355	1.353	1.342	1.320	1.295	1.273	1.261

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 43

IR SCAN TIME 17.36 SEC
INITIAL TEMP 547.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	1.022	1.022	1.019	1.024	1.017	1.017	1.011	1.011	1.003	1.003	1.000	1.003	0.997	0.997	0.988	0.991	0.985	0.988	0.985	0.981
30	1.019	1.003	1.011	0.994	1.003	0.988	0.991	0.985	0.985	0.974	0.974	0.967	0.974	0.963	0.978	0.971	0.978	0.971	0.978	0.971
31	0.991	0.985	0.981	0.981	0.974	0.978	0.971	0.974	0.971	0.974	0.971	0.974	0.971	0.974	0.971	0.974	0.963	0.971	0.967	0.971
32	0.971	0.978	0.971	0.978	0.971	0.974	0.971	0.974	0.974	0.978	0.978	0.974	0.974	0.974	0.974	0.978	0.971	0.978	0.971	0.974
33	0.981	0.967	0.978	0.981	0.978	0.981	0.978	0.981	0.978	0.967	0.978	0.978	0.974	0.971	0.974	0.974	0.974	0.974	0.974	0.967
34	0.978	0.974	0.978	0.974	0.981	0.978	0.981	0.974	0.978	0.974	0.978	0.974	0.978	0.971	0.974	0.967	0.974	0.967	0.974	0.971
35	0.981	0.981	0.978	0.981	0.978	0.981	0.974	0.981	0.974	0.981	0.974	0.974	0.971	0.974	0.971	0.971	0.971	0.971	0.971	0.971
36	0.985	0.981	0.985	0.981	0.985	0.978	0.981	0.978	0.978	0.981	0.981	0.974	0.981	0.978	0.978	0.974	0.978	0.974	0.978	0.974
37	0.971	0.985	0.967	0.981	0.971	0.985	0.971	0.981	0.971	0.978	0.967	0.985	0.978	0.985	0.978	0.985	0.974	0.981	0.978	0.985
38	0.985	0.988	0.985	0.985	0.985	0.985	0.981	0.985	0.985	0.985	0.981	0.981	0.978	0.981	0.974	0.981	0.971	0.981	0.971	0.974
39	0.988	0.985	0.988	0.985	0.988	0.985	0.985	0.981	0.985	0.981	0.985	0.981	0.985	0.981	0.985	0.978	0.985	0.981	0.985	0.985
40	0.988	0.991	0.985	0.988	0.985	0.991	0.985	0.988	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.981	0.988	0.981	0.985
41	0.985	0.988	0.985	0.991	0.985	0.994	0.985	0.991	0.985	0.991	0.988	0.988	0.985	0.988	0.985	0.988	0.985	0.988	0.985	0.988
42	0.985	0.991	0.988	0.991	0.988	0.988	0.988	0.988	0.985	0.991	0.988	0.991	0.988	0.988	0.985	0.988	0.989	0.985	0.985	0.988
43	0.994	0.988	0.994	0.988	0.994	0.988	0.994	0.988	0.991	0.988	0.994	0.988	0.991	0.988	0.991	0.988	0.991	0.988	0.991	0.988
44	0.985	0.994	0.988	0.991	0.988	0.994	0.988	0.994	0.988	0.997	0.991	0.994	0.991	0.994	0.988	0.994	0.988	0.988	0.985	0.988
45	1.006	1.000	1.000	1.000	1.003	0.997	1.000	1.000	1.000	0.997	1.006	0.991	0.997	0.988	0.997	0.988	0.997	0.988	0.994	0.985
46	1.009	1.003	1.009	1.003	1.006	1.000	1.003	1.000	1.003	0.997	1.003	0.997	1.003	1.000	1.003	1.000	1.003	1.000	1.000	1.000
47	1.014	1.017	1.017	1.014	1.006	1.011	1.006	1.006	1.006	1.006	1.000	1.006	1.000	1.003	1.000	1.003	0.997	1.003	0.997	1.003
48	1.029	1.022	1.022	1.017	1.019	1.011	1.014	1.009	1.011	1.006	1.011	1.006	1.009	1.003	1.009	1.003	1.006	1.003	1.006	1.003
49	1.064	1.042	1.036	1.022	1.019	1.011	1.014	1.009	1.011	1.006	1.009	1.006	1.009	1.003	1.009	1.003	1.006	1.003	1.006	1.003
50	1.172	1.079	1.052	1.038	1.038	1.026	1.019	1.014	1.014	1.011	1.014	1.011	1.009	1.009	1.009	1.006	1.009	1.006	1.009	1.006
51	1.370	1.268	1.124	1.064	1.031	1.033	1.024	1.024	1.014	1.019	1.011	1.014	1.009	1.011	1.006	1.011	1.006	1.009	1.006	1.009
52	1.347	1.379	1.306	1.161	1.077	1.033	1.029	1.024	1.017	1.009	1.006	1.000	1.006	0.997	1.003	0.997	1.003	1.000	1.003	1.000
53	1.327	1.323	1.322	1.256	1.131	1.060	1.029	1.024	1.019	1.009	1.000	1.000	0.994	0.994	0.988	0.991	0.985	0.991	0.988	0.997
54	1.380	1.363	1.350	1.350	1.303	1.182	1.084	1.040	1.029	1.022	1.017	0.997	0.994	0.985	0.991	0.985	0.991	0.985	0.994	0.997
55	1.395	1.397	1.390	1.381	1.382	1.377	1.298	1.155	1.069	1.036	1.024	1.024	1.003	1.000	0.994	0.997	0.991	0.994	0.994	1.003
56	1.399	1.396	1.398	1.398	1.401	1.408	1.422	1.376	1.235	1.107	1.058	1.029	1.029	1.017	1.003	0.994	1.000	0.994	1.003	1.003
57	1.393	1.397	1.394	1.389	1.388	1.391	1.404	1.425	1.419	1.322	1.165	1.077	1.044	1.024	1.019	1.003	1.000	0.994	1.003	1.000
58	1.374	1.371	1.374	1.382	1.391	1.394	1.398	1.405	1.414	1.403	1.326	1.201	1.099	1.046	1.029	1.019	1.014	0.997	1.003	0.997
59	1.366	1.367	1.357	1.345	1.341	1.349	1.368	1.392	1.410	1.419	1.402	1.316	1.169	1.079	1.033	1.024	1.014	1.014	0.997	1.000
60	1.365	1.366	1.370	1.365	1.346	1.322	1.311	1.323	1.354	1.394	1.430	1.420	1.343	1.225	1.107	1.050	1.024	1.019	1.014	1.000
61	1.375	1.370	1.367	1.368	1.369	1.368	1.354	1.324	1.291	1.290	1.308	1.335	1.378	1.387	1.303	1.160	1.069	1.031	1.019	1.014
62	1.363	1.372	1.374	1.370	1.367	1.366	1.374	1.383	1.388	1.364	1.301	1.251	1.248	1.293	1.340	1.313	1.189	1.084	1.038	1.022
63	1.270	1.293	1.325	1.352	1.372	1.383	1.393	1.404	1.417	1.415	1.398	1.380	1.340	1.275	1.229	1.249	1.293	1.251	1.140	1.064

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 43

IR SCAN TIME 17.36 SEC
INITIAL TEMP 547.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.978	0.978	0.974	0.978	0.974	0.978	0.971	0.978	0.971	0.978	0.971	0.978	0.971	0.974	0.974	0.978	0.974	0.978	0.974	0.978
30	0.978	0.974	0.978	0.971	0.978	0.971	0.974	0.971	0.978	0.974	0.974	0.971	0.974	0.971	0.974	0.971	0.978	0.971	0.974	0.971
31	0.959	0.971	0.959	0.971	0.963	0.971	0.963	0.971	0.959	0.971	0.963	0.971	0.971	0.974	0.971	0.978	0.974	0.978	0.974	0.978
32	0.967	0.971	0.967	0.971	0.967	0.971	0.967	0.971	0.967	0.971	0.963	0.967	0.967	0.974	0.959	0.974	0.955	0.974	0.959	0.971
33	0.967	0.974	0.971	0.971	0.971	0.967	0.974	0.967	0.971	0.967	0.974	0.967	0.971	0.967	0.974	0.967	0.971	0.967	0.971	0.967
34	0.974	0.967	0.974	0.967	0.971	0.967	0.971	0.967	0.971	0.963	0.971	0.963	0.974	0.967	0.971	0.963	0.974	0.967	0.971	0.963
35	0.967	0.971	0.967	0.974	0.971	0.974	0.967	0.971	0.967	0.971	0.967	0.971	0.971	0.974	0.967	0.971	0.971	0.971	0.971	0.971
36	0.978	0.971	0.978	0.974	0.978	0.971	0.974	0.971	0.978	0.971	0.978	0.971	0.978	0.974	0.974	0.971	0.974	0.971	0.974	0.967
37	0.974	0.981	0.978	0.981	0.978	0.978	0.974	0.978	0.978	0.981	0.974	0.978	0.971	0.974	0.974	0.974	0.971	0.978	0.971	0.974
38	0.971	0.981	0.971	0.978	0.974	0.978	0.967	0.974	0.971	0.981	0.978	0.985	0.978	0.985	0.974	0.978	0.978	0.981	0.974	0.978
39	0.985	0.981	0.985	0.981	0.985	0.978	0.985	0.974	0.981	0.974	0.981	0.971	0.981	0.967	0.978	0.967	0.974	0.967	0.974	0.971
40	0.981	0.985	0.981	0.988	0.981	0.985	0.981	0.985	0.978	0.981	0.974	0.981	0.978	0.985	0.978	0.981	0.974	0.978	0.974	0.978
41	0.985	0.988	0.981	0.988	0.978	0.985	0.978	0.981	0.978	0.985	0.978	0.981	0.974	0.985	0.978	0.985	0.974	0.981	0.974	0.978
42	0.985	0.988	0.985	0.985	0.981	0.985	0.981	0.985	0.981	0.985	0.978	0.981	0.978	0.981	0.978	0.978	0.974	0.981	0.974	0.981
43	0.988	0.991	0.988	0.981	0.988	0.981	0.985	0.981	0.988	0.981	0.985	0.981	0.985	0.978	0.985	0.978	0.981	0.978	0.985	0.978
44	0.985	0.988	0.985	0.988	0.981	0.988	0.985	0.988	0.988	0.985	0.985	0.988	0.981	0.985	0.981	0.988	0.985	0.988	0.985	0.988
45	0.994	0.988	0.991	0.988	0.991	0.985	0.991	0.988	0.994	0.988	0.991	0.988	0.994	0.991	0.994	0.991	0.994	0.997	0.994	0.991
46	1.003	1.000	1.000	0.994	0.997	0.991	0.997	0.991	0.997	0.974	0.997	0.978	0.997	0.981	0.994	0.981	0.997	0.978	0.997	0.978
47	0.997	1.000	1.000	1.000	1.000	1.000	1.000	0.997	0.997	0.997	0.997	1.000	0.997	1.000	0.997	1.000	0.994	0.997	0.994	0.997
48	1.006	1.003	1.006	0.997	1.003	1.000	1.003	0.997	1.003	0.997	1.003	1.000	1.006	1.003	1.003	0.997	1.003	1.000	1.003	1.000
49	1.006	1.000	1.003	1.003	1.006	1.003	1.006	1.000	1.003	1.003	1.006	1.000	1.006	1.000	1.003	0.997	1.003	0.997	1.003	0.997
50	1.009	1.003	1.006	1.000	1.009	1.003	1.009	1.003	1.006	1.003	1.006	1.003	1.006	1.003	1.003	1.000	1.003	1.000	1.006	0.997
51	1.006	1.009	1.006	1.009	1.006	1.009	1.006	1.009	1.006	1.006	1.006	1.003	1.003	1.000	1.006	1.003	1.003	1.003	1.003	1.006
52	1.006	1.003	1.009	1.003	1.009	1.006	1.009	1.006	1.006	1.006	1.006	1.003	1.006	1.003	1.006	1.000	1.006	1.000	1.006	1.000
53	0.997	1.003	1.000	1.006	1.006	1.003	1.006	1.009	1.000	1.006	1.000	1.006	0.997	1.006	1.000	1.009	1.003	1.009	0.997	1.003
54	1.003	1.003	1.009	1.006	1.009	1.009	1.011	1.009	1.014	1.009	1.011	1.006	1.011	1.006	1.009	1.006	1.009	1.006	1.009	1.003
55	1.003	1.009	1.006	1.009	1.006	1.011	1.009	1.011	1.009	1.011	1.009	1.014	1.009	1.011	1.006	1.009	1.006	1.011	1.006	1.009
56	1.009	1.009	1.011	1.009	1.014	1.011	1.014	1.009	1.017	1.009	1.014	1.009	1.011	1.009	1.009	1.009	1.009	1.006	1.009	1.006
57	1.006	1.003	1.009	1.003	1.006	1.000	1.003	1.003	1.006	1.000	1.003	1.000	1.006	1.000	1.003	1.000	1.003	1.000	1.000	1.000
58	1.006	1.000	1.000	0.997	1.000	0.997	1.000	0.997	1.000	0.997	1.000	0.997	1.000	0.997	1.000	0.994	1.000	0.994	0.997	0.994
59	0.994	0.994	0.991	0.997	0.994	0.997	0.994	0.997	0.988	0.994	0.988	0.994	0.988	0.991	0.985	0.991	0.981	0.991	0.988	0.991
60	1.003	0.994	0.997	0.994	1.000	0.991	1.000	0.988	0.997	0.988	0.997	0.985	0.994	0.981	0.991	0.981	0.991	0.985	0.991	0.985
61	1.003	1.000	0.997	1.000	0.994	0.997	0.994	0.997	0.994	0.994	0.991	0.994	0.988	0.988	0.985	0.988	0.985	0.988	0.988	0.988
62	1.011	1.009	0.997	1.000	0.994	0.994	0.994	0.994	0.991	0.994	0.988	0.988	0.985	0.988	0.988	0.991	0.988	0.988	0.988	0.991
63	1.031	1.017	1.011	1.003	1.003	0.997	1.000	0.994	0.997	0.988	0.994	0.988	0.991	0.981	0.991	0.985	0.985	0.985	0.991	0.985

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 43

IR SCAN TIME 17.36 SEC
INITIAL TEMP 547.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.974	0.978	0.974	0.981	0.978	0.981	0.978	0.985	0.974	0.981	0.974	0.978	0.967	0.974	0.971	0.974	0.967	0.971	0.967	0.974
30	0.978	0.971	0.978	0.971	0.978	0.974	0.978	0.974	0.978	0.971	0.978	0.971	0.974	0.971	0.974	0.967	0.967	0.971	0.974	0.967
31	0.971	0.978	0.971	0.978	0.971	0.978	0.967	0.974	0.971	0.971	0.974	0.974	0.967	0.974	0.967	0.971	0.967	0.971	0.967	0.971
32	0.963	0.967	0.963	0.971	0.967	0.971	0.963	0.971	0.967	0.974	0.967	0.971	0.971	0.971	0.967	0.971	0.967	0.971	0.963	0.967
33	0.971	0.967	0.974	0.967	0.967	0.967	0.971	0.967	0.971	0.971	0.971	0.963	0.971	0.959	0.967	0.955	0.967	0.955	0.967	0.959
34	0.971	0.963	0.971	0.963	0.967	0.959	0.967	0.959	0.967	0.959	0.967	0.959	0.967	0.963	0.967	0.959	0.967	0.959	0.963	0.959
35	0.963	0.971	0.963	0.971	0.967	0.971	0.963	0.967	0.963	0.967	0.963	0.967	0.959	0.967	0.959	0.967	0.963	0.967	0.959	0.967
36	0.971	0.967	0.971	0.967	0.974	0.967	0.967	0.963	0.971	0.967	0.971	0.963	0.971	0.967	0.971	0.967	0.971	0.971	0.971	0.967
37	0.971	0.971	0.971	0.974	0.967	0.974	0.967	0.971	0.967	0.971	0.967	0.978	0.971	0.974	0.971	0.974	0.971	0.974	0.967	0.974
38	0.974	0.978	0.971	0.974	0.971	0.974	0.971	0.978	0.971	0.978	0.971	0.971	0.967	0.974	0.971	0.974	0.971	0.974	0.971	0.971
39	0.978	0.971	0.978	0.971	0.974	0.967	0.991	0.974	0.978	0.971	0.978	0.974	0.978	0.974	0.978	0.978	0.981	0.971	0.978	0.971
40	0.974	0.974	0.974	0.978	0.967	0.974	0.971	0.974	0.971	0.981	0.967	0.978	0.971	0.978	0.967	0.974	0.967	0.978	0.971	0.974
41	0.974	0.978	0.978	0.985	0.974	0.978	0.978	0.981	0.978	0.978	0.974	0.981	0.971	0.974	0.971	0.981	0.971	0.978	0.971	0.978
42	0.974	0.981	0.978	0.985	0.978	0.985	0.974	0.981	0.978	0.981	0.978	0.981	0.974	0.978	0.974	0.974	0.971	0.974	0.971	0.981
43	0.985	0.978	0.985	0.981	0.985	0.981	0.981	0.981	0.985	0.978	0.985	0.978	0.981	0.974	0.981	0.974	0.981	0.974	0.981	0.971
44	0.985	0.988	0.985	0.988	0.985	0.988	0.981	0.985	0.978	0.985	0.981	0.985	0.981	0.985	0.978	0.981	0.978	0.978	0.978	0.978
45	0.988	0.988	0.994	0.991	0.994	0.988	0.997	0.988	0.994	0.988	0.991	0.988	0.991	0.988	0.991	0.988	0.991	0.991	0.991	0.985
46	0.997	0.985	1.000	0.985	1.000	0.997	1.000	0.997	0.997	0.994	0.997	0.997	1.000	0.994	0.997	0.994	0.997	0.994	0.997	0.991
47	0.997	0.997	0.997	1.000	0.997	0.997	0.997	1.000	0.991	0.997	0.991	0.997	0.991	0.994	0.988	0.997	0.991	1.000	0.994	1.000
48	1.003	1.003	1.003	1.000	1.003	0.997	1.003	0.997	1.000	0.994	1.003	0.997	1.000	0.994	1.003	0.994	1.000	0.997	1.000	1.000
49	1.003	1.000	1.003	0.997	1.003	0.997	1.003	0.997	1.003	0.997	1.003	0.997	1.003	0.997	1.003	0.997	1.003	1.000	1.003	0.997
50	1.006	1.000	1.003	1.000	1.003	1.000	1.003	0.997	1.003	0.997	1.003	1.000	1.003	1.000	1.003	1.000	1.003	0.997	1.003	1.000
51	0.997	1.003	1.000	1.003	1.003	1.003	1.000	1.003	1.000	1.003	1.000	1.003	1.000	1.003	0.997	1.003	1.000	1.003	1.000	1.003
52	1.006	1.003	1.006	1.000	1.003	0.997	0.997	0.994	0.997	0.994	0.997	0.994	0.997	0.991	0.997	0.991	0.997	0.988	0.991	0.988
53	0.997	1.003	0.994	1.003	0.997	0.994	0.985	0.988	0.985	0.988	0.981	0.985	0.985	0.981	0.978	0.981	0.978	0.981	0.974	0.981
54	1.006	0.997	1.003	0.997	0.997	0.985	0.988	0.978	0.981	0.971	0.978	0.971	0.978	0.974	0.981	0.971	0.978	0.967	0.978	0.967
55	1.006	1.006	1.003	1.003	0.997	0.997	0.991	0.988	0.981	0.981	0.978	0.978	0.974	0.981	0.971	0.978	0.971	0.974	0.971	0.974
56	1.009	1.003	1.006	1.000	1.003	0.994	0.994	0.985	0.988	0.978	0.981	0.974	0.978	0.971	0.978	0.971	0.974	0.967	0.974	0.963
57	1.000	0.997	1.000	0.994	0.994	0.988	0.988	0.981	0.985	0.974	0.978	0.974	0.978	0.971	0.978	0.971	0.974	0.967	0.974	0.967
58	0.997	0.991	0.997	0.991	0.994	0.988	0.991	0.985	0.991	0.985	0.994	0.985	0.988	0.985	0.988	0.985	0.988	0.985	0.988	0.985
59	0.988	0.991	0.985	0.988	0.985	0.985	0.981	0.985	0.985	0.985	0.978	0.985	0.978	0.981	0.978	0.985	0.974	0.981	0.971	0.981
60	0.991	0.985	0.991	0.985	0.988	0.981	0.988	0.985	0.985	0.981	0.985	0.978	0.985	0.978	0.985	0.978	0.981	0.981	0.985	0.981
61	0.988	0.985	0.985	0.988	0.978	0.981	0.974	0.981	0.974	0.981	0.974	0.978	0.974	0.978	0.974	0.981	0.974	0.981	0.974	0.985
62	0.988	0.988	0.988	0.988	0.985	0.988	0.981	0.981	0.991	0.985	0.981	0.978	0.971	0.981	0.974	0.978	0.974	0.978	0.974	0.978
63	0.991	0.985	0.991	0.985	0.988	0.981	0.988	0.985	0.988	0.985	0.985	0.981	0.988	0.981	0.985	0.978	0.985	0.985	0.985	0.978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 43

IR SCAN TIME 17.36 SEC
INITIAL TEMP 547.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.967	0.971	0.963	0.967	0.967	0.967	0.967	0.971	0.963	0.967
30	0.974	0.971	0.971	0.963	0.971	0.963	0.967	0.967	0.971	0.963
31	0.963	0.967	0.967	0.967	0.967	0.967	0.963	0.967	0.963	0.967
32	0.963	0.967	0.959	0.963	0.959	0.963	0.959	0.963	0.963	0.967
33	0.967	0.955	0.967	0.959	0.967	0.959	0.967	0.967	0.971	0.967
34	0.963	0.955	0.963	0.959	0.967	0.963	0.967	0.963	0.967	0.955
35	0.967	0.967	0.963	0.967	0.963	0.971	0.963	0.967	0.967	0.967
36	0.971	0.971	0.971	0.967	0.971	0.963	0.971	0.959	0.971	0.963
37	0.971	0.971	0.967	0.974	0.967	0.971	0.967	0.971	0.967	0.971
38	0.971	0.974	0.971	0.974	0.971	0.974	0.971	0.974	0.971	0.978
39	0.978	0.971	0.978	0.971	0.978	0.971	0.974	0.971	0.978	0.967
40	0.967	0.974	0.967	0.974	0.967	0.981	0.971	0.978	0.971	0.978
41	0.971	0.974	0.971	0.974	0.971	0.974	0.971	0.978	0.967	0.978
42	0.971	0.974	0.974	0.974	0.971	0.974	0.974	0.978	0.974	0.978
43	0.981	0.971	0.978	0.974	0.981	0.974	0.981	0.974	0.981	0.974
44	0.978	0.981	0.981	0.981	0.981	0.981	0.981	0.978	0.978	0.985
45	0.991	0.988	0.991	0.985	0.988	0.985	0.991	0.988	0.991	0.985
46	0.994	0.994	0.994	0.991	0.994	0.994	0.994	0.991	0.997	0.988
47	0.991	0.997	0.991	1.000	0.997	1.000	0.994	1.000	0.994	0.994
48	1.003	0.997	1.000	0.994	0.997	0.994	1.000	0.991	1.000	0.991
49	1.000	0.997	1.003	0.997	1.000	0.994	1.000	0.997	1.000	0.994
50	1.003	1.000	1.003	0.997	1.006	0.997	1.003	0.997	1.003	0.997
51	1.003	1.000	0.994	1.000	0.997	1.000	0.997	1.000	0.997	0.997
52	0.991	0.988	0.991	0.985	0.991	0.985	0.991	0.985	0.991	0.985
53	0.974	0.981	0.978	0.978	0.974	0.974	0.974	0.974	0.971	0.974
54	0.978	0.971	0.978	0.967	0.971	0.967	0.971	0.963	0.971	0.963
55	0.967	0.971	0.967	0.974	0.955	0.971	0.955	0.971	0.955	0.967
56	0.971	0.963	0.971	0.967	0.971	0.967	0.971	0.963	0.967	0.963
57	0.974	0.967	0.967	0.971	0.974	0.971	0.974	0.967	0.971	0.967
58	0.985	0.981	0.985	0.981	0.985	0.981	0.986	0.981	0.988	0.981
59	0.971	0.978	0.974	0.981	0.978	0.981	0.981	0.978	0.978	0.981
60	0.985	0.985	0.985	0.978	0.985	0.981	0.985	0.981	0.988	0.978
61	0.978	0.985	0.978	0.981	0.978	0.978	0.971	0.978	0.974	0.981
62	0.974	0.981	0.971	0.978	0.971	0.978	0.967	0.978	0.971	0.981
63	0.981	0.978	0.981	0.974	0.978	0.974	0.981	0.974	0.978	0.974

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 17.36 SEC
GROUP 43 INITIAL TEMP 547.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.981	0.985	0.988	0.985	0.988	0.991	0.994	0.991	0.997	0.988	1.000	0.991	1.000	1.033	1.136	1.189	1.212	1.223	1.235	1.239
65	0.981	0.974	0.985	0.981	0.985	0.981	0.988	0.981	0.985	0.985	0.991	0.988	1.003	1.054	1.151	1.194	1.213	1.225	1.235	1.239
66	0.967	0.967	0.974	0.967	0.974	0.967	0.974	0.971	0.974	0.974	0.981	0.981	1.003	1.064	1.167	1.197	1.215	1.225	1.234	1.241
67	0.955	0.959	0.955	0.959	0.955	0.963	0.959	0.967	0.959	0.967	0.967	0.978	1.009	1.111	1.174	1.197	1.210	1.220	1.226	1.234
68	0.955	0.946	0.955	0.946	0.955	0.950	0.959	0.955	0.963	0.959	0.967	0.974	1.040	1.131	1.175	1.191	1.206	1.212	1.220	1.226
69	0.950	0.950	0.946	0.955	0.950	0.959	0.955	0.959	0.955	0.963	0.963	0.991	1.069	1.149	1.178	1.195	1.204	1.213	1.220	1.227
70	0.955	0.963	0.959	0.936	0.959	0.955	0.963	0.959	0.967	0.959	0.971	0.994	1.087	1.155	1.181	1.194	1.206	1.212	1.219	1.224
71	0.950	0.955	0.946	0.959	0.955	0.959	0.959	0.963	0.955	0.963	0.959	1.011	1.102	1.164	1.184	1.199	1.207	1.215	1.220	1.227
72	0.955	0.955	0.950	0.955	0.955	0.963	0.959	0.963	0.959	0.963	0.963	1.011	1.110	1.167	1.187	1.200	1.209	1.215	1.222	1.229
73	0.950	0.950	0.950	0.955	0.955	0.963	0.955	0.963	0.959	0.963	0.967	1.029	1.125	1.174	1.191	1.203	1.212	1.218	1.225	1.232
74	0.950	0.950	0.950	0.950	0.955	0.959	0.959	0.963	0.955	0.963	0.974	1.064	1.143	1.179	1.193	1.204	1.212	1.219	1.225	1.233
75	0.955	0.950	0.955	0.955	0.959	0.946	0.959	0.950	0.959	0.963	0.991	1.079	1.140	1.165	1.178	1.185	1.193	1.198	1.204	1.209
76	0.955	0.955	0.955	0.959	0.955	0.955	0.955	0.959	0.955	0.963	1.003	1.087	1.126	1.141	1.149	1.157	1.161	1.166	1.169	1.174
77	0.955	0.955	0.963	0.955	0.963	0.955	0.963	0.955	0.959	0.963	1.024	1.084	1.111	1.118	1.125	1.130	1.133	1.133	1.140	1.142
78	0.963	0.978	0.985	0.981	0.981	0.985	0.978	0.985	0.963	0.971	1.024	1.081	1.093	1.107	1.109	1.114	1.115	1.119	1.118	1.121
79	0.978	1.000	1.003	0.981	0.988	0.985	0.974	0.963	0.981	0.994	1.042	1.077	1.093	1.099	1.104	1.107	1.111	1.112	1.115	1.119
80	0.994	1.022	1.024	0.994	0.991	0.994	0.997	0.991	0.985	0.991	1.044	1.079	1.094	1.097	1.106	1.107	1.111	1.112	1.116	1.116
81	1.011	1.033	1.050	1.019	1.003	0.991	0.997	0.997	1.000	1.011	1.062	1.085	1.099	1.102	1.107	1.109	1.112	1.114	1.118	1.119
82	1.069	1.071	1.082	1.064	1.026	0.997	0.985	0.981	1.003	1.024	1.074	1.092	1.102	1.104	1.110	1.110	1.114	1.114	1.116	1.118
83	1.074	1.071	1.096	1.092	1.038	1.009	0.981	0.963	0.974	1.044	1.094	1.109	1.111	1.112	1.112	1.114	1.114	1.116	1.116	1.119
84	1.033	1.024	1.042	1.042	1.022	1.000	0.988	0.988	1.011	1.076	1.133	1.153	1.155	1.151	1.151	1.143	1.138	1.129	1.125	1.124
85	1.022	1.019	1.014	1.024	1.011	1.003	0.997	1.014	1.014	1.019	1.014	1.024	1.014	1.022	1.019	1.029	1.033	1.048	1.062	1.079
86	0.997	1.000	1.006	1.006	1.003	0.997	1.006	1.009	1.019	1.014	1.017	1.014	1.017	1.011	1.011	1.014	1.011	1.006	1.011	1.009
87	0.971	0.965	0.988	0.991	0.994	0.991	1.000	1.017	1.022	1.003	1.006	1.003	1.014	1.014	1.006	1.009	1.009	1.009	1.009	1.011
88	0.974	0.967	0.963	0.971	0.978	0.985	0.991	1.011	1.017	1.017	1.014	1.014	1.011	1.014	1.009	1.009	1.003	1.006	1.003	1.009
89	0.955	0.963	0.959	0.974	0.981	0.985	0.988	1.006	1.014	1.014	1.011	1.011	1.011	1.009	1.003	1.006	1.000	1.003	1.000	1.000
90	0.950	0.950	0.955	0.971	0.978	0.978	0.985	1.000	1.009	1.011	1.009	1.009	1.006	1.006	1.000	1.003	0.997	1.000	1.000	1.000
91	0.950	0.955	0.959	0.967	0.971	0.971	0.981	0.991	1.009	1.006	1.006	1.006	1.009	1.003	1.006	1.003	1.003	1.003	1.003	1.000
92	0.946	0.946	0.941	0.963	0.959	0.974	0.971	0.994	1.003	1.009	1.006	1.009	1.000	1.009	1.003	1.003	0.997	1.006	0.997	1.000
93	0.967	0.959	0.971	0.967	0.978	0.978	0.988	0.994	1.011	1.006	1.014	1.006	1.009	1.006	1.009	1.009	1.009	1.006	1.003	0.991
94	0.994	0.997	0.994	0.997	0.994	0.997	0.994	1.006	1.011	1.011	1.009	1.014	1.014	1.011	1.011	1.011	1.009	1.003	0.997	0.997
95	1.000	1.000	1.009	1.003	1.009	1.003	1.006	1.006	1.019	1.014	1.017	1.014	1.019	1.017	1.019	1.017	1.019	1.009	1.003	1.000
96	1.014	1.009	1.011	1.011	1.011	1.009	1.006	1.009	1.022	1.019	1.022	1.022	1.026	1.024	1.029	1.024	1.026	1.017	1.011	1.003
97	1.011	1.006	1.017	1.014	1.019	1.011	1.011	1.014	1.024	1.019	1.022	1.024	1.026	1.026	1.033	1.026	1.029	1.017	1.011	1.003
98	1.011	1.011	1.019	1.011	1.022	1.011	1.011	1.006	1.024	1.014	1.019	1.019	1.029	1.031	1.031	1.029	1.026	1.019	1.019	1.011

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
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50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 43

IR SCAN TIME 17.36 SEC
INITIAL TEMP 547.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	1.246	1.251	1.258	1.263	1.273	1.282	1.293	1.304	1.316	1.323	1.329	1.336	1.347	1.352	1.357	1.360	1.362	1.360	1.350	1.327
65	1.245	1.251	1.260	1.266	1.275	1.283	1.292	1.298	1.315	1.323	1.329	1.332	1.344	1.345	1.350	1.353	1.361	1.363	1.366	1.367
66	1.247	1.253	1.262	1.269	1.279	1.287	1.297	1.306	1.316	1.328	1.337	1.337	1.341	1.346	1.350	1.352	1.357	1.358	1.358	1.360
67	1.239	1.246	1.253	1.261	1.269	1.278	1.288	1.299	1.309	1.322	1.332	1.338	1.339	1.340	1.344	1.350	1.350	1.350	1.351	1.355
68	1.232	1.237	1.246	1.252	1.262	1.270	1.279	1.290	1.304	1.316	1.331	1.342	1.347	1.350	1.351	1.353	1.357	1.359	1.363	1.363
69	1.231	1.239	1.245	1.252	1.261	1.269	1.274	1.283	1.291	1.305	1.317	1.329	1.335	1.344	1.349	1.353	1.356	1.360	1.363	1.365
70	1.232	1.237	1.246	1.251	1.261	1.269	1.277	1.281	1.289	1.299	1.308	1.316	1.322	1.324	1.327	1.331	1.337	1.341	1.347	1.351
71	1.230	1.237	1.244	1.252	1.256	1.265	1.272	1.279	1.286	1.295	1.303	1.308	1.315	1.318	1.318	1.321	1.323	1.327	1.329	1.331
72	1.233	1.239	1.244	1.251	1.257	1.264	1.271	1.280	1.286	1.295	1.302	1.309	1.312	1.315	1.314	1.315	1.317	1.322	1.323	1.326
73	1.236	1.244	1.248	1.255	1.263	1.272	1.278	1.288	1.293	1.299	1.304	1.308	1.314	1.320	1.320	1.319	1.318	1.319	1.321	1.323
74	1.237	1.245	1.249	1.256	1.263	1.273	1.280	1.287	1.295	1.303	1.307	1.315	1.321	1.326	1.325	1.324	1.323	1.322	1.323	1.327
75	1.214	1.218	1.229	1.233	1.241	1.248	1.257	1.264	1.273	1.280	1.287	1.292	1.297	1.302	1.306	1.310	1.315	1.319	1.321	1.322
76	1.178	1.184	1.187	1.193	1.198	1.204	1.209	1.213	1.217	1.225	1.229	1.234	1.239	1.244	1.247	1.252	1.255	1.260	1.265	1.271
77	1.148	1.149	1.153	1.156	1.159	1.161	1.165	1.167	1.170	1.170	1.172	1.175	1.179	1.179	1.182	1.182	1.184	1.185	1.190	1.190
78	1.125	1.129	1.132	1.131	1.132	1.136	1.138	1.141	1.140	1.142	1.140	1.142	1.140	1.142	1.140	1.143	1.142	1.147	1.146	1.148
79	1.120	1.123	1.124	1.121	1.127	1.125	1.133	1.126	1.130	1.129	1.132	1.127	1.132	1.129	1.133	1.131	1.133	1.131	1.136	1.136
80	1.120	1.121	1.124	1.125	1.127	1.129	1.131	1.129	1.131	1.131	1.133	1.132	1.134	1.133	1.133	1.130	1.131	1.132	1.132	1.131
81	1.121	1.123	1.125	1.127	1.130	1.129	1.131	1.132	1.134	1.136	1.138	1.136	1.137	1.134	1.136	1.133	1.136	1.134	1.136	1.134
82	1.121	1.123	1.126	1.131	1.131	1.130	1.133	1.133	1.136	1.136	1.138	1.136	1.138	1.134	1.138	1.134	1.138	1.138	1.141	1.140
83	1.120	1.124	1.126	1.129	1.131	1.136	1.138	1.142	1.141	1.143	1.142	1.143	1.141	1.143	1.141	1.141	1.140	1.141	1.139	1.141
84	1.121	1.121	1.125	1.129	1.132	1.132	1.140	1.141	1.144	1.144	1.149	1.148	1.149	1.146	1.148	1.146	1.149	1.148	1.149	1.149
85	1.076	1.087	1.099	1.114	1.123	1.129	1.125	1.129	1.131	1.148	1.171	1.167	1.140	1.126	1.126	1.126	1.130	1.131	1.133	1.132
86	1.009	1.003	1.009	1.003	1.011	1.003	1.009	1.003	1.006	1.003	1.009	1.003	1.009	1.003	1.006	1.000	1.006	1.003	1.006	1.003
87	1.006	1.009	1.006	1.006	1.003	1.009	1.006	1.009	1.006	1.003	1.003	1.003	1.006	1.003	1.003	1.003	1.003	1.000	1.003	1.003
88	1.009	1.009	1.006	1.009	1.006	1.009	1.006	1.009	1.003	1.006	1.003	1.003	1.000	1.000	0.997	1.003	0.997	1.000	0.997	0.997
89	1.000	1.003	1.000	1.003	1.006	1.003	1.009	1.009	1.003	1.009	1.003	1.006	1.003	1.006	0.997	1.003	0.997	1.000	0.997	1.000
90	0.997	1.000	0.997	1.000	0.997	1.003	1.003	1.003	1.003	1.006	1.003	1.009	1.009	1.009	1.000	1.003	1.000	1.000	0.997	1.000
91	1.000	0.997	0.997	1.000	1.003	1.003	1.006	1.003	1.003	1.003	1.024	1.082	1.118	1.079	1.026	1.003	1.000	0.994	1.000	0.994
92	0.997	1.003	1.003	1.003	1.000	1.003	1.003	1.003	1.003	1.006	1.009	1.058	1.084	1.058	1.017	1.003	0.997	0.997	0.994	1.000
93	1.003	0.985	1.000	0.988	1.003	0.988	1.003	0.994	1.006	0.994	1.006	0.991	1.003	0.988	1.000	0.997	1.000	0.994	1.000	0.997
94	0.991	0.997	0.997	1.000	1.003	1.006	1.003	1.006	1.006	1.009	1.006	1.003	1.000	1.000	0.997	0.997	0.994	1.000	0.988	0.997
95	1.003	0.997	1.003	1.000	1.006	1.003	1.011	1.009	1.011	1.009	1.014	1.006	1.009	1.003	1.003	0.997	1.003	0.997	1.000	0.997
96	1.003	0.997	1.006	1.006	1.009	1.009	1.014	1.011	1.017	1.011	1.019	1.011	1.014	1.006	1.006	0.997	1.003	0.997	1.000	0.994
97	1.006	1.003	1.009	1.009	1.014	1.011	1.014	1.011	1.019	1.014	1.019	1.014	1.017	1.009	1.011	1.003	1.006	1.000	1.003	0.997
98	1.017	1.011	1.014	1.011	1.017	1.014	1.014	1.014	1.014	1.011	1.017	1.011	1.017	1.009	1.014	1.003	1.006	1.003	1.003	0.997

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 43

IR SCAN TIME 17.36 SEC
INITIAL TEMP 547.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	1.296	1.260	1.232	1.222	1.237	1.269	1.311	1.358	1.401	1.410	1.412	1.414	1.412	1.406	1.373	1.308	1.237	1.191	1.167	1.096
65	1.370	1.363	1.344	1.308	1.263	1.224	1.203	1.201	1.215	1.238	1.277	1.319	1.355	1.381	1.399	1.398	1.368	1.308	1.239	1.184
66	1.362	1.363	1.364	1.364	1.361	1.349	1.323	1.290	1.249	1.206	1.189	1.179	1.183	1.193	1.222	1.266	1.320	1.361	1.369	1.327
67	1.356	1.357	1.356	1.357	1.362	1.372	1.379	1.385	1.375	1.343	1.302	1.259	1.224	1.206	1.197	1.191	1.185	1.195	1.230	1.283
68	1.365	1.366	1.369	1.367	1.366	1.373	1.385	1.397	1.397	1.386	1.375	1.356	1.326	1.285	1.247	1.220	1.206	1.198	1.193	1.185
69	1.366	1.368	1.370	1.374	1.376	1.384	1.395	1.410	1.404	1.388	1.380	1.378	1.374	1.364	1.344	1.317	1.280	1.244	1.217	1.209
70	1.357	1.362	1.369	1.373	1.378	1.385	1.396	1.413	1.410	1.394	1.385	1.377	1.374	1.372	1.366	1.361	1.359	1.348	1.324	1.292
71	1.332	1.334	1.337	1.341	1.341	1.344	1.358	1.383	1.383	1.379	1.377	1.375	1.374	1.375	1.374	1.371	1.371	1.371	1.373	1.374
72	1.326	1.328	1.327	1.325	1.321	1.320	1.323	1.331	1.321	1.307	1.308	1.319	1.329	1.341	1.351	1.360	1.364	1.367	1.372	1.377
73	1.325	1.326	1.323	1.320	1.320	1.326	1.335	1.349	1.357	1.337	1.311	1.288	1.264	1.246	1.234	1.239	1.244	1.259	1.276	1.296
74	1.332	1.336	1.338	1.337	1.335	1.338	1.350	1.365	1.373	1.359	1.347	1.341	1.332	1.319	1.298	1.276	1.246	1.215	1.189	1.173
75	1.326	1.330	1.337	1.341	1.342	1.348	1.360	1.374	1.374	1.362	1.358	1.354	1.351	1.346	1.341	1.335	1.329	1.320	1.307	1.284
76	1.276	1.283	1.289	1.297	1.304	1.313	1.324	1.337	1.326	1.328	1.340	1.343	1.344	1.344	1.344	1.346	1.345	1.344	1.339	1.334
77	1.195	1.198	1.201	1.203	1.206	1.208	1.214	1.218	1.225	1.223	1.225	1.229	1.239	1.247	1.256	1.265	1.278	1.287	1.297	1.306
78	1.147	1.149	1.148	1.149	1.150	1.152	1.153	1.156	1.155	1.152	1.144	1.144	1.143	1.143	1.142	1.143	1.142	1.146	1.148	1.153
79	1.138	1.138	1.140	1.140	1.142	1.141	1.144	1.143	1.147	1.141	1.138	1.133	1.134	1.131	1.131	1.130	1.129	1.129	1.125	1.124
80	1.133	1.132	1.136	1.133	1.138	1.136	1.140	1.140	1.144	1.141	1.139	1.132	1.134	1.132	1.132	1.127	1.131	1.131	1.127	1.126
81	1.138	1.136	1.138	1.137	1.140	1.139	1.143	1.143	1.146	1.143	1.141	1.138	1.136	1.136	1.133	1.129	1.129	1.129	1.126	1.124
82	1.143	1.141	1.144	1.143	1.146	1.144	1.149	1.150	1.154	1.153	1.151	1.144	1.146	1.141	1.142	1.136	1.136	1.131	1.129	1.126
83	1.140	1.141	1.141	1.143	1.143	1.148	1.144	1.148	1.149	1.154	1.150	1.150	1.148	1.149	1.144	1.144	1.141	1.141	1.138	1.137
84	1.151	1.149	1.150	1.148	1.150	1.147	1.149	1.148	1.150	1.150	1.150	1.143	1.146	1.141	1.142	1.139	1.137	1.132	1.133	1.132
85	1.136	1.142	1.144	1.147	1.147	1.151	1.152	1.156	1.155	1.157	1.155	1.150	1.147	1.147	1.142	1.140	1.136	1.133	1.130	1.131
86	1.009	1.006	1.009	1.009	1.014	1.009	1.017	1.011	1.022	1.024	1.033	1.031	1.031	1.029	1.029	1.029	1.029	1.029	1.033	1.029
87	0.997	1.003	1.003	1.000	1.000	1.000	1.003	1.003	0.994	1.000	0.997	1.003	0.994	1.000	0.994	1.000	0.994	0.994	0.988	0.991
88	0.997	1.000	1.000	1.000	0.997	1.003	0.994	0.997	0.991	0.997	0.991	0.997	0.991	0.991	0.988	0.988	0.985	0.985	0.974	0.985
89	1.000	1.000	0.997	1.000	0.997	0.997	0.994	0.994	0.991	0.994	0.994	0.994	0.991	0.991	0.991	0.991	0.988	0.985	0.985	0.988
90	1.000	1.000	0.997	1.000	1.000	1.000	0.997	0.997	0.991	0.997	0.991	0.997	0.991	0.997	0.988	0.991	0.985	0.988	0.985	0.985
91	1.000	0.997	0.997	0.997	1.000	0.997	0.997	0.997	1.000	0.997	1.009	1.036	1.050	1.022	1.003	0.991	0.991	0.985	0.988	0.985
92	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.994	1.000	1.009	1.056	1.069	1.038	1.003	0.994	0.985	0.988	0.985	0.988
93	1.003	0.997	1.003	0.997	1.003	0.997	1.006	0.997	0.997	0.994	0.997	0.994	1.000	0.994	0.994	0.988	0.991	0.981	0.988	0.985
94	0.991	0.991	0.991	0.997	0.994	1.000	0.997	1.000	0.991	0.994	0.985	0.991	0.981	0.991	0.985	0.991	0.985	0.985	0.981	0.988
95	0.997	0.994	1.000	0.997	1.003	1.000	1.003	1.000	1.003	0.994	1.000	0.991	0.994	0.988	0.988	0.981	0.985	0.978	0.988	0.981
96	1.000	0.997	1.000	0.994	1.003	0.997	1.006	1.000	1.006	0.997	1.003	0.994	0.997	0.991	0.991	0.988	0.991	0.985	0.988	0.981
97	1.003	1.000	1.003	0.997	1.003	1.000	1.006	1.000	1.003	0.997	1.003	0.994	0.994	0.988	0.991	0.988	0.991	0.985	0.988	0.985
98	1.003	0.994	1.000	0.997	1.000	0.997	1.003	1.000	1.006	1.000	1.000	0.991	0.997	0.988	0.991	0.985	0.991	0.985	0.988	0.985

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
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MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 43

IR SCAN TIME 17.36 SEC
INITIAL TEMP 547.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	1.042	1.019	1.014	1.009	1.006	0.994	1.000	0.991	0.994	0.988	0.991	0.988	0.994	0.988	0.991	0.988	0.991	0.988	0.991	0.985
65	1.126	1.056	1.026	1.011	1.011	1.003	1.003	0.991	0.988	0.985	0.988	0.985	0.991	0.988	0.988	0.985	0.988	0.981	0.985	0.981
66	1.257	1.174	1.090	1.036	1.019	1.009	1.009	0.997	0.991	0.981	0.985	0.981	0.985	0.981	0.981	0.978	0.978	0.974	0.978	0.974
67	1.317	1.314	1.274	1.197	1.081	1.031	1.006	1.009	0.989	0.985	0.967	0.971	0.959	0.971	0.963	0.971	0.959	0.967	0.955	0.967
68	1.186	1.204	1.238	1.252	1.202	1.099	1.044	1.014	1.009	0.997	0.985	0.967	0.967	0.959	0.963	0.955	0.963	0.955	0.963	0.955
69	1.202	1.200	1.197	1.197	1.202	1.179	1.110	1.048	1.014	1.006	0.994	0.985	0.967	0.967	0.963	0.967	0.959	0.959	0.955	0.959
70	1.259	1.229	1.217	1.217	1.220	1.218	1.203	1.133	1.054	1.014	1.009	1.000	0.994	0.971	0.967	0.959	0.963	0.955	0.959	0.950
71	1.367	1.357	1.330	1.290	1.250	1.220	1.209	1.201	1.153	1.076	1.024	1.009	1.003	0.997	0.978	0.971	0.963	0.967	0.963	0.963
72	1.377	1.378	1.379	1.375	1.361	1.338	1.304	1.266	1.232	1.190	1.116	1.044	1.011	1.003	0.997	0.985	0.967	0.967	0.955	0.959
73	1.312	1.326	1.337	1.343	1.348	1.354	1.358	1.357	1.335	1.301	1.256	1.180	1.081	1.029	1.003	1.003	0.985	0.971	0.963	0.959
74	1.168	1.172	1.182	1.199	1.216	1.242	1.265	1.290	1.309	1.328	1.329	1.314	1.249	1.144	1.064	1.022	0.994	0.994	0.974	0.967
75	1.257	1.221	1.189	1.165	1.152	1.146	1.147	1.147	1.154	1.162	1.178	1.199	1.227	1.218	1.138	1.044	1.011	0.997	0.991	0.974
76	1.330	1.324	1.313	1.296	1.272	1.241	1.206	1.176	1.155	1.143	1.139	1.138	1.134	1.139	1.133	1.092	1.029	1.006	0.991	0.991
77	1.314	1.321	1.326	1.326	1.326	1.325	1.322	1.312	1.295	1.264	1.225	1.184	1.158	1.143	1.143	1.134	1.100	1.038	1.006	0.991
78	1.159	1.168	1.179	1.193	1.209	1.227	1.245	1.262	1.276	1.290	1.296	1.293	1.277	1.254	1.223	1.193	1.162	1.124	1.064	1.014
79	1.124	1.121	1.121	1.120	1.120	1.118	1.121	1.123	1.126	1.129	1.139	1.150	1.168	1.180	1.188	1.192	1.197	1.190	1.171	1.115
80	1.126	1.120	1.121	1.119	1.121	1.116	1.118	1.115	1.119	1.118	1.121	1.118	1.120	1.119	1.121	1.121	1.124	1.129	1.138	1.144
81	1.124	1.118	1.119	1.115	1.119	1.114	1.116	1.112	1.114	1.110	1.116	1.116	1.120	1.115	1.119	1.116	1.119	1.116	1.119	1.118
82	1.123	1.120	1.116	1.115	1.115	1.112	1.112	1.112	1.112	1.111	1.111	1.110	1.114	1.114	1.112	1.112	1.115	1.110	1.114	1.114
83	1.130	1.129	1.124	1.121	1.118	1.116	1.112	1.114	1.111	1.110	1.110	1.110	1.107	1.107	1.106	1.106	1.107	1.109	1.109	1.112
84	1.132	1.131	1.132	1.127	1.127	1.126	1.129	1.124	1.123	1.123	1.121	1.119	1.120	1.116	1.116	1.112	1.112	1.111	1.111	1.111
85	1.131	1.126	1.126	1.129	1.126	1.124	1.123	1.124	1.124	1.123	1.123	1.125	1.126	1.127	1.129	1.132	1.129	1.130	1.131	1.134
86	1.036	1.033	1.040	1.040	1.046	1.044	1.048	1.050	1.052	1.050	1.056	1.052	1.056	1.058	1.064	1.064	1.069	1.067	1.076	1.079
87	0.988	0.991	0.991	0.997	0.991	0.994	0.988	0.994	0.991	0.994	0.988	0.994	0.991	0.988	0.988	0.988	0.985	0.985	0.988	0.988
88	0.974	0.988	0.978	0.985	0.978	0.988	0.978	0.981	0.978	0.981	0.978	0.985	0.978	0.988	0.985	0.988	0.985	0.985	0.978	0.985
89	0.985	0.985	0.985	0.988	0.985	0.988	0.985	0.981	0.981	0.981	0.981	0.981	0.978	0.978	0.974	0.978	0.971	0.981	0.974	0.981
90	0.985	0.988	0.985	0.985	0.985	0.988	0.981	0.985	0.981	0.981	0.978	0.981	0.974	0.978	0.981	0.991	0.988	0.985	0.978	0.981
91	0.988	0.985	0.985	0.985	0.988	0.981	0.985	0.981	0.988	0.991	1.014	1.003	0.991	0.974	0.978	0.971	0.981	0.974	0.981	0.974
92	0.985	0.985	0.978	0.981	0.978	0.985	0.981	0.985	0.985	1.011	1.038	1.033	1.003	0.985	0.974	0.981	0.974	0.978	0.971	0.974
93	0.985	0.985	0.988	0.981	0.985	0.981	0.985	0.981	0.985	0.981	0.991	0.985	0.985	0.974	0.978	0.971	0.981	0.974	0.985	0.978
94	0.985	0.991	0.985	0.985	0.981	0.985	0.985	0.985	0.978	0.988	0.981	0.985	0.978	0.981	0.974	0.981	0.974	0.978	0.974	0.978
95	0.985	0.978	0.985	0.978	0.985	0.974	0.985	0.974	0.985	0.974	0.981	0.978	0.985	0.978	0.981	0.978	0.985	0.974	0.985	0.978
96	0.985	0.981	0.985	0.978	0.985	0.978	0.985	0.978	0.985	0.981	0.985	0.974	0.981	0.971	0.981	0.971	0.976	0.967	0.981	0.974
97	0.988	0.981	0.988	0.985	0.985	0.978	0.985	0.981	0.988	0.985	0.988	0.981	0.981	0.978	0.985	0.981	0.985	0.985	0.988	0.985
98	0.988	0.981	0.985	0.978	0.988	0.981	0.985	0.978	0.985	0.981	0.988	0.985	0.985	0.981	0.991	0.997	1.003	0.991	0.991	0.985

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
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VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 43

IR SCAN TIME 17.36 SEC
INITIAL TEMP 547.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.991	0.985	0.991	0.985	0.988	0.985	0.985	0.985	0.988	0.978	0.985	0.978	0.985	0.981	0.985	0.981	0.985	0.978	0.985	0.978
65	0.985	0.985	0.985	0.985	0.988	0.985	0.985	0.981	0.985	0.981	0.985	0.978	0.981	0.974	0.981	0.971	0.978	0.971	0.978	0.971
66	0.978	0.971	0.978	0.971	0.978	0.974	0.978	0.971	0.974	0.971	0.974	0.971	0.971	0.967	0.971	0.963	0.967	0.963	0.967	0.959
67	0.963	0.971	0.963	0.974	0.967	0.967	0.959	0.963	0.959	0.963	0.959	0.963	0.959	0.959	0.955	0.963	0.950	0.959	0.950	0.955
68	0.963	0.950	0.963	0.950	0.963	0.946	0.959	0.941	0.955	0.946	0.955	0.941	0.950	0.941	0.950	0.936	0.950	0.946	0.950	0.936
69	0.959	0.959	0.950	0.959	0.946	0.955	0.946	0.950	0.950	0.950	0.946	0.950	0.941	0.946	0.936	0.946	0.941	0.941	0.941	0.950
70	0.959	0.955	0.959	0.950	0.959	0.950	0.959	0.946	0.955	0.946	0.955	0.946	0.955	0.946	0.955	0.946	0.955	0.941	0.946	0.941
71	0.955	0.959	0.955	0.959	0.955	0.959	0.950	0.959	0.950	0.955	0.946	0.955	0.950	0.950	0.941	0.946	0.941	0.941	0.941	0.946
72	0.959	0.959	0.955	0.963	0.955	0.959	0.950	0.955	0.946	0.955	0.946	0.950	0.946	0.950	0.946	0.946	0.941	0.946	0.946	0.946
73	0.959	0.959	0.950	0.955	0.946	0.950	0.955	0.955	0.946	0.955	0.946	0.950	0.946	0.950	0.946	0.950	0.946	0.946	0.941	0.946
74	0.955	0.959	0.955	0.955	0.950	0.955	0.950	0.955	0.946	0.955	0.946	0.955	0.946	0.950	0.950	0.950	0.946	0.946	0.946	0.950
75	0.967	0.950	0.959	0.941	0.955	0.941	0.955	0.941	0.955	0.941	0.950	0.941	0.950	0.936	0.950	0.946	0.955	0.946	0.950	0.946
76	0.985	0.974	0.959	0.959	0.950	0.950	0.950	0.950	0.950	0.955	0.946	0.950	0.946	0.950	0.946	0.950	0.941	0.946	0.936	0.950
77	0.991	0.988	0.988	0.971	0.963	0.950	0.955	0.946	0.955	0.950	0.955	0.950	0.955	0.946	0.955	0.941	0.950	0.941	0.946	0.941
78	0.994	0.988	0.985	0.988	0.985	0.974	0.955	0.955	0.946	0.941	0.941	0.946	0.941	0.946	0.941	0.941	0.936	0.941	0.936	0.946
79	1.052	1.014	0.997	0.985	0.988	0.985	0.988	0.981	0.974	0.959	0.955	0.941	0.950	0.941	0.941	0.936	0.941	0.941	0.946	0.936
80	1.136	1.082	1.024	0.997	0.994	0.988	0.988	0.985	0.988	0.985	0.985	0.974	0.974	0.963	0.963	0.946	0.950	0.941	0.950	0.946
81	1.121	1.111	1.079	1.019	0.997	0.985	0.985	0.978	0.981	0.974	0.978	0.978	0.981	0.974	0.981	0.971	0.971	0.963	0.963	0.955
82	1.116	1.116	1.119	1.088	1.042	0.991	0.988	0.974	0.981	0.974	0.978	0.974	0.978	0.974	0.981	0.971	0.978	0.974	0.981	0.974
83	1.115	1.118	1.119	1.119	1.104	1.082	1.006	0.985	0.971	0.974	0.971	0.974	0.967	0.974	0.971	0.978	0.959	0.974	0.959	0.974
84	1.112	1.112	1.118	1.118	1.119	1.106	1.076	1.022	0.991	0.978	0.974	0.971	0.974	0.971	0.974	0.971	0.974	0.967	0.974	0.971
85	1.131	1.133	1.130	1.130	1.127	1.126	1.114	1.088	1.040	0.997	0.978	0.974	0.967	0.971	0.967	0.978	0.974	0.978	0.974	0.978
86	1.084	1.084	1.088	1.084	1.088	1.088	1.087	1.081	1.069	1.029	0.994	0.978	0.978	0.971	0.974	0.971	0.974	0.967	0.978	0.971
87	0.985	0.988	0.981	0.985	0.978	0.985	0.981	0.985	0.981	0.985	0.978	0.978	0.974	0.978	0.971	0.974	0.971	0.974	0.971	0.974
88	0.974	0.978	0.974	0.971	0.971	0.974	0.971	0.978	0.974	0.978	0.971	0.978	0.971	0.971	0.967	0.971	0.967	0.974	0.971	0.974
89	0.974	0.978	0.967	0.971	0.967	0.971	0.971	0.978	0.971	0.974	0.967	0.978	0.974	0.978	0.971	0.974	0.971	0.971	0.967	0.971
90	0.988	0.994	0.981	0.974	0.971	0.971	0.971	0.971	0.974	0.974	0.971	0.971	0.971	0.974	0.963	0.974	0.963	0.974	0.959	0.967
91	0.981	0.974	0.978	0.967	0.974	0.971	0.974	0.974	0.974	0.971	0.971	0.971	0.974	0.971	0.974	0.967	0.971	0.967	0.971	0.967
92	0.971	0.978	0.974	0.974	0.974	0.974	0.967	0.974	0.971	0.974	0.971	0.971	0.967	0.974	0.967	0.967	0.963	0.971	0.963	0.971
93	0.978	0.974	0.978	0.974	0.978	0.971	0.978	0.971	0.974	0.967	0.974	0.967	0.974	0.967	0.974	0.967	0.974	0.967	0.974	0.963
94	0.971	0.974	0.971	0.974	0.971	0.978	0.971	0.974	0.967	0.974	0.967	0.974	0.967	0.974	0.971	0.974	0.967	0.974	0.967	0.971
95	0.981	0.978	0.981	0.974	0.978	0.971	0.974	0.971	0.978	0.971	0.974	0.971	0.974	0.967	0.974	0.967	0.974	0.967	0.974	0.967
96	0.985	0.978	0.981	0.974	0.978	0.971	0.978	0.971	0.974	0.971	0.974	0.971	0.974	0.963	0.974	0.967	0.974	0.967	0.971	0.967
97	0.985	0.978	0.985	0.974	0.981	0.974	0.974	0.971	0.971	0.967	0.974	0.963	0.974	0.959	0.974	0.959	0.974	0.963	0.974	0.963
98	0.991	0.994	0.994	0.981	0.978	0.971	0.978	0.974	0.978	0.971	0.974	0.971	0.974	0.971	0.974	0.971	0.974	0.967	0.974	0.971

310

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 43

IR SCAN TIME 17.36 SEC
INITIAL TEMP 547.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.985	0.974	0.985	0.978	0.981	0.974	0.978	0.971	0.978	0.971
65	0.974	0.967	0.974	0.967	0.971	0.967	0.974	0.971	0.971	0.967
66	0.967	0.959	0.967	0.959	0.963	0.959	0.963	0.955	0.963	0.959
67	0.950	0.955	0.946	0.955	0.946	0.955	0.946	0.950	0.946	0.950
68	0.950	0.941	0.946	0.941	0.946	0.941	0.946	0.941	0.946	0.936
69	0.925	0.941	0.931	0.941	0.913	0.941	0.931	0.946	0.931	0.941
70	0.950	0.946	0.946	0.936	0.941	0.936	0.941	0.936	0.941	0.936
71	0.941	0.946	0.941	0.946	0.941	0.941	0.941	0.946	0.941	0.946
72	0.941	0.946	0.941	0.946	0.936	0.950	0.941	0.941	0.941	0.941
73	0.941	0.941	0.941	0.941	0.941	0.941	0.931	0.936	0.936	0.941
74	0.946	0.950	0.941	0.950	0.946	0.946	0.941	0.941	0.931	0.946
75	0.950	0.941	0.946	0.946	0.950	0.941	0.941	0.936	0.941	0.941
76	0.931	0.946	0.931	0.946	0.931	0.941	0.931	0.936	0.925	0.941
77	0.950	0.941	0.946	0.936	0.941	0.936	0.941	0.936	0.941	0.936
78	0.941	0.950	0.941	0.941	0.941	0.941	0.936	0.941	0.941	0.941
79	0.941	0.936	0.941	0.936	0.936	0.936	0.941	0.946	0.941	0.936
80	0.955	0.946	0.950	0.941	0.955	0.946	0.950	0.941	0.950	0.941
81	0.955	0.941	0.946	0.936	0.936	0.931	0.936	0.936	0.936	0.936
82	0.981	0.971	0.974	0.963	0.967	0.950	0.955	0.941	0.946	0.941
83	0.959	0.974	0.963	0.974	0.967	0.978	0.967	0.974	0.959	0.971
84	0.978	0.974	0.978	0.974	0.978	0.974	0.981	0.974	0.981	0.974
85	0.974	0.971	0.974	0.974	0.974	0.974	0.967	0.974	0.967	0.974
86	0.974	0.971	0.974	0.974	0.974	0.971	0.974	0.967	0.974	0.971
87	0.971	0.981	0.971	0.974	0.971	0.974	0.971	0.974	0.971	0.974
88	0.971	0.971	0.971	0.971	0.971	0.974	0.971	0.971	0.967	0.971
89	0.967	0.971	0.967	0.971	0.967	0.971	0.967	0.971	0.967	0.971
90	0.959	0.971	0.955	0.971	0.959	0.967	0.963	0.967	0.959	0.971
91	0.971	0.967	0.971	0.967	0.967	0.967	0.967	0.967	0.967	0.963
92	0.967	0.967	0.963	0.967	0.963	0.967	0.967	0.967	0.967	0.967
93	0.971	0.967	0.971	0.967	0.971	0.967	0.974	0.967	0.971	0.967
94	0.967	0.974	0.967	0.971	0.963	0.971	0.967	0.971	0.963	0.971
95	0.974	0.967	0.971	0.967	0.974	0.971	0.974	0.967	0.974	0.967
96	0.971	0.963	0.974	0.967	0.971	0.967	0.971	0.971	0.978	0.971
97	0.974	0.959	0.978	0.967	0.974	0.963	0.978	0.971	0.978	0.971
98	0.971	0.963	0.971	0.967	0.974	0.971	0.974	0.971	0.974	0.971

NASA/RI OH90 TRANSITION TEST
V41R-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 17.36 SEC
HRFR = 0.253E-01

GROUP 43

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	0.007	0.006	0.006	0.008	0.006	0.005	0.006	0.005	0.009	0.005	0.006	0.005	0.003	0.005	0.007	0.006	0.006	0.007	0.006	0.008
30	0.007	0.007	0.006	0.007	0.005	0.006	0.005	0.007	0.007	0.008	0.008	0.006	0.007	0.003	0.008	0.006	0.006	0.006	0.007	0.005
31	0.007	0.006	0.005	0.006	0.006	0.007	0.006	0.007	0.007	0.007	0.006	0.007	0.006	0.008	0.007	0.008	0.007	0.007	0.005	0.005
32	0.008	0.006	0.006	0.006	0.007	0.008	0.008	0.007	0.005	0.007	0.007	0.008	0.007	0.007	0.006	0.007	0.006	0.007	0.006	0.007
33	0.005	0.005	0.007	0.005	0.007	0.007	0.009	0.007	0.009	0.001	0.009	0.003	0.006	0.007	0.005	0.008	0.008	0.011	0.007	0.008
34	0.008	0.007	0.007	0.006	0.006	0.005	0.007	0.003	0.006	0.003	0.006	0.003	0.007	0.007	0.007	0.007	0.008	0.008	0.009	0.009
35	0.006	0.006	0.001	0.006	0.000	0.003	0.000	0.005	0.002	0.006	0.003	0.006	0.003	0.006	0.005	0.009	0.008	0.008	0.007	0.006
36	0.006	0.003	0.005	0.003	0.005	0.003	0.006	0.005	0.006	0.006	0.008	0.007	0.009	0.007	0.008	0.006	0.005	0.000	0.000	0.000
37	0.005	0.003	0.003	0.005	0.005	0.007	0.006	0.008	0.007	0.007	0.006	0.007	0.007	0.006	0.002	0.000	0.000	0.000	0.000	0.000
38	0.005	0.003	0.003	0.006	0.006	0.007	0.006	0.008	0.007	0.008	0.006	0.006	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.005	0.007	0.007	0.007	0.009	0.006	0.008	0.007	0.006	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
40	0.006	0.007	0.008	0.008	0.007	0.008	0.006	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
41	0.007	0.007	0.007	0.008	0.005	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
42	0.008	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.011	0.019
46	0.002	0.002	0.001	0.001	0.000	0.000	0.001	0.001	0.001	0.000	0.001	0.001	0.001	0.002	0.001	0.003	0.012	0.049	0.081
47	0.000	0.000	0.000	0.001	0.001	0.001	0.000	0.001	0.001	0.002	0.001	0.002	0.002	0.003	0.002	0.003	0.003	0.019	0.060	0.090
48	0.000	0.000	0.001	0.001	0.002	0.001	0.002	0.000	0.003	0.002	0.005	0.003	0.003	0.002	0.005	0.005	0.007	0.027	0.070	0.097
49	0.000	0.001	0.002	0.000	0.003	0.001	0.003	0.001	0.003	0.000	0.003	0.002	0.003	0.003	0.005	0.003	0.009	0.036	0.081	0.103
50	0.001	0.001	0.002	0.001	0.003	0.002	0.002	0.001	0.003	0.002	0.003	0.002	0.005	0.001	0.006	0.003	0.014	0.052	0.094	0.111
51	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.002	0.002	0.003	0.002	0.002	0.002	0.003	0.003	0.007	0.019	0.066	0.100	0.115
52	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.000	0.002	0.003	0.032	0.080	0.106	0.117
53	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.006	0.045	0.090	0.109	0.119
54	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.009	0.056	0.094	0.110	0.117
55	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.019	0.065	0.099	0.112	0.119
56	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.025	0.071	0.100	0.113	0.119
57	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.005	0.034	0.081	0.104	0.115	0.121
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.048	0.091	0.110	0.120	0.126
59	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.014	0.061	0.095	0.110	0.117	0.123
60	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.030	0.075	0.100	0.111	0.117	0.123
61	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.009	0.043	0.082	0.100	0.110	0.116	0.121
62	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008	0.047	0.084	0.100	0.109	0.114	0.119
63	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.012	0.055	0.087	0.100	0.107	0.113	0.116

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 17.36 SEC
HRFR = 0.253E-01

GROUP 43

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	0.005	0.008	0.005	0.007	0.002	0.005	0.001	0.006	0.002	0.006	0.003	0.005	0.002	0.007	0.003	0.009	0.007	0.008	0.008	0.010
30	0.007	0.005	0.005	0.003	0.003	0.003	0.006	0.005	0.007	0.007	0.009	0.009	0.010	0.009	0.010	0.010	0.011	0.008	0.009	0.006
31	0.005	0.006	0.006	0.007	0.007	0.008	0.007	0.008	0.008	0.010	0.009	0.011	0.010	0.009	0.007	0.008	0.003	0.002	0.000	0.000
32	0.007	0.008	0.008	0.009	0.008	0.009	0.009	0.010	0.010	0.010	0.006	0.007	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.009	0.008	0.008	0.008	0.010	0.006	0.006	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.010	0.008	0.007	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
40	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
41	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
42	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.023	0.020	0.020	0.013	0.013	0.008	0.008	0.006	0.005	0.002	0.003	0.002	0.002	0.001	0.003	0.001	0.002	0.001	0.002	0.000
46	0.096	0.103	0.111	0.115	0.120	0.122	0.122	0.112	0.097	0.078	0.057	0.034	0.020	0.010	0.008	0.005	0.006	0.003	0.005	0.002
47	0.103	0.111	0.117	0.126	0.134	0.144	0.155	0.166	0.171	0.171	0.170	0.165	0.149	0.122	0.086	0.049	0.023	0.013	0.007	0.010
48	0.110	0.116	0.123	0.130	0.138	0.146	0.154	0.161	0.169	0.174	0.177	0.173	0.167	0.170	0.173	0.161	0.127	0.072	0.034	0.017
49	0.114	0.122	0.130	0.137	0.144	0.152	0.161	0.169	0.171	0.172	0.176	0.178	0.177	0.173	0.173	0.178	0.181	0.157	0.100	0.046
50	0.121	0.128	0.135	0.141	0.149	0.157	0.167	0.175	0.182	0.188	0.192	0.190	0.188	0.187	0.187	0.184	0.183	0.194	0.199	0.155
51	0.123	0.129	0.135	0.143	0.151	0.160	0.169	0.178	0.188	0.194	0.195	0.196	0.193	0.190	0.185	0.181	0.176	0.175	0.180	0.205
52	0.125	0.131	0.138	0.145	0.155	0.163	0.173	0.182	0.191	0.195	0.196	0.199	0.202	0.203	0.203	0.200	0.193	0.182	0.172	0.166
53	0.125	0.130	0.135	0.143	0.151	0.161	0.173	0.185	0.196	0.203	0.203	0.202	0.201	0.203	0.206	0.213	0.215	0.210	0.203	0.187
54	0.124	0.128	0.133	0.139	0.149	0.158	0.169	0.179	0.191	0.202	0.210	0.214	0.213	0.210	0.209	0.207	0.208	0.211	0.216	0.216
55	0.125	0.129	0.133	0.139	0.146	0.155	0.165	0.175	0.185	0.195	0.202	0.208	0.211	0.216	0.218	0.217	0.217	0.215	0.214	0.219
56	0.125	0.128	0.134	0.138	0.146	0.153	0.162	0.172	0.181	0.187	0.192	0.194	0.198	0.201	0.205	0.210	0.217	0.224	0.229	0.228
57	0.125	0.128	0.133	0.137	0.145	0.151	0.160	0.168	0.175	0.182	0.187	0.187	0.192	0.196	0.200	0.201	0.202	0.204	0.208	0.214
58	0.130	0.132	0.138	0.144	0.151	0.157	0.166	0.176	0.183	0.188	0.191	0.191	0.197	0.199	0.199	0.198	0.203	0.205	0.206	0.205
59	0.126	0.130	0.135	0.142	0.149	0.158	0.168	0.177	0.187	0.193	0.194	0.197	0.201	0.205	0.202	0.199	0.201	0.204	0.202	0.200
60	0.126	0.130	0.135	0.139	0.143	0.150	0.157	0.165	0.174	0.182	0.188	0.197	0.206	0.212	0.210	0.208	0.207	0.206	0.204	0.201
61	0.123	0.127	0.132	0.137	0.142	0.150	0.156	0.163	0.167	0.167	0.165	0.166	0.172	0.180	0.190	0.201	0.206	0.207	0.205	0.208
62	0.121	0.125	0.129	0.134	0.138	0.143	0.151	0.160	0.167	0.171	0.172	0.174	0.171	0.164	0.155	0.149	0.150	0.158	0.169	0.184
63	0.120	0.123	0.128	0.132	0.137	0.142	0.149	0.158	0.166	0.169	0.174	0.181	0.190	0.192	0.191	0.183	0.167	0.150	0.136	0.129

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 17.36 SEC
GROUP 43 HRFR = 0.253E-01

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	0.009	0.009	0.008	0.010	0.007	0.007	0.005	0.005	0.001	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
30	0.008	0.001	0.005	0.005	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
40	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
41	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
42	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.002	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
46	0.003	0.001	0.003	0.001	0.002	0.000	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000
47	0.006	0.007	0.007	0.006	0.002	0.005	0.002	0.002	0.002	0.002	0.000	0.002	0.000	0.001	0.000	0.001	0.001	0.001	0.001	0.001
48	0.012	0.009	0.009	0.007	0.008	0.005	0.006	0.003	0.005	0.002	0.005	0.002	0.003	0.001	0.003	0.001	0.002	0.001	0.002	0.001
49	0.027	0.017	0.015	0.009	0.008	0.005	0.006	0.003	0.005	0.002	0.003	0.002	0.003	0.001	0.003	0.001	0.002	0.001	0.002	0.001
50	0.079	0.034	0.022	0.016	0.016	0.011	0.008	0.006	0.006	0.005	0.006	0.005	0.003	0.003	0.003	0.002	0.003	0.002	0.003	0.002
51	0.203	0.133	0.054	0.027	0.013	0.014	0.010	0.010	0.006	0.008	0.005	0.006	0.003	0.005	0.002	0.005	0.002	0.003	0.002	0.003
52	0.186	0.210	0.157	0.073	0.033	0.014	0.012	0.010	0.007	0.003	0.002	0.000	0.002	0.002	0.001	0.001	0.001	0.000	0.001	0.000
53	0.172	0.169	0.169	0.126	0.058	0.025	0.012	0.010	0.008	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54	0.211	0.198	0.189	0.188	0.156	0.084	0.036	0.016	0.012	0.009	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
55	0.223	0.224	0.219	0.212	0.213	0.209	0.152	0.070	0.029	0.015	0.010	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001
56	0.227	0.224	0.225	0.226	0.228	0.234	0.246	0.208	0.113	0.046	0.024	0.012	0.012	0.007	0.001	0.001	0.000	0.000	0.001	0.001
57	0.221	0.225	0.223	0.218	0.217	0.220	0.230	0.248	0.243	0.168	0.075	0.033	0.018	0.010	0.008	0.001	0.000	0.000	0.001	0.000
58	0.206	0.204	0.207	0.213	0.220	0.223	0.225	0.231	0.239	0.229	0.171	0.094	0.043	0.019	0.012	0.008	0.006	0.006	0.001	0.001
59	0.202	0.201	0.193	0.185	0.182	0.188	0.202	0.221	0.236	0.243	0.229	0.165	0.077	0.034	0.014	0.010	0.006	0.006	0.006	0.000
60	0.200	0.200	0.203	0.200	0.186	0.169	0.161	0.169	0.192	0.223	0.253	0.244	0.183	0.107	0.046	0.021	0.010	0.008	0.006	0.000
61	0.208	0.204	0.201	0.202	0.203	0.202	0.192	0.170	0.148	0.147	0.159	0.178	0.210	0.217	0.156	0.072	0.029	0.013	0.008	0.006
62	0.198	0.205	0.207	0.204	0.201	0.202	0.206	0.214	0.217	0.199	0.154	0.123	0.121	0.149	0.181	0.162	0.087	0.036	0.016	0.009
63	0.135	0.149	0.171	0.190	0.205	0.213	0.221	0.231	0.242	0.239	0.225	0.211	0.181	0.137	0.110	0.121	0.149	0.123	0.062	0.027

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP COPP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 17.36 SEC
HRFR = 0.253E-01

GROUP 43

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
30	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
40	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
41	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
42	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
46	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
47	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48	0.002	0.001	0.002	0.002	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.000	0.002	0.001	0.001	0.001	0.001	0.000	0.001	0.000
49	0.002	0.000	0.001	0.001	0.002	0.001	0.002	0.000	0.001	0.001	0.002	0.000	0.002	0.000	0.001	0.001	0.001	0.001	0.001	0.001
50	0.003	0.001	0.002	0.000	0.003	0.001	0.003	0.001	0.002	0.001	0.002	0.001	0.002	0.001	0.001	0.000	0.001	0.000	0.002	0.002
51	0.002	0.003	0.002	0.003	0.002	0.003	0.002	0.003	0.002	0.002	0.002	0.001	0.001	0.001	0.000	0.002	0.001	0.001	0.001	0.002
52	0.002	0.001	0.003	0.001	0.003	0.002	0.003	0.002	0.002	0.002	0.002	0.001	0.002	0.001	0.002	0.000	0.002	0.000	0.002	0.000
53	0.000	0.001	0.000	0.002	0.002	0.001	0.002	0.003	0.000	0.002	0.000	0.002	0.002	0.002	0.000	0.003	0.001	0.003	0.003	0.001
54	0.001	0.001	0.003	0.002	0.003	0.003	0.005	0.003	0.006	0.003	0.005	0.002	0.005	0.002	0.003	0.002	0.003	0.002	0.003	0.001
55	0.001	0.003	0.002	0.003	0.002	0.005	0.003	0.005	0.003	0.005	0.003	0.006	0.003	0.005	0.002	0.003	0.002	0.005	0.002	0.003
56	0.003	0.003	0.005	0.003	0.006	0.005	0.006	0.003	0.007	0.003	0.006	0.003	0.005	0.003	0.003	0.003	0.003	0.002	0.003	0.002
57	0.002	0.001	0.003	0.001	0.002	0.000	0.001	0.001	0.002	0.000	0.001	0.000	0.002	0.000	0.001	0.000	0.001	0.000	0.000	0.000
58	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
61	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
62	0.005	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
63	0.013	0.007	0.005	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 17.36 SEC
HRFR = 0.253E-01

GROUP 43

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
30	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
40	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
41	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
42	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
46	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
47	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48	0.001	0.001	0.001	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.001	0.001	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000
49	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.001	0.001
50	0.002	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
51	0.002	0.001	0.000	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000	0.001	0.000	0.001
52	0.002	0.001	0.002	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
53	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
54	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
55	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
56	0.003	0.001	0.002	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
61	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
62	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
63	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 17.36 SEC
HRFR = 0.253E-01

GROUP 43

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
30	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
40	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
41	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
42	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
46	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
47	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
49	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
50	0.001	0.000	0.001	0.001	0.002	0.002	0.001	0.001	0.001	0.001
51	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
53	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
54	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
55	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
56	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
61	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
62	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
63	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 17.36 SEC
HREF = 0.253E-01

GROUP 43

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.014	0.060	0.087	0.100	0.106	0.113	0.116
65	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.023	0.068	0.090	0.101	0.108	0.113	0.116
66	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.036	0.076	0.092	0.102	0.107	0.113	0.117
67	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.048	0.080	0.092	0.099	0.105	0.108	0.113
68	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.016	0.058	0.080	0.089	0.097	0.100	0.104	0.108
69	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.029	0.067	0.081	0.091	0.096	0.101	0.104	0.109
70	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.037	0.070	0.083	0.090	0.097	0.100	0.104	0.107
71	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.044	0.074	0.085	0.093	0.097	0.102	0.105	0.109
72	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.005	0.048	0.076	0.087	0.094	0.099	0.102	0.106	0.110
73	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.012	0.055	0.080	0.089	0.095	0.100	0.104	0.107	0.112
74	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.027	0.064	0.082	0.090	0.096	0.100	0.104	0.108	0.112
75	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.034	0.062	0.075	0.081	0.085	0.090	0.092	0.096	0.098
76	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.001	0.037	0.056	0.063	0.067	0.071	0.073	0.075	0.077	0.080
77	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.010	0.036	0.048	0.051	0.055	0.057	0.059	0.059	0.062	0.063
78	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.010	0.034	0.040	0.046	0.047	0.050	0.050	0.052	0.051	0.053
79	0.006	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.017	0.033	0.040	0.043	0.045	0.046	0.048	0.049	0.050	0.052
80	0.006	0.009	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.018	0.034	0.041	0.042	0.046	0.046	0.048	0.049	0.051	0.051
81	0.005	0.014	0.021	0.008	0.001	0.001	0.001	0.001	0.000	0.005	0.026	0.036	0.043	0.044	0.046	0.047	0.049	0.050	0.051	0.052
82	0.029	0.030	0.035	0.027	0.011	0.011	0.011	0.011	0.001	0.010	0.031	0.039	0.044	0.045	0.048	0.048	0.050	0.050	0.051	0.051
83	0.031	0.030	0.041	0.039	0.016	0.003	0.003	0.003	0.003	0.018	0.041	0.047	0.048	0.049	0.049	0.050	0.050	0.051	0.051	0.052
84	0.014	0.010	0.017	0.017	0.009	0.000	0.000	0.000	0.005	0.032	0.059	0.069	0.070	0.068	0.068	0.064	0.061	0.057	0.055	0.054
85	0.009	0.008	0.006	0.010	0.005	0.001	0.001	0.006	0.006	0.008	0.006	0.010	0.006	0.009	0.008	0.012	0.014	0.020	0.026	0.034
86	0.016	0.000	0.002	0.002	0.001	0.001	0.002	0.003	0.008	0.006	0.007	0.006	0.007	0.005	0.005	0.006	0.005	0.002	0.005	0.003
87	0.012	0.012	0.012	0.012	0.012	0.012	0.000	0.007	0.009	0.001	0.002	0.001	0.006	0.006	0.002	0.003	0.003	0.003	0.003	0.005
88	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.007	0.007	0.006	0.006	0.005	0.006	0.003	0.003	0.001	0.002	0.001	0.003
89	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.006	0.006	0.005	0.005	0.005	0.003	0.001	0.002	0.000	0.001	0.000	0.000
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.005	0.003	0.003	0.002	0.002	0.000	0.001	0.001	0.000	0.000
91	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.002	0.002	0.002	0.003	0.001	0.002	0.001	0.001	0.001	0.001	0.000
92	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.002	0.003	0.000	0.003	0.001	0.001	0.001	0.002	0.002	0.000
93	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.005	0.002	0.006	0.002	0.003	0.002	0.003	0.003	0.003	0.002	0.001	0.001
94	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.005	0.005	0.003	0.006	0.006	0.005	0.005	0.005	0.003	0.001	0.001	0.001
95	0.000	0.000	0.003	0.001	0.003	0.001	0.002	0.002	0.008	0.006	0.007	0.006	0.008	0.007	0.008	0.007	0.008	0.003	0.001	0.000
96	0.006	0.003	0.005	0.005	0.005	0.003	0.002	0.003	0.009	0.008	0.009	0.009	0.011	0.010	0.012	0.010	0.011	0.007	0.005	0.001
97	0.005	0.002	0.007	0.006	0.006	0.005	0.005	0.006	0.010	0.008	0.009	0.010	0.011	0.011	0.014	0.011	0.012	0.007	0.005	0.001
98	0.005	0.005	0.008	0.005	0.009	0.005	0.005	0.002	0.010	0.006	0.008	0.008	0.012	0.013	0.013	0.012	0.011	0.008	0.008	0.005

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 17.36 SEC
HRFR = 0.253E-01

. GROUP 43

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	0.120	0.122	0.127	0.130	0.136	0.142	0.149	0.156	0.164	0.169	0.174	0.178	0.186	0.190	0.194	0.196	0.198	0.196	0.188	0.172
65	0.119	0.122	0.128	0.132	0.137	0.143	0.148	0.153	0.164	0.169	0.174	0.176	0.184	0.185	0.189	0.191	0.197	0.198	0.200	0.201
66	0.120	0.124	0.129	0.134	0.140	0.145	0.152	0.158	0.164	0.173	0.179	0.179	0.182	0.186	0.188	0.190	0.194	0.194	0.194	0.196
67	0.115	0.120	0.124	0.129	0.134	0.140	0.146	0.153	0.160	0.168	0.176	0.180	0.181	0.181	0.184	0.188	0.188	0.188	0.189	0.192
68	0.112	0.115	0.119	0.124	0.129	0.134	0.140	0.147	0.156	0.165	0.175	0.182	0.186	0.188	0.189	0.191	0.194	0.195	0.198	0.198
69	0.111	0.115	0.119	0.124	0.129	0.134	0.137	0.142	0.148	0.157	0.165	0.173	0.178	0.184	0.188	0.190	0.193	0.196	0.198	0.200
70	0.112	0.115	0.119	0.123	0.129	0.134	0.139	0.141	0.146	0.153	0.159	0.165	0.169	0.170	0.172	0.175	0.179	0.182	0.186	0.189
71	0.110	0.115	0.118	0.124	0.126	0.131	0.136	0.140	0.144	0.151	0.155	0.159	0.164	0.165	0.166	0.168	0.169	0.172	0.173	0.175
72	0.112	0.116	0.118	0.123	0.126	0.131	0.135	0.141	0.144	0.150	0.155	0.160	0.162	0.164	0.163	0.164	0.165	0.168	0.169	0.171
73	0.114	0.118	0.121	0.125	0.130	0.136	0.140	0.146	0.149	0.153	0.156	0.159	0.163	0.167	0.167	0.166	0.166	0.166	0.168	0.169
74	0.115	0.119	0.122	0.126	0.130	0.136	0.141	0.145	0.151	0.156	0.158	0.164	0.168	0.171	0.171	0.170	0.169	0.168	0.169	0.172
75	0.101	0.104	0.110	0.112	0.117	0.121	0.126	0.131	0.136	0.140	0.145	0.149	0.152	0.155	0.158	0.160	0.164	0.166	0.168	0.169
76	0.081	0.085	0.087	0.090	0.092	0.096	0.098	0.101	0.103	0.107	0.110	0.113	0.115	0.119	0.121	0.123	0.125	0.128	0.131	0.135
77	0.066	0.067	0.069	0.070	0.072	0.073	0.075	0.076	0.078	0.078	0.079	0.080	0.082	0.082	0.084	0.084	0.085	0.086	0.088	0.088
78	0.055	0.057	0.058	0.058	0.058	0.060	0.061	0.063	0.062	0.063	0.062	0.063	0.062	0.064	0.063	0.064	0.063	0.066	0.065	0.066
79	0.053	0.054	0.054	0.053	0.056	0.055	0.059	0.056	0.057	0.057	0.058	0.058	0.058	0.057	0.059	0.058	0.059	0.058	0.060	0.060
80	0.053	0.053	0.054	0.055	0.056	0.057	0.058	0.057	0.058	0.058	0.059	0.058	0.060	0.059	0.059	0.057	0.058	0.058	0.058	0.058
81	0.053	0.054	0.055	0.056	0.057	0.057	0.058	0.058	0.060	0.060	0.061	0.060	0.061	0.060	0.060	0.059	0.060	0.060	0.060	0.060
82	0.053	0.054	0.056	0.058	0.058	0.057	0.059	0.059	0.060	0.060	0.061	0.060	0.061	0.060	0.061	0.060	0.061	0.061	0.063	0.062
83	0.053	0.054	0.056	0.057	0.058	0.060	0.061	0.063	0.063	0.064	0.063	0.064	0.063	0.064	0.063	0.063	0.062	0.063	0.062	0.063
84	0.053	0.053	0.055	0.057	0.058	0.058	0.062	0.063	0.064	0.064	0.067	0.066	0.067	0.065	0.066	0.065	0.067	0.066	0.067	0.067
85	0.032	0.037	0.043	0.050	0.054	0.057	0.055	0.057	0.058	0.066	0.078	0.076	0.062	0.056	0.056	0.056	0.057	0.058	0.059	0.058
86	0.003	0.001	0.003	0.001	0.005	0.001	0.003	0.001	0.002	0.001	0.003	0.001	0.003	0.001	0.002	0.000	0.002	0.001	0.002	0.001
87	0.002	0.003	0.002	0.002	0.001	0.003	0.002	0.003	0.002	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.000	0.001	0.001
88	0.003	0.003	0.002	0.003	0.002	0.003	0.002	0.003	0.001	0.002	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000
89	0.000	0.001	0.000	0.001	0.002	0.001	0.003	0.003	0.001	0.003	0.001	0.002	0.001	0.002	0.002	0.001	0.001	0.000	0.000	0.000
90	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.002	0.001	0.003	0.003	0.003	0.000	0.001	0.000	0.000	0.000	0.000
91	0.000	0.000	0.000	0.000	0.001	0.001	0.002	0.001	0.001	0.001	0.010	0.035	0.051	0.034	0.011	0.001	0.000	0.000	0.000	0.000
92	0.000	0.001	0.001	0.001	0.000	0.001	0.001	0.001	0.001	0.002	0.003	0.024	0.036	0.024	0.007	0.001	0.001	0.001	0.001	0.000
93	0.001	0.001	0.000	0.000	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
94	0.001	0.001	0.001	0.000	0.001	0.002	0.001	0.002	0.002	0.003	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	0.001	0.001	0.001	0.000	0.002	0.001	0.005	0.003	0.005	0.003	0.006	0.002	0.003	0.001	0.001	0.001	0.001	0.001	0.000	0.000
96	0.001	0.001	0.002	0.002	0.003	0.003	0.006	0.005	0.007	0.005	0.008	0.005	0.006	0.002	0.002	0.002	0.001	0.001	0.000	0.000
97	0.002	0.001	0.003	0.003	0.006	0.005	0.006	0.005	0.008	0.006	0.008	0.006	0.007	0.003	0.005	0.001	0.002	0.000	0.001	0.001
98	0.007	0.005	0.006	0.005	0.007	0.006	0.006	0.006	0.006	0.005	0.007	0.005	0.007	0.003	0.006	0.001	0.002	0.001	0.001	0.001

NASA/HI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 17.36 SEC
HRFR = 0.253E-01

GROUP 43

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	0.151	0.128	0.112	0.106	0.115	0.134	0.161	0.194	0.228	0.235	0.238	0.239	0.238	0.232	0.206	0.159	0.114	0.089	0.076	0.041
65	0.203	0.198	0.184	0.159	0.130	0.107	0.095	0.094	0.102	0.115	0.139	0.167	0.192	0.212	0.227	0.226	0.202	0.159	0.116	0.085
66	0.198	0.198	0.199	0.199	0.197	0.187	0.169	0.147	0.122	0.097	0.087	0.082	0.084	0.090	0.106	0.132	0.167	0.196	0.202	0.172
67	0.193	0.194	0.193	0.194	0.198	0.205	0.210	0.215	0.207	0.183	0.155	0.128	0.107	0.097	0.092	0.089	0.086	0.091	0.110	0.143
68	0.200	0.201	0.203	0.201	0.200	0.205	0.215	0.225	0.224	0.216	0.208	0.193	0.171	0.144	0.121	0.104	0.097	0.092	0.090	0.085
69	0.201	0.202	0.203	0.206	0.208	0.214	0.223	0.235	0.231	0.218	0.211	0.210	0.206	0.199	0.184	0.165	0.141	0.118	0.103	0.098
70	0.193	0.197	0.203	0.205	0.210	0.215	0.224	0.238	0.236	0.222	0.216	0.209	0.207	0.205	0.201	0.197	0.195	0.187	0.170	0.149
71	0.176	0.177	0.179	0.182	0.182	0.184	0.195	0.214	0.214	0.210	0.209	0.208	0.207	0.208	0.207	0.205	0.204	0.204	0.206	0.206
72	0.172	0.173	0.172	0.170	0.168	0.167	0.169	0.175	0.168	0.158	0.159	0.166	0.174	0.182	0.189	0.196	0.199	0.201	0.205	0.209
73	0.170	0.171	0.169	0.167	0.167	0.171	0.178	0.188	0.194	0.179	0.161	0.146	0.130	0.119	0.113	0.115	0.119	0.128	0.138	0.151
74	0.175	0.178	0.180	0.179	0.177	0.180	0.188	0.200	0.205	0.195	0.186	0.182	0.175	0.166	0.152	0.138	0.120	0.102	0.087	0.079
75	0.171	0.174	0.179	0.182	0.183	0.187	0.196	0.206	0.207	0.197	0.195	0.191	0.189	0.186	0.182	0.178	0.173	0.167	0.158	0.143
76	0.138	0.143	0.146	0.152	0.156	0.162	0.170	0.179	0.171	0.173	0.181	0.183	0.184	0.184	0.184	0.185	0.185	0.184	0.181	0.177
77	0.091	0.092	0.094	0.095	0.097	0.098	0.101	0.104	0.107	0.106	0.108	0.110	0.116	0.120	0.126	0.131	0.139	0.145	0.152	0.157
78	0.066	0.067	0.066	0.067	0.067	0.068	0.069	0.070	0.070	0.068	0.064	0.064	0.064	0.064	0.063	0.064	0.063	0.065	0.066	0.069
79	0.061	0.061	0.062	0.062	0.063	0.063	0.064	0.064	0.066	0.063	0.061	0.059	0.060	0.058	0.058	0.057	0.057	0.057	0.055	0.054
80	0.059	0.058	0.060	0.059	0.061	0.060	0.062	0.062	0.064	0.063	0.062	0.058	0.060	0.058	0.058	0.056	0.058	0.058	0.056	0.056
81	0.061	0.060	0.061	0.061	0.062	0.062	0.064	0.064	0.065	0.064	0.063	0.061	0.060	0.060	0.059	0.057	0.057	0.057	0.056	0.054
82	0.064	0.063	0.064	0.064	0.065	0.064	0.067	0.067	0.069	0.069	0.068	0.064	0.065	0.063	0.063	0.060	0.060	0.058	0.057	0.056
83	0.062	0.063	0.063	0.064	0.064	0.065	0.064	0.066	0.067	0.069	0.067	0.067	0.066	0.067	0.064	0.064	0.063	0.063	0.061	0.061
84	0.068	0.067	0.067	0.066	0.067	0.066	0.067	0.066	0.067	0.067	0.067	0.064	0.065	0.063	0.063	0.062	0.061	0.058	0.059	0.058
85	0.060	0.063	0.064	0.066	0.066	0.068	0.068	0.070	0.070	0.071	0.070	0.067	0.066	0.066	0.063	0.062	0.060	0.059	0.057	0.058
86	0.003	0.002	0.003	0.003	0.006	0.003	0.007	0.005	0.009	0.010	0.014	0.013	0.013	0.012	0.012	0.012	0.012	0.012	0.014	0.012
87	0.001	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
89	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.015	0.021	0.009	0.001	0.001	0.001	0.001	0.001	0.001
92	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.023	0.029	0.016	0.001	0.001	0.001	0.001	0.001	0.001
93	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
94	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
96	0.000	0.000	0.000	0.000	0.001	0.001	0.002	0.000	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
97	0.001	0.000	0.001	0.001	0.001	0.000	0.002	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
98	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

320

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 17.36 SEC
HRFR = 0.253E-01

GROUP 43

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.017	0.008	0.006	0.003	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65	0.056	0.023	0.011	0.005	0.005	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
66	0.126	0.080	0.038	0.015	0.008	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
67	0.165	0.163	0.137	0.092	0.034	0.013	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
68	0.086	0.096	0.115	0.123	0.094	0.043	0.018	0.006	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
69	0.094	0.094	0.092	0.092	0.094	0.082	0.048	0.020	0.006	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
70	0.128	0.110	0.103	0.103	0.104	0.104	0.095	0.059	0.023	0.006	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
71	0.201	0.193	0.174	0.147	0.122	0.104	0.098	0.094	0.069	0.032	0.010	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
72	0.209	0.210	0.211	0.207	0.196	0.180	0.156	0.132	0.112	0.088	0.051	0.018	0.005	0.001	0.001	0.001	0.001	0.001	0.001	0.001
73	0.161	0.171	0.179	0.183	0.187	0.192	0.195	0.193	0.178	0.154	0.126	0.083	0.034	0.012	0.001	0.001	0.001	0.001	0.001	0.001
74	0.076	0.079	0.084	0.093	0.102	0.118	0.131	0.147	0.160	0.173	0.173	0.163	0.121	0.064	0.027	0.009	0.009	0.009	0.009	0.009
75	0.126	0.105	0.087	0.075	0.068	0.065	0.066	0.066	0.069	0.073	0.081	0.093	0.109	0.104	0.061	0.018	0.005	0.005	0.005	0.005
76	0.174	0.170	0.162	0.151	0.136	0.117	0.097	0.081	0.070	0.064	0.062	0.061	0.060	0.062	0.059	0.039	0.012	0.002	0.002	0.002
77	0.163	0.168	0.171	0.172	0.171	0.171	0.168	0.161	0.150	0.130	0.107	0.085	0.071	0.064	0.064	0.060	0.043	0.016	0.002	0.002
78	0.072	0.077	0.082	0.090	0.098	0.109	0.119	0.129	0.138	0.147	0.151	0.149	0.139	0.124	0.106	0.090	0.073	0.054	0.027	0.006
79	0.054	0.053	0.053	0.053	0.053	0.051	0.053	0.054	0.056	0.057	0.062	0.067	0.077	0.083	0.087	0.089	0.092	0.088	0.078	0.050
80	0.056	0.053	0.053	0.052	0.053	0.051	0.051	0.050	0.052	0.051	0.053	0.051	0.053	0.052	0.053	0.053	0.054	0.057	0.061	0.064
81	0.054	0.051	0.052	0.050	0.052	0.050	0.051	0.049	0.050	0.048	0.051	0.051	0.053	0.050	0.052	0.051	0.052	0.051	0.052	0.051
82	0.054	0.053	0.051	0.050	0.050	0.049	0.049	0.049	0.049	0.048	0.048	0.048	0.050	0.050	0.049	0.049	0.050	0.048	0.050	0.050
83	0.057	0.057	0.054	0.053	0.051	0.051	0.049	0.050	0.048	0.048	0.048	0.048	0.046	0.046	0.046	0.046	0.046	0.047	0.047	0.049
84	0.058	0.058	0.058	0.056	0.056	0.056	0.057	0.054	0.054	0.054	0.053	0.052	0.053	0.051	0.051	0.049	0.049	0.048	0.048	0.048
85	0.058	0.056	0.056	0.057	0.056	0.054	0.054	0.054	0.054	0.054	0.054	0.055	0.056	0.056	0.057	0.058	0.057	0.057	0.058	0.060
86	0.015	0.014	0.016	0.016	0.019	0.018	0.020	0.021	0.022	0.021	0.023	0.022	0.023	0.024	0.027	0.027	0.029	0.028	0.032	0.034
87	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
89	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.006	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
92	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.005	0.016	0.014	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
93	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
94	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
96	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
97	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
98	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 17.36 SEC
HRFR = 0.253E-01

GROUP 43

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
66	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
67	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
68	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
69	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
70	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
71	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
72	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
73	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
74	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
75	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
76	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
77	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
78	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
79	0.022	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
80	0.060	0.035	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
81	0.053	0.048	0.034	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
82	0.051	0.051	0.052	0.038	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017
83	0.050	0.051	0.052	0.052	0.045	0.026	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
84	0.049	0.049	0.051	0.051	0.052	0.046	0.032	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
85	0.058	0.059	0.057	0.057	0.056	0.056	0.050	0.038	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016
86	0.036	0.036	0.038	0.036	0.038	0.038	0.037	0.034	0.029	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
87	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
89	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
92	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
93	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
94	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
96	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
97	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
98	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001

322

IR HEAT TRANSFER COEFFICIENT - H(,9TO)/HRFR
IR SCAN TIME 17.36 SEC
HRFR = 0.253E-01

GROUP 43

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
66	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
67	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
68	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
69	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
70	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
71	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
72	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
73	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
74	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
75	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
76	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
77	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
78	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
79	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
80	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
81	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
82	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017
83	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
84	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
85	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016
86	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
87	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
89	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
92	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
93	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
94	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
96	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
97	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
98	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

GROUP 44

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
435 44	594.023	594.066	594.066	594.066	0.000	591.671
435 45	594.197	594.197	594.066	594.197	0.000	591.671
435 46	594.284	594.328	594.066	594.328	0.000	591.671
435 47	594.458	594.458	594.066	594.458	0.000	591.671
435 48	594.589	594.545	594.066	594.589	0.000	591.671
435 48	594.632	594.589	594.066	594.632	0.000	591.671
435 49	594.676	594.632	594.066	594.676	0.000	591.671
435 50	594.719	594.676	594.066	594.719	0.000	591.671
435 51	594.806	594.763	594.066	594.806	0.000	591.671
435 52	594.894	594.806	594.066	594.850	0.000	591.671
435 53	594.894	594.850	594.066	594.894	0.000	591.671
435 54	594.981	594.894	594.066	594.894	0.000	591.671
435 55	595.024	594.981	594.066	594.937	0.000	591.671
435 56	595.068	594.981	594.066	594.981	0.000	591.671
435 57	595.068	595.024	594.066	595.024	0.000	591.671
435 57	595.111	595.068	594.066	595.024	0.000	591.671
435 58	595.111	595.068	594.066	595.024	0.000	591.671
435 58	595.111	595.068	594.066	595.024	0.000	591.671
435 59	595.155	595.111	594.066	595.068	0.000	591.671
436 0	595.198	595.111	594.066	595.068	0.000	591.671
436 1	595.198	595.155	594.066	595.111	0.000	591.671
436 2	595.242	595.155	594.066	595.111	0.000	591.671

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

GROUP	* * * * TITLE TYPE	MODEL DESCRIPTION * * * * GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
44	RSI FORWARD	0.01	0.010	0.05	29.95	0.053	4	35	24

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/F FT-1	HRFR BTU/FT2-SEC-R	INITIAL TEMP DEG R
7.96	321.57	1283.67	93.89	0.0340	3781.	0.304E-04	0.756E-07	0.152E+07	0.253E-01	554.7

IR CAMERA INFORMATION

MOUNTING LOCATION	260
F STOP	2.5
LENS-DEG	15
SENSITIVITY	500.
BLACK LEVEL VOLTAGE	1.2793
LINE SCAN PHI	90
MODEL EMISSIVITY	0.96
REF EMISSIVITY	0.94
WINDOW FACTOR	0.840

TIME RECORDS

LIFT OFF	0.00
CENTER LINE	1.99
IR SCAN TIME	13.78
DELTA TIME,SEC	12.67
PHOTO 1 TIME	435
PHOTO 2 TIME	0
PHOTO 3 TIME	0
PHOTO 4 TIME	0

REFERENCE TARGET INFORMATION

TCR5	591.98
TCR6	591.28

DIGITAL DATA AREA PRINTOUT LOCATION

LINE 29 THROUGH 98
POINT 1 THROUGH 110

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 12.67 SEC
INITIAL TEMP 554.7 DEG. R

GROUP 44

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	1.013	1.020	1.018	1.013	1.016	1.016	1.011	1.016	1.013	1.016	1.013	1.006	1.016	1.020	1.013	1.011	1.016	1.018	1.018	1.016
30	1.018	1.018	1.020	1.018	1.009	1.011	1.009	1.016	1.011	1.016	1.016	1.016	1.013	1.018	1.013	1.016	1.016	1.020	1.016	1.018
31	1.018	1.016	1.011	1.011	1.016	1.016	1.016	1.018	1.016	1.020	1.016	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.013	1.013
32	1.013	1.013	1.013	1.016	1.018	1.020	1.016	1.018	1.011	1.016	1.013	1.020	1.013	1.018	1.013	1.016	1.011	1.013	1.013	1.016
33	1.013	1.018	1.018	1.018	1.016	1.018	1.013	1.018	1.013	1.018	1.016	1.016	1.011	1.011	1.009	1.016	1.013	1.020	1.013	1.022
34	1.020	1.020	1.018	1.013	1.013	1.013	1.011	1.013	1.013	1.011	1.011	1.006	1.011	1.009	1.016	1.016	1.020	1.018	1.020	1.020
35	1.020	1.011	1.006	1.011	1.004	1.011	1.001	1.009	1.001	1.011	1.006	1.016	1.009	1.016	1.013	1.020	1.020	1.022	1.022	1.022
36	1.011	1.011	1.009	1.006	1.006	1.006	1.011	1.009	1.013	1.013	1.013	1.013	1.020	1.018	1.020	1.020	1.020	1.020	1.011	1.009
37	1.009	1.011	1.006	1.009	1.006	1.011	1.009	1.016	1.013	1.016	1.013	1.020	1.018	1.020	1.011	1.006	0.993	0.990	0.978	0.975
38	1.006	1.006	1.011	1.009	1.011	1.011	1.016	1.018	1.020	1.018	1.020	1.016	1.011	0.998	0.993	0.982	0.982	0.975	0.975	0.972
39	1.011	1.009	1.009	1.013	1.013	1.016	1.013	1.020	1.013	1.016	1.004	0.996	0.985	0.982	0.978	0.982	0.978	0.978	0.978	0.982
40	1.013	1.016	1.016	1.018	1.016	1.018	1.016	1.011	0.998	0.990	0.982	0.982	0.978	0.985	0.975	0.982	0.975	0.982	0.978	0.978
41	1.016	1.018	1.018	1.018	1.011	1.006	0.990	0.987	0.975	0.985	0.978	0.985	0.982	0.985	0.982	0.985	0.978	0.985	0.982	0.985
42	1.020	1.018	1.013	0.996	0.990	0.975	0.978	0.972	0.982	0.975	0.982	0.975	0.982	0.985	0.987	0.982	0.985	0.985	0.987	0.985
43	1.013	1.001	0.987	0.985	0.982	0.985	0.978	0.985	0.982	0.985	0.978	0.982	0.976	0.985	0.978	0.985	0.978	0.985	0.978	0.987
44	0.987	0.985	0.985	0.985	0.985	0.982	0.985	0.982	0.982	0.985	0.985	0.985	0.987	0.985	0.990	0.987	0.990	0.990	0.993	0.990
45	0.990	0.987	0.990	0.987	0.987	0.987	0.990	0.990	0.993	0.987	0.993	0.990	0.993	0.993	0.996	0.993	0.996	1.001	1.035	1.060
46	0.990	0.993	0.990	0.996	0.990	0.996	0.993	0.996	0.993	0.996	0.990	0.998	0.996	1.001	0.998	1.004	1.004	1.046	1.152	1.233
47	0.996	0.993	0.998	0.996	0.998	0.996	0.996	0.993	0.998	0.998	1.001	1.001	1.001	1.004	1.004	1.006	1.009	1.062	1.179	1.252
48	0.996	0.998	0.998	0.993	0.998	0.996	1.001	0.996	1.001	1.001	1.004	0.998	1.006	1.004	1.006	1.009	1.020	1.096	1.212	1.272
49	0.996	0.990	0.996	0.993	0.998	0.993	0.998	0.998	1.001	0.998	1.006	1.004	1.004	1.006	1.011	1.009	1.033	1.138	1.242	1.287
50	0.996	0.996	0.996	1.001	0.998	1.001	0.998	1.004	1.001	1.004	1.001	1.006	1.004	1.013	1.006	1.018	1.052	1.174	1.263	1.299
51	0.998	0.998	0.998	0.998	0.998	0.998	0.998	1.001	1.004	1.001	1.001	1.004	1.009	1.009	1.013	1.020	1.088	1.209	1.278	1.304
52	0.990	0.990	0.990	0.993	0.990	0.996	0.993	0.996	0.998	1.001	0.998	1.004	1.001	1.006	1.006	1.027	1.121	1.238	1.288	1.309
53	0.978	0.985	0.982	0.985	0.982	0.985	0.982	0.990	0.985	0.990	0.990	0.993	0.993	0.998	0.996	1.029	1.143	1.248	1.290	1.309
54	0.972	0.972	0.978	0.975	0.982	0.978	0.982	0.982	0.985	0.985	0.987	0.987	0.993	0.990	0.996	1.041	1.168	1.257	1.291	1.308
55	0.972	0.972	0.972	0.972	0.975	0.975	0.982	0.985	0.985	0.987	0.990	0.990	0.993	0.996	1.004	1.064	1.187	1.262	1.293	1.308
56	0.969	0.972	0.982	0.965	0.982	0.969	0.985	0.969	0.990	0.987	0.993	0.987	0.993	0.990	1.013	1.094	1.208	1.271	1.297	1.311
57	0.972	0.972	0.978	0.975	0.978	0.978	0.982	0.982	0.985	0.985	0.987	0.990	0.990	0.990	1.029	1.127	1.233	1.278	1.300	1.311
58	0.972	0.978	0.978	0.982	0.982	0.982	0.985	0.987	0.985	0.987	0.985	0.987	0.990	1.001	1.037	1.157	1.249	1.289	1.308	1.320
59	0.975	0.985	0.985	0.982	0.987	0.985	0.985	0.985	0.987	0.987	0.990	0.990	0.996	0.998	1.067	1.191	1.264	1.291	1.308	1.319
60	0.982	0.985	0.985	0.985	0.990	0.987	0.990	0.987	0.990	0.990	0.993	0.996	1.001	1.018	1.103	1.213	1.269	1.291	1.307	1.318
61	0.982	0.987	0.987	0.987	0.987	0.993	0.990	0.996	0.993	0.996	0.996	1.001	1.001	1.031	1.126	1.225	1.269	1.290	1.303	1.314
62	0.987	0.982	0.990	0.987	0.990	0.990	0.990	0.993	0.996	0.996	0.998	0.996	1.004	1.027	1.138	1.230	1.269	1.288	1.301	1.309
63	0.985	0.990	0.978	0.990	0.982	0.993	0.987	0.996	0.993	0.998	0.996	1.001	1.001	1.035	1.150	1.234	1.265	1.282	1.292	1.303

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 44

IR SCAN TIME 12.67 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	1.020	1.013	1.018	1.011	1.018	1.009	1.013	1.006	1.011	1.009	1.016	1.009	1.016	1.011	1.020	1.020	1.020	1.020	1.022	1.022
30	1.011	1.013	1.013	1.016	1.013	1.018	1.013	1.016	1.013	1.022	1.020	1.025	1.025	1.025	1.025	1.027	1.027	1.031	1.022	1.027
31	1.009	1.013	1.013	1.020	1.016	1.022	1.020	1.025	1.022	1.027	1.027	1.031	1.031	1.031	1.027	1.027	1.018	1.016	1.006	1.001
32	1.011	1.020	1.020	1.029	1.022	1.027	1.027	1.029	1.025	1.029	1.022	1.022	1.016	1.011	0.996	0.996	0.985	0.982	0.975	0.978
33	1.018	1.022	1.020	1.025	1.025	1.025	1.022	1.018	1.009	1.009	0.996	0.993	0.982	0.978	0.969	0.972	0.969	0.975	0.969	0.972
34	1.022	1.018	1.025	1.018	1.013	1.004	0.996	0.987	0.978	0.969	0.972	0.965	0.969	0.975	0.969	0.969	0.972	0.965	0.972	0.969
35	1.016	1.011	0.996	0.990	0.978	0.975	0.969	0.972	0.969	0.972	0.965	0.975	0.969	0.972	0.969	0.972	0.972	0.975	0.972	0.975
36	0.987	0.972	0.975	0.969	0.972	0.969	0.972	0.969	0.972	0.965	0.972	0.965	0.972	0.972	0.975	0.969	0.975	0.972	0.975	0.975
37	0.972	0.975	0.972	0.975	0.975	0.978	0.975	0.978	0.975	0.978	0.978	0.978	0.972	0.978	0.972	0.978	0.965	0.978	0.965	0.978
38	0.975	0.972	0.978	0.975	0.975	0.972	0.975	0.972	0.978	0.972	0.978	0.975	0.978	0.972	0.978	0.975	0.978	0.978	0.978	0.975
39	0.978	0.985	0.978	0.982	0.978	0.982	0.978	0.985	0.975	0.982	0.978	0.982	0.978	0.982	0.978	0.985	0.978	0.982	0.975	0.982
40	0.978	0.985	0.978	0.985	0.978	0.985	0.982	0.985	0.982	0.985	0.982	0.985	0.978	0.985	0.985	0.987	0.985	0.987	0.985	0.985
41	0.982	0.985	0.982	0.987	0.985	0.990	0.985	0.990	0.985	0.987	0.982	0.987	0.985	0.987	0.985	0.990	0.985	0.990	0.987	0.990
42	0.987	0.985	0.987	0.985	0.987	0.985	0.990	0.987	0.990	0.987	0.987	0.987	0.990	0.990	0.993	0.990	0.990	0.990	0.990	0.987
43	0.978	0.990	0.982	0.990	0.982	0.993	0.982	0.993	0.985	0.993	0.987	0.996	0.993	0.996	0.990	0.996	0.993	0.993	0.990	0.996
44	0.996	0.993	0.993	0.993	0.996	0.996	0.998	0.996	0.996	0.998	0.998	0.996	0.996	0.993	0.998	0.990	0.996	0.987	0.993	0.987
45	1.070	1.069	1.064	1.052	1.045	1.035	1.027	1.018	1.018	1.011	1.011	1.006	1.009	1.006	1.009	1.006	1.004	1.004	1.004	1.001
46	1.264	1.283	1.297	1.311	1.319	1.326	1.326	1.316	1.289	1.249	1.195	1.132	1.076	1.048	1.029	1.022	1.016	1.016	1.009	1.013
47	1.282	1.297	1.311	1.325	1.342	1.358	1.378	1.395	1.408	1.414	1.414	1.406	1.385	1.346	1.286	1.197	1.106	1.050	1.033	1.020
48	1.297	1.314	1.328	1.342	1.356	1.369	1.382	1.394	1.404	1.411	1.417	1.417	1.411	1.410	1.414	1.402	1.340	1.219	1.113	1.060
49	1.310	1.327	1.342	1.356	1.370	1.387	1.401	1.411	1.413	1.414	1.416	1.419	1.421	1.421	1.425	1.429	1.428	1.387	1.279	1.149
50	1.319	1.334	1.347	1.361	1.375	1.391	1.407	1.424	1.435	1.443	1.445	1.441	1.434	1.431	1.432	1.435	1.437	1.447	1.444	1.366
51	1.320	1.333	1.346	1.363	1.378	1.393	1.409	1.423	1.439	1.449	1.451	1.450	1.447	1.439	1.431	1.422	1.418	1.417	1.426	1.443
52	1.323	1.336	1.347	1.361	1.377	1.393	1.409	1.426	1.441	1.449	1.450	1.455	1.460	1.464	1.464	1.460	1.448	1.433	1.419	1.410
53	1.321	1.332	1.341	1.355	1.369	1.385	1.403	1.421	1.437	1.451	1.457	1.458	1.456	1.458	1.464	1.472	1.473	1.468	1.463	1.443
54	1.321	1.330	1.339	1.352	1.367	1.383	1.399	1.414	1.431	1.444	1.455	1.463	1.466	1.467	1.469	1.467	1.468	1.475	1.482	1.485
55	1.320	1.329	1.338	1.349	1.363	1.377	1.392	1.408	1.424	1.437	1.446	1.452	1.456	1.461	1.468	1.472	1.477	1.479	1.477	1.482
56	1.321	1.329	1.339	1.349	1.363	1.376	1.391	1.406	1.419	1.430	1.436	1.441	1.445	1.448	1.453	1.459	1.468	1.479	1.489	1.495
57	1.321	1.327	1.338	1.348	1.361	1.374	1.388	1.401	1.414	1.424	1.431	1.433	1.439	1.447	1.451	1.452	1.454	1.460	1.469	1.479
58	1.328	1.334	1.344	1.356	1.369	1.382	1.397	1.413	1.424	1.433	1.435	1.439	1.446	1.453	1.451	1.450	1.454	1.459	1.460	1.466
59	1.327	1.334	1.344	1.357	1.371	1.385	1.399	1.414	1.429	1.436	1.439	1.444	1.451	1.457	1.454	1.450	1.454	1.458	1.456	1.454
60	1.325	1.332	1.343	1.351	1.361	1.375	1.390	1.405	1.421	1.430	1.437	1.447	1.458	1.463	1.461	1.457	1.458	1.459	1.457	1.455
61	1.319	1.327	1.336	1.346	1.356	1.369	1.381	1.393	1.403	1.408	1.412	1.421	1.436	1.446	1.453	1.460	1.462	1.460	1.457	1.461
62	1.316	1.322	1.331	1.339	1.349	1.359	1.373	1.388	1.399	1.404	1.406	1.408	1.410	1.407	1.407	1.411	1.420	1.432	1.439	1.447
63	1.309	1.318	1.327	1.335	1.344	1.356	1.368	1.383	1.396	1.404	1.411	1.422	1.432	1.434	1.428	1.417	1.399	1.388	1.385	1.390

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 44

IR SCAN TIME 12.67 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	1.027	1.025	1.027	1.025	1.025	1.020	1.022	1.016	1.013	1.006	1.006	1.001	0.996	0.990	0.990	0.987	0.985	0.982	0.982	0.978
30	1.018	1.018	1.009	1.011	0.996	0.998	0.987	0.990	0.978	0.982	0.969	0.975	0.965	0.975	0.972	0.972	0.969	0.972	0.972	0.975
31	0.990	0.990	0.982	0.982	0.972	0.972	0.969	0.969	0.965	0.969	0.965	0.969	0.962	0.965	0.962	0.965	0.955	0.969	0.958	0.969
32	0.969	0.972	0.969	0.972	0.969	0.969	0.965	0.969	0.969	0.972	0.965	0.972	0.969	0.965	0.969	0.972	0.962	0.972	0.962	0.969
33	0.969	0.972	0.962	0.972	0.965	0.972	0.965	0.972	0.965	0.969	0.962	0.969	0.965	0.972	0.969	0.975	0.969	0.969	0.962	0.969
34	0.972	0.969	0.972	0.969	0.972	0.965	0.969	0.965	0.972	0.969	0.972	0.969	0.965	0.965	0.965	0.965	0.969	0.965	0.969	0.962
35	0.972	0.975	0.969	0.975	0.972	0.978	0.972	0.975	0.972	0.975	0.969	0.975	0.969	0.972	0.969	0.972	0.965	0.969	0.962	0.969
36	0.978	0.975	0.978	0.972	0.975	0.975	0.978	0.975	0.978	0.975	0.975	0.972	0.972	0.972	0.972	0.969	0.972	0.969	0.969	0.965
37	0.965	0.978	0.962	0.975	0.965	0.975	0.965	0.978	0.962	0.975	0.962	0.978	0.972	0.978	0.972	0.975	0.972	0.975	0.972	0.975
38	0.982	0.978	0.978	0.975	0.978	0.978	0.978	0.975	0.975	0.972	0.975	0.972	0.975	0.969	0.975	0.965	0.972	0.962	0.972	0.965
39	0.975	0.985	0.982	0.985	0.978	0.982	0.978	0.982	0.978	0.982	0.978	0.978	0.975	0.978	0.975	0.978	0.972	0.978	0.972	0.975
40	0.985	0.987	0.985	0.987	0.982	0.985	0.978	0.985	0.975	0.982	0.979	0.982	0.975	0.978	0.972	0.978	0.972	0.978	0.975	0.978
41	0.985	0.990	0.982	0.990	0.985	0.987	0.985	0.985	0.985	0.985	0.982	0.982	0.978	0.982	0.975	0.982	0.975	0.982	0.975	0.982
42	0.990	0.987	0.990	0.985	0.990	0.985	0.990	0.985	0.987	0.982	0.985	0.982	0.985	0.978	0.978	0.978	0.978	0.975	0.978	0.975
43	0.990	0.993	0.987	0.993	0.985	0.990	0.982	0.990	0.985	0.985	0.982	0.985	0.978	0.987	0.982	0.985	0.978	0.985	0.978	0.985
44	0.993	0.987	0.993	0.987	0.990	0.985	0.987	0.982	0.990	0.987	0.990	0.987	0.990	0.985	0.987	0.985	0.987	0.985	0.987	0.985
45	1.004	1.001	1.001	0.998	0.998	0.998	0.998	0.996	0.993	0.990	0.993	0.990	0.990	0.985	0.990	0.982	0.990	0.982	0.990	0.985
46	1.009	1.011	1.006	1.009	1.004	1.006	1.001	1.004	0.998	1.004	0.996	1.001	0.998	1.004	0.996	0.998	0.996	0.998	0.996	0.996
47	1.020	1.016	1.016	1.009	1.011	1.008	1.009	1.006	1.006	1.004	1.006	1.004	1.004	1.001	1.001	0.998	0.996	0.996	1.001	0.998
48	1.018	1.025	1.022	1.020	1.020	1.013	1.013	1.011	1.011	1.006	1.009	1.004	1.006	1.004	1.006	1.004	1.006	1.004	1.004	0.996
49	1.079	1.054	1.041	1.027	1.022	1.018	1.018	1.013	1.016	1.011	1.013	1.009	1.009	1.006	1.006	1.004	1.006	1.004	1.006	1.001
50	1.217	1.107	1.060	1.050	1.043	1.037	1.022	1.022	1.016	1.018	1.016	1.016	1.011	1.013	1.009	1.011	1.006	1.009	1.004	1.009
51	1.415	1.288	1.142	1.070	1.043	1.035	1.039	1.029	1.027	1.020	1.020	1.018	1.016	1.013	1.013	1.009	1.011	1.006	1.009	1.004
52	1.412	1.402	1.311	1.177	1.089	1.050	1.037	1.035	1.025	1.020	1.009	1.011	1.004	1.009	1.001	1.006	0.996	1.004	0.998	1.004
53	1.423	1.412	1.397	1.329	1.193	1.093	1.050	1.037	1.031	1.025	1.009	1.006	0.998	0.998	0.993	0.996	0.993	0.993	0.993	0.998
54	1.479	1.464	1.446	1.435	1.386	1.260	1.130	1.069	1.043	1.035	1.029	1.011	1.004	0.996	0.996	0.993	0.993	0.990	0.996	0.998
55	1.490	1.495	1.492	1.481	1.476	1.465	1.392	1.239	1.117	1.060	1.041	1.033	1.022	1.009	1.004	0.996	0.998	0.996	0.998	1.001
56	1.496	1.494	1.494	1.496	1.498	1.504	1.511	1.457	1.300	1.149	1.081	1.045	1.037	1.025	1.013	1.001	1.004	1.001	1.004	1.006
57	1.488	1.494	1.492	1.486	1.485	1.488	1.501	1.515	1.485	1.360	1.194	1.101	1.057	1.039	1.033	1.016	1.004	1.004	1.006	1.004
58	1.476	1.483	1.487	1.494	1.496	1.495	1.496	1.504	1.514	1.494	1.394	1.250	1.128	1.070	1.041	1.035	1.018	1.013	1.009	1.011
59	1.457	1.465	1.471	1.475	1.480	1.486	1.494	1.504	1.516	1.526	1.507	1.399	1.225	1.112	1.060	1.035	1.033	1.020	1.020	1.006
60	1.455	1.456	1.461	1.464	1.464	1.466	1.472	1.484	1.501	1.521	1.538	1.510	1.407	1.264	1.134	1.070	1.041	1.031	1.025	1.011
61	1.463	1.461	1.460	1.463	1.466	1.466	1.464	1.458	1.456	1.465	1.468	1.456	1.473	1.463	1.354	1.193	1.092	1.052	1.031	1.025
62	1.457	1.460	1.462	1.460	1.459	1.463	1.471	1.480	1.487	1.468	1.409	1.368	1.376	1.417	1.451	1.404	1.259	1.123	1.069	1.037
63	1.409	1.429	1.448	1.461	1.470	1.477	1.485	1.497	1.511	1.507	1.478	1.463	1.432	1.374	1.322	1.335	1.377	1.333	1.198	1.097

B-328.28

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 44

IR SCAN TIME 12.67 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.975	0.972	0.972	0.969	0.972	0.969	0.975	0.969	0.972	0.969	0.972	0.972	0.972	0.965	0.969	0.969	0.972	0.969	0.972	0.972
30	0.965	0.972	0.969	0.972	0.965	0.969	0.962	0.969	0.962	0.969	0.962	0.969	0.962	0.969	0.965	0.972	0.965	0.972	0.965	0.969
31	0.965	0.969	0.962	0.969	0.962	0.969	0.962	0.969	0.958	0.965	0.965	0.965	0.962	0.969	0.962	0.969	0.962	0.965	0.962	0.969
32	0.962	0.969	0.962	0.969	0.962	0.965	0.958	0.962	0.958	0.962	0.958	0.962	0.958	0.969	0.951	0.962	0.951	0.965	0.951	0.965
33	0.965	0.969	0.965	0.965	0.958	0.965	0.955	0.962	0.958	0.962	0.958	0.962	0.958	0.962	0.955	0.962	0.958	0.962	0.958	0.958
34	0.969	0.962	0.965	0.955	0.965	0.958	0.962	0.955	0.962	0.958	0.958	0.958	0.962	0.958	0.962	0.958	0.962	0.958	0.962	0.958
35	0.962	0.972	0.962	0.969	0.962	0.965	0.962	0.965	0.962	0.965	0.962	0.962	0.962	0.965	0.962	0.965	0.958	0.965	0.958	0.965
36	0.969	0.965	0.965	0.965	0.969	0.965	0.972	0.962	0.969	0.965	0.965	0.962	0.969	0.962	0.969	0.962	0.969	0.962	0.969	0.958
37	0.975	0.975	0.972	0.975	0.969	0.969	0.965	0.972	0.969	0.972	0.969	0.972	0.962	0.969	0.962	0.969	0.965	0.969	0.962	0.969
38	0.972	0.965	0.972	0.965	0.972	0.962	0.969	0.965	0.975	0.972	0.975	0.969	0.972	0.969	0.972	0.969	0.972	0.969	0.969	0.962
39	0.965	0.975	0.972	0.972	0.969	0.972	0.969	0.975	0.969	0.972	0.972	0.972	0.962	0.975	0.962	0.972	0.962	0.972	0.962	0.972
40	0.975	0.978	0.972	0.978	0.972	0.975	0.972	0.978	0.969	0.978	0.972	0.975	0.972	0.975	0.972	0.975	0.969	0.975	0.969	0.972
41	0.975	0.982	0.972	0.978	0.975	0.978	0.972	0.978	0.975	0.975	0.972	0.978	0.975	0.975	0.972	0.975	0.972	0.975	0.969	0.975
42	0.982	0.978	0.978	0.975	0.982	0.975	0.975	0.975	0.978	0.975	0.975	0.975	0.975	0.975	0.975	0.972	0.975	0.972	0.975	0.972
43	0.978	0.985	0.978	0.982	0.975	0.985	0.975	0.978	0.978	0.978	0.975	0.978	0.972	0.978	0.972	0.978	0.972	0.975	0.972	0.975
44	0.987	0.985	0.985	0.982	0.985	0.985	0.982	0.978	0.985	0.978	0.985	0.978	0.978	0.978	0.978	0.975	0.978	0.975	0.978	0.975
45	0.987	0.985	0.987	0.982	0.985	0.982	0.987	0.987	0.990	0.987	0.990	0.978	0.990	0.985	0.987	0.985	0.987	0.985	0.985	0.982
46	0.993	0.993	0.993	0.990	0.990	0.993	0.987	0.990	0.987	0.996	0.978	0.993	0.975	0.993	0.982	0.993	0.978	0.993	0.978	0.990
47	0.998	0.996	0.998	0.996	0.998	0.993	0.993	0.993	0.993	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990
48	1.001	0.996	0.998	0.993	0.996	0.993	0.996	0.996	0.996	0.993	0.996	0.993	0.996	0.993	0.993	0.987	0.993	0.990	0.993	0.993
49	1.001	0.998	0.998	0.996	0.998	0.998	0.998	0.996	0.996	0.996	0.996	0.996	0.996	0.993	0.996	0.993	0.996	0.993	0.993	0.993
50	1.004	1.004	1.001	1.001	0.998	1.001	0.996	1.001	0.996	1.001	0.998	0.998	0.993	0.998	0.993	0.998	0.996	0.998	0.996	0.998
51	1.006	1.001	1.006	1.004	1.004	1.001	1.001	1.001	1.001	0.998	1.001	0.998	0.996	0.998	1.001	0.998	1.001	0.998	1.001	0.996
52	1.001	1.006	0.998	1.006	0.998	1.009	1.001	1.006	1.001	1.006	1.004	1.006	1.001	1.004	1.001	1.006	1.001	1.004	0.998	1.004
53	0.998	1.004	1.004	1.006	1.004	1.006	1.001	1.006	0.998	1.006	0.996	1.006	0.998	1.006	0.996	1.006	0.996	1.004	0.996	1.001
54	1.004	1.004	1.006	1.006	1.009	1.006	1.009	1.006	1.011	1.006	1.009	1.006	1.009	1.006	1.006	1.004	1.004	1.004	1.004	0.998
55	1.009	1.006	1.011	1.009	1.011	1.009	1.011	1.009	1.013	1.009	1.013	1.011	1.011	1.006	1.009	1.006	1.009	1.004	1.006	1.004
56	1.013	1.013	1.016	1.013	1.013	1.011	1.013	1.011	1.013	1.011	1.013	1.009	1.011	1.006	1.011	1.006	1.009	1.004	1.006	1.001
57	1.011	1.006	1.011	1.009	1.011	1.006	1.006	1.004	1.006	1.004	1.006	1.004	1.001	1.001	1.001	0.998	0.998	0.996	0.996	0.996
58	1.006	1.011	1.006	1.009	1.006	1.009	1.006	1.004	1.001	1.004	1.001	1.001	1.001	1.001	0.998	0.998	0.996	0.996	0.993	0.996
59	1.006	0.998	1.004	1.004	1.004	0.998	1.001	0.993	0.996	0.993	0.993	0.993	0.996	0.990	0.993	0.987	0.990	0.987	0.990	0.987
60	1.009	1.004	1.004	1.001	0.998	0.996	0.996	0.990	0.998	0.990	0.996	0.985	0.993	0.987	0.990	0.985	0.990	0.987	0.990	0.985
61	1.016	1.013	1.006	1.006	1.004	1.004	1.001	1.004	0.998	0.999	0.993	0.998	0.993	0.996	0.990	0.993	0.990	0.990	0.990	0.993
62	1.027	1.018	1.016	1.004	1.006	1.004	1.004	0.998	1.001	0.996	0.996	0.993	0.996	0.990	0.993	0.990	0.993	0.990	0.996	0.990
63	1.050	1.033	1.022	1.016	1.006	1.009	1.001	1.004	0.998	1.001	0.993	0.996	0.993	0.996	0.990	0.996	0.990	0.996	0.990	0.996

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 44

IR SCAN TIME 12.67 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.975	0.969	0.972	0.969	0.972	0.969	0.972	0.965	0.965	0.962	0.969	0.962	0.969	0.965	0.965	0.958	0.965	0.958	0.965	0.962
30	0.965	0.969	0.965	0.969	0.965	0.972	0.969	0.972	0.965	0.972	0.965	0.972	0.965	0.969	0.965	0.969	0.958	0.962	0.958	0.962
31	0.962	0.965	0.962	0.972	0.965	0.969	0.965	0.972	0.965	0.972	0.965	0.969	0.965	0.969	0.962	0.965	0.962	0.965	0.958	0.965
32	0.955	0.965	0.958	0.965	0.958	0.965	0.955	0.965	0.958	0.965	0.958	0.962	0.958	0.965	0.958	0.962	0.955	0.962	0.958	0.958
33	0.955	0.962	0.955	0.962	0.958	0.962	0.958	0.965	0.958	0.962	0.958	0.962	0.955	0.962	0.951	0.958	0.947	0.955	0.947	0.958
34	0.962	0.955	0.958	0.958	0.958	0.955	0.962	0.958	0.962	0.955	0.958	0.955	0.958	0.955	0.958	0.955	0.955	0.951	0.955	0.951
35	0.962	0.965	0.962	0.965	0.958	0.962	0.955	0.962	0.955	0.962	0.955	0.962	0.955	0.962	0.955	0.962	0.955	0.958	0.958	0.958
36	0.962	0.962	0.962	0.958	0.962	0.958	0.962	0.958	0.958	0.955	0.958	0.955	0.958	0.955	0.958	0.958	0.962	0.955	0.962	0.955
37	0.958	0.965	0.958	0.965	0.962	0.969	0.962	0.965	0.962	0.965	0.958	0.965	0.962	0.969	0.962	0.962	0.955	0.962	0.955	0.965
38	0.969	0.962	0.965	0.962	0.965	0.962	0.965	0.965	0.962	0.962	0.965	0.962	0.965	0.962	0.965	0.962	0.965	0.962	0.965	0.962
39	0.965	0.972	0.962	0.972	0.958	0.969	0.958	0.972	0.962	0.972	0.965	0.972	0.962	0.965	0.958	0.969	0.962	0.969	0.962	0.965
40	0.965	0.972	0.965	0.969	0.965	0.972	0.965	0.969	0.965	0.969	0.958	0.969	0.958	0.965	0.958	0.969	0.958	0.972	0.962	0.969
41	0.969	0.975	0.969	0.972	0.965	0.972	0.965	0.972	0.965	0.972	0.965	0.972	0.965	0.972	0.962	0.972	0.965	0.972	0.965	0.972
42	0.978	0.972	0.972	0.969	0.969	0.969	0.972	0.965	0.972	0.969	0.972	0.965	0.972	0.965	0.969	0.969	0.972	0.969	0.972	0.969
43	0.972	0.975	0.972	0.975	0.972	0.975	0.975	0.972	0.969	0.975	0.969	0.975	0.969	0.975	0.972	0.975	0.969	0.975	0.972	0.975
44	0.978	0.975	0.975	0.975	0.978	0.972	0.975	0.972	0.978	0.975	0.975	0.972	0.978	0.972	0.975	0.975	0.975	0.975	0.975	0.972
45	0.985	0.982	0.985	0.985	0.987	0.982	0.985	0.982	0.982	0.982	0.985	0.982	0.985	0.982	0.985	0.978	0.985	0.982	0.985	0.982
46	0.982	0.993	0.982	0.993	0.982	0.996	0.990	0.993	0.987	0.993	0.987	0.990	0.990	0.993	0.990	0.990	0.990	0.990	0.969	0.985
47	0.993	0.990	0.990	0.993	0.993	0.990	0.996	0.990	0.993	0.987	0.993	0.985	0.993	0.987	0.990	0.990	0.990	0.987	0.987	0.985
48	0.996	0.996	0.993	0.996	0.996	0.993	0.996	0.993	0.993	0.990	0.993	0.987	0.993	0.987	0.990	0.987	0.990	0.987	0.990	0.987
49	0.998	0.993	0.998	0.996	0.996	0.993	0.990	0.993	0.996	0.996	0.993	0.993	0.993	0.990	0.993	0.990	0.993	0.990	0.990	0.990
50	0.996	0.998	0.996	0.998	0.996	0.998	0.993	0.996	0.993	0.996	0.993	0.996	0.993	0.996	0.990	0.996	0.990	0.993	0.990	0.993
51	0.998	0.996	0.998	0.996	0.998	0.993	0.993	0.993	0.993	0.993	0.993	0.990	0.993	0.990	0.993	0.990	0.993	0.990	0.993	0.990
52	0.996	1.001	0.996	0.998	0.993	0.996	0.990	0.993	0.987	0.990	0.987	0.990	0.987	0.990	0.985	0.990	0.985	0.990	0.985	0.990
53	0.993	0.998	0.990	0.996	0.990	0.993	0.985	0.987	0.982	0.985	0.978	0.982	0.975	0.982	0.975	0.978	0.972	0.978	0.972	0.975
54	0.998	0.996	0.996	0.993	0.993	0.985	0.985	0.975	0.978	0.969	0.975	0.969	0.972	0.972	0.975	0.969	0.985	0.969	0.972	0.965
55	1.004	0.998	1.001	0.996	0.996	0.990	0.990	0.982	0.982	0.975	0.975	0.972	0.978	0.975	0.975	0.972	0.972	0.972	0.972	0.972
56	1.001	0.996	0.998	0.993	0.993	0.990	0.987	0.982	0.982	0.975	0.978	0.975	0.975	0.972	0.975	0.972	0.975	0.972	0.972	0.969
57	0.996	0.990	0.993	0.987	0.990	0.985	0.987	0.982	0.982	0.978	0.978	0.975	0.978	0.975	0.978	0.972	0.975	0.972	0.975	0.972
58	0.996	0.996	0.993	0.996	0.990	0.996	0.990	0.993	0.987	0.990	0.987	0.990	0.987	0.993	0.985	0.993	0.987	0.990	0.987	0.987
59	0.990	0.985	0.990	0.987	0.990	0.985	0.987	0.985	0.982	0.978	0.985	0.982	0.982	0.982	0.982	0.978	0.982	0.978	0.982	0.975
60	0.990	0.987	0.990	0.987	0.990	0.987	0.987	0.965	0.987	0.987	0.987	0.982	0.965	0.982	0.985	0.978	0.985	0.982	0.982	0.978
61	0.987	0.993	0.985	0.993	0.982	0.990	0.978	0.987	0.978	0.985	0.978	0.985	0.978	0.985	0.978	0.985	0.978	0.985	0.978	0.990
62	0.996	0.990	0.990	0.990	0.993	0.987	0.990	0.987	0.990	0.985	0.985	0.982	0.985	0.982	0.985	0.978	0.985	0.978	0.982	0.978
63	0.990	0.996	0.990	0.990	0.987	0.993	0.990	0.993	0.987	0.990	0.985	0.990	0.985	0.985	0.982	0.985	0.978	0.985	0.978	0.985

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 44

IR SCAN TIME 12.67 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.962	0.958	0.969	0.962	0.965	0.958	0.962	0.962	0.962	0.958
30	0.958	0.962	0.955	0.962	0.955	0.962	0.955	0.958	0.955	0.962
31	0.958	0.958	0.955	0.962	0.962	0.962	0.955	0.958	0.955	0.962
32	0.958	0.962	0.955	0.962	0.955	0.958	0.947	0.955	0.955	0.958
33	0.947	0.955	0.947	0.955	0.947	0.951	0.947	0.958	0.951	0.958
34	0.955	0.951	0.955	0.951	0.951	0.951	0.951	0.947	0.955	0.938
35	0.951	0.962	0.951	0.958	0.951	0.958	0.955	0.962	0.955	0.958
36	0.958	0.955	0.962	0.955	0.962	0.958	0.962	0.958	0.962	0.958
37	0.958	0.962	0.958	0.962	0.955	0.958	0.955	0.962	0.958	0.962
38	0.965	0.962	0.965	0.962	0.965	0.958	0.965	0.962	0.965	0.958
39	0.958	0.965	0.962	0.969	0.965	0.969	0.965	0.972	0.965	0.969
40	0.962	0.965	0.962	0.969	0.962	0.972	0.965	0.969	0.962	0.972
41	0.965	0.972	0.965	0.972	0.965	0.972	0.972	0.972	0.958	0.969
42	0.972	0.969	0.969	0.965	0.972	0.969	0.969	0.969	0.972	0.969
43	0.969	0.975	0.969	0.972	0.965	0.972	0.965	0.975	0.965	0.972
44	0.982	0.972	0.975	0.975	0.975	0.972	0.975	0.972	0.975	0.972
45	0.982	0.982	0.985	0.982	0.985	0.982	0.982	0.982	0.982	0.978
46	0.985	0.993	0.987	0.990	0.987	0.978	0.975	0.985	0.987	0.990
47	0.990	0.985	0.993	0.987	0.990	0.987	0.990	0.985	0.990	0.985
48	0.990	0.990	0.990	0.987	0.990	0.985	0.990	0.985	0.990	0.982
49	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.987
50	0.987	0.996	0.990	0.993	0.990	0.996	0.990	0.993	0.987	0.993
51	0.993	0.990	0.990	0.990	0.993	0.990	0.990	0.990	0.990	0.990
52	0.985	0.987	0.985	0.985	0.985	0.987	0.985	0.985	0.985	0.987
53	0.972	0.975	0.972	0.978	0.972	0.975	0.969	0.972	0.969	0.972
54	0.975	0.969	0.972	0.965	0.972	0.962	0.965	0.962	0.969	0.958
55	0.969	0.965	0.969	0.955	0.972	0.951	0.969	0.951	0.965	0.947
56	0.972	0.969	0.969	0.962	0.965	0.962	0.965	0.962	0.962	0.958
57	0.975	0.972	0.975	0.965	0.972	0.965	0.969	0.965	0.972	0.965
58	0.985	0.985	0.985	0.985	0.982	0.985	0.978	0.985	0.978	0.982
59	0.978	0.975	0.978	0.972	0.978	0.972	0.975	0.972	0.975	0.972
60	0.978	0.978	0.978	0.975	0.975	0.975	0.978	0.972	0.978	0.975
61	0.982	0.985	0.975	0.982	0.978	0.982	0.975	0.982	0.975	0.978
62	0.978	0.972	0.982	0.972	0.978	0.972	0.978	0.972	0.975	0.972
63	0.978	0.982	0.975	0.982	0.975	0.982	0.975	0.978	0.972	0.975

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 44

IR SCAN TIME 12.67 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.987	0.987	0.985	0.990	0.987	0.990	0.990	0.993	0.990	0.998	0.990	1.004	0.998	1.055	1.174	1.242	1.268	1.284	1.296	1.306
65	0.975	0.982	0.978	0.982	0.982	0.985	0.982	0.990	0.985	0.993	0.990	0.998	1.006	1.097	1.204	1.253	1.274	1.289	1.298	1.307
66	0.965	0.969	0.972	0.969	0.969	0.972	0.978	0.975	0.978	0.982	0.985	0.987	1.016	1.127	1.220	1.255	1.276	1.289	1.300	1.308
67	0.958	0.958	0.958	0.965	0.962	0.969	0.965	0.972	0.969	0.978	0.975	0.990	1.033	1.158	1.227	1.254	1.271	1.283	1.291	1.300
68	0.955	0.955	0.958	0.955	0.962	0.962	0.965	0.965	0.972	0.972	0.978	0.990	1.070	1.177	1.225	1.246	1.261	1.271	1.280	1.290
69	0.951	0.955	0.958	0.958	0.958	0.958	0.965	0.962	0.969	0.972	0.975	0.990	1.088	1.186	1.226	1.246	1.260	1.270	1.279	1.286
70	0.955	0.958	0.947	0.962	0.951	0.969	0.962	0.972	0.965	0.972	0.972	1.004	1.108	1.199	1.230	1.249	1.261	1.271	1.278	1.287
71	0.955	0.958	0.958	0.958	0.962	0.965	0.962	0.965	0.958	0.975	0.969	1.022	1.128	1.205	1.232	1.250	1.261	1.272	1.279	1.287
72	0.958	0.962	0.958	0.965	0.962	0.965	0.962	0.969	0.965	0.972	0.975	1.029	1.146	1.214	1.237	1.254	1.264	1.273	1.281	1.288
73	0.955	0.958	0.955	0.962	0.958	0.965	0.965	0.972	0.965	0.972	0.978	1.067	1.174	1.224	1.244	1.259	1.269	1.278	1.285	1.292
74	0.955	0.962	0.958	0.962	0.955	0.962	0.965	0.965	0.975	0.969	0.993	1.094	1.187	1.225	1.245	1.256	1.265	1.273	1.282	1.290
75	0.951	0.958	0.958	0.942	0.951	0.955	0.958	0.958	0.962	0.962	1.004	1.113	1.182	1.205	1.220	1.230	1.239	1.246	1.253	1.258
76	0.951	0.955	0.958	0.958	0.955	0.965	0.955	0.962	0.958	0.972	1.018	1.117	1.159	1.176	1.185	1.194	1.199	1.205	1.210	1.216
77	0.955	0.962	0.962	0.962	0.962	0.962	0.972	0.962	0.965	0.965	1.031	1.102	1.134	1.145	1.153	1.157	1.163	1.166	1.170	1.173
78	0.962	0.982	0.990	0.990	0.982	0.987	0.972	0.987	0.972	0.982	1.029	1.094	1.111	1.126	1.130	1.137	1.138	1.143	1.144	1.149
79	0.978	0.998	1.009	0.985	0.987	0.990	0.985	0.969	0.975	0.993	1.045	1.090	1.108	1.119	1.123	1.127	1.132	1.133	1.138	1.140
80	0.990	1.020	1.031	0.996	0.993	0.993	0.996	0.993	0.990	0.996	1.057	1.101	1.113	1.121	1.127	1.130	1.134	1.135	1.138	1.140
81	1.018	1.045	1.062	1.031	1.004	0.990	0.993	0.993	0.996	1.016	1.078	1.107	1.120	1.122	1.129	1.129	1.135	1.136	1.141	1.143
82	1.070	1.082	1.096	1.078	1.029	1.004	0.982	0.985	0.996	1.037	1.090	1.113	1.123	1.128	1.129	1.134	1.134	1.138	1.138	1.144
83	1.069	1.072	1.103	1.096	1.041	1.013	0.978	0.969	0.982	1.065	1.121	1.136	1.136	1.138	1.135	1.137	1.135	1.138	1.139	1.143
84	1.033	1.029	1.046	1.046	1.020	1.004	0.987	0.990	1.016	1.085	1.147	1.164	1.169	1.168	1.168	1.163	1.159	1.155	1.151	1.149
85	1.025	1.020	1.018	1.022	1.018	1.001	1.004	1.006	1.020	1.020	1.025	1.025	1.029	1.025	1.039	1.045	1.060	1.070	1.088	1.102
86	1.004	1.001	1.004	1.011	1.004	1.004	1.001	1.011	1.016	1.018	1.016	1.018	1.016	1.016	1.013	1.016	1.009	1.009	1.001	1.009
87	0.982	0.985	0.990	0.987	0.990	0.987	0.996	1.013	1.020	1.011	1.013	1.011	1.011	1.006	1.009	1.009	1.009	1.009	1.009	1.006
88	0.969	0.969	0.969	0.969	0.978	0.978	0.990	1.006	1.018	1.011	1.016	1.011	1.013	1.009	1.006	1.006	1.006	1.004	1.006	1.006
89	0.958	0.955	0.958	0.969	0.975	0.978	0.990	1.001	1.016	1.013	1.011	1.011	1.013	1.006	1.006	1.001	1.001	1.004	1.001	0.998
90	0.947	0.947	0.951	0.965	0.972	0.978	0.978	0.998	1.006	1.013	1.011	1.011	1.006	1.006	1.001	1.001	0.998	1.001	0.996	0.998
91	0.942	0.942	0.951	0.955	0.969	0.972	0.978	0.990	1.006	1.004	1.009	1.004	1.009	1.001	1.006	1.004	1.004	1.001	0.998	0.996
92	0.942	0.938	0.947	0.951	0.969	0.965	0.975	0.985	1.006	1.006	1.011	1.009	1.009	1.004	1.006	1.001	1.006	1.004	1.001	0.996
93	0.958	0.958	0.958	0.972	0.969	0.978	0.975	0.990	1.004	1.011	1.006	1.011	1.006	1.006	1.004	1.006	1.001	1.001	0.996	0.996
94	0.987	0.987	0.987	0.985	0.990	0.985	0.990	0.996	1.011	1.009	1.011	1.011	1.013	1.011	1.013	1.011	1.011	1.004	1.001	0.990
95	1.001	0.996	0.998	0.996	0.998	0.996	0.998	1.004	1.013	1.013	1.013	1.011	1.016	1.013	1.018	1.013	1.013	1.009	1.004	0.996
96	1.006	1.006	1.006	1.006	1.009	1.004	1.004	1.006	1.020	1.020	1.020	1.020	1.025	1.025	1.027	1.027	1.025	1.016	1.006	0.996
97	1.006	1.006	1.009	1.011	1.013	1.006	1.004	1.009	1.020	1.018	1.020	1.022	1.029	1.027	1.031	1.027	1.027	1.016	1.009	1.001
98	1.009	1.011	1.009	1.016	1.011	1.011	1.004	1.013	1.020	1.020	1.016	1.025	1.022	1.031	1.025	1.027	1.022	1.018	1.013	1.016

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 44

IR SCAN TIME 12.67 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	1.311	1.319	1.326	1.334	1.344	1.357	1.368	1.382	1.396	1.406	1.412	1.424	1.438	1.442	1.443	1.446	1.443	1.436	1.417	1.391
65	1.311	1.321	1.330	1.339	1.349	1.359	1.369	1.382	1.394	1.407	1.410	1.420	1.430	1.435	1.437	1.445	1.449	1.454	1.453	1.454
66	1.315	1.323	1.333	1.342	1.352	1.362	1.374	1.385	1.395	1.410	1.419	1.421	1.424	1.431	1.435	1.438	1.443	1.444	1.444	1.447
67	1.306	1.314	1.324	1.333	1.343	1.355	1.366	1.379	1.391	1.404	1.415	1.422	1.423	1.423	1.430	1.436	1.435	1.435	1.436	1.440
68	1.297	1.305	1.315	1.325	1.337	1.348	1.360	1.373	1.388	1.403	1.418	1.429	1.434	1.437	1.439	1.441	1.444	1.447	1.450	1.449
69	1.292	1.301	1.311	1.319	1.331	1.341	1.349	1.360	1.374	1.389	1.405	1.418	1.427	1.434	1.440	1.443	1.446	1.450	1.454	1.456
70	1.293	1.301	1.310	1.319	1.326	1.338	1.347	1.353	1.361	1.375	1.386	1.398	1.406	1.411	1.414	1.419	1.424	1.430	1.435	1.440
71	1.291	1.300	1.307	1.317	1.323	1.333	1.342	1.350	1.359	1.370	1.378	1.385	1.390	1.394	1.395	1.397	1.401	1.406	1.407	1.408
72	1.294	1.301	1.308	1.316	1.325	1.333	1.342	1.352	1.359	1.371	1.378	1.386	1.391	1.394	1.394	1.395	1.395	1.399	1.401	1.402
73	1.300	1.307	1.314	1.323	1.333	1.343	1.352	1.362	1.369	1.376	1.382	1.388	1.396	1.402	1.399	1.398	1.397	1.398	1.401	1.404
74	1.296	1.304	1.312	1.320	1.328	1.340	1.349	1.358	1.369	1.377	1.383	1.392	1.399	1.405	1.404	1.403	1.401	1.401	1.403	1.408
75	1.264	1.272	1.282	1.290	1.300	1.308	1.318	1.327	1.334	1.344	1.354	1.360	1.365	1.370	1.374	1.379	1.386	1.391	1.395	1.398
76	1.220	1.227	1.231	1.238	1.244	1.252	1.258	1.265	1.270	1.277	1.283	1.289	1.294	1.300	1.304	1.309	1.314	1.320	1.325	1.331
77	1.176	1.180	1.184	1.187	1.192	1.196	1.199	1.203	1.207	1.208	1.211	1.213	1.216	1.218	1.221	1.222	1.226	1.227	1.230	1.232
78	1.151	1.156	1.157	1.163	1.164	1.167	1.169	1.170	1.170	1.173	1.173	1.174	1.173	1.174	1.174	1.175	1.175	1.178	1.178	1.179
79	1.144	1.146	1.148	1.150	1.155	1.153	1.159	1.158	1.162	1.161	1.164	1.163	1.165	1.162	1.165	1.163	1.165	1.164	1.167	1.167
80	1.144	1.146	1.149	1.151	1.156	1.156	1.158	1.161	1.164	1.164	1.166	1.165	1.167	1.165	1.165	1.164	1.164	1.163	1.164	1.164
81	1.146	1.148	1.152	1.155	1.157	1.160	1.163	1.165	1.168	1.169	1.170	1.169	1.170	1.169	1.170	1.168	1.170	1.169	1.170	1.169
82	1.145	1.149	1.152	1.156	1.158	1.162	1.164	1.168	1.168	1.170	1.170	1.170	1.169	1.170	1.169	1.170	1.170	1.172	1.170	1.173
83	1.145	1.150	1.154	1.159	1.161	1.167	1.169	1.172	1.173	1.175	1.175	1.176	1.175	1.176	1.174	1.174	1.173	1.175	1.173	1.175
84	1.148	1.150	1.155	1.156	1.163	1.166	1.170	1.174	1.175	1.178	1.181	1.180	1.180	1.179	1.179	1.179	1.180	1.179	1.181	1.180
85	1.108	1.117	1.129	1.141	1.152	1.157	1.161	1.164	1.170	1.178	1.203	1.206	1.183	1.164	1.161	1.161	1.163	1.163	1.166	1.166
86	1.006	1.006	1.004	1.011	1.006	1.011	1.006	1.011	1.006	1.013	1.011	1.020	1.011	1.016	1.011	1.018	1.013	1.022	1.018	1.025
87	1.006	1.006	1.011	1.006	1.009	1.006	1.009	1.004	1.004	1.004	1.001	1.001	1.001	0.998	1.001	1.004	1.001	1.001	1.001	0.998
88	1.009	1.006	1.009	1.006	1.009	1.006	1.009	1.006	1.006	1.004	1.004	1.001	1.001	1.001	0.998	0.996	0.998	0.993	0.998	0.996
89	1.001	1.001	1.004	1.006	1.009	1.006	1.009	1.006	1.006	1.004	1.006	1.001	1.004	0.998	1.001	0.996	0.996	0.996	0.998	0.996
90	0.996	1.001	0.998	1.004	0.998	1.001	1.001	1.006	1.001	1.006	1.004	1.006	1.001	1.004	0.998	1.001	0.996	0.998	0.993	0.998
91	0.996	0.996	1.001	0.998	0.998	0.998	1.001	0.998	1.004	1.004	1.018	1.073	1.103	1.067	1.018	1.001	0.996	0.993	0.996	0.996
92	0.998	0.996	0.998	0.996	0.998	0.996	1.001	0.998	1.001	1.001	1.016	1.067	1.105	1.073	1.025	1.004	0.998	0.996	0.996	0.993
93	0.985	0.996	0.985	0.993	0.987	1.001	0.990	1.004	0.998	1.006	0.996	1.001	0.993	1.001	0.990	1.001	0.993	0.998	0.993	0.996
94	0.993	0.990	0.993	0.993	0.998	0.998	1.001	0.998	1.004	1.001	1.004	1.001	0.998	0.996	0.996	0.990	0.993	0.990	0.996	0.990
95	0.996	0.993	0.998	0.998	1.004	1.001	1.004	1.004	1.009	1.006	1.009	1.006	1.006	1.001	1.001	0.996	0.996	0.993	0.996	0.993
96	0.996	0.993	0.998	0.998	1.006	1.004	1.009	1.006	1.011	1.009	1.013	1.006	1.011	1.001	1.001	0.996	0.998	0.996	0.998	0.993
97	1.004	1.001	1.006	1.006	1.009	1.006	1.009	1.011	1.011	1.011	1.013	1.013	1.013	1.006	1.006	1.001	0.998	0.996	0.998	0.990
98	1.011	1.013	1.011	1.013	1.011	1.013	1.011	1.016	1.011	1.018	1.009	1.011	1.006	1.011	1.006	1.006	1.001	1.004	1.001	1.004

B-333332

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 44

IR SCAN TIME 12.67 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	1.362	1.340	1.333	1.349	1.380	1.416	1.450	1.483	1.507	1.498	1.494	1.498	1.495	1.490	1.465	1.408	1.327	1.262	1.219	1.140
65	1.447	1.431	1.398	1.354	1.311	1.287	1.290	1.316	1.348	1.378	1.417	1.448	1.468	1.481	1.490	1.492	1.476	1.434	1.357	1.264
66	1.450	1.452	1.452	1.448	1.438	1.414	1.376	1.333	1.285	1.253	1.247	1.253	1.278	1.312	1.352	1.391	1.426	1.449	1.460	1.436
67	1.443	1.446	1.446	1.447	1.454	1.464	1.469	1.465	1.434	1.388	1.341	1.299	1.270	1.255	1.250	1.253	1.267	1.297	1.333	1.366
68	1.451	1.454	1.458	1.458	1.458	1.466	1.479	1.487	1.476	1.463	1.450	1.422	1.381	1.332	1.291	1.266	1.256	1.254	1.252	1.249
69	1.457	1.458	1.461	1.464	1.469	1.477	1.488	1.498	1.486	1.472	1.465	1.460	1.455	1.444	1.422	1.389	1.347	1.303	1.274	1.261
70	1.446	1.453	1.461	1.468	1.473	1.481	1.490	1.501	1.489	1.476	1.470	1.464	1.459	1.457	1.450	1.443	1.438	1.427	1.403	1.370
71	1.407	1.407	1.410	1.414	1.417	1.424	1.438	1.463	1.462	1.458	1.463	1.464	1.464	1.463	1.462	1.458	1.457	1.457	1.458	1.458
72	1.402	1.401	1.397	1.390	1.381	1.374	1.370	1.373	1.359	1.355	1.370	1.386	1.402	1.419	1.434	1.447	1.455	1.458	1.463	1.468
73	1.407	1.409	1.404	1.401	1.400	1.404	1.409	1.412	1.397	1.365	1.332	1.305	1.283	1.274	1.272	1.284	1.296	1.316	1.341	1.367
74	1.412	1.419	1.423	1.423	1.420	1.423	1.435	1.454	1.458	1.439	1.421	1.405	1.383	1.356	1.323	1.289	1.254	1.229	1.213	1.208
75	1.402	1.409	1.418	1.423	1.427	1.436	1.448	1.463	1.453	1.431	1.436	1.435	1.433	1.428	1.420	1.407	1.391	1.367	1.336	1.296
76	1.338	1.345	1.352	1.360	1.369	1.380	1.391	1.407	1.389	1.375	1.401	1.411	1.415	1.417	1.419	1.423	1.423	1.423	1.419	1.410
77	1.236	1.239	1.242	1.245	1.249	1.253	1.257	1.263	1.268	1.264	1.265	1.272	1.281	1.289	1.298	1.308	1.321	1.332	1.342	1.353
78	1.179	1.180	1.180	1.182	1.183	1.184	1.186	1.189	1.189	1.186	1.178	1.179	1.178	1.178	1.176	1.177	1.176	1.179	1.179	1.184
79	1.168	1.168	1.170	1.170	1.170	1.170	1.174	1.175	1.176	1.172	1.168	1.166	1.167	1.166	1.164	1.162	1.161	1.158	1.156	1.156
80	1.165	1.164	1.166	1.166	1.169	1.168	1.170	1.170	1.175	1.172	1.168	1.164	1.165	1.163	1.163	1.160	1.161	1.158	1.157	1.156
81	1.170	1.170	1.170	1.170	1.172	1.172	1.175	1.175	1.177	1.175	1.170	1.167	1.167	1.164	1.164	1.163	1.160	1.157	1.156	1.153
82	1.172	1.175	1.175	1.178	1.178	1.181	1.183	1.186	1.187	1.190	1.181	1.178	1.176	1.175	1.171	1.170	1.166	1.164	1.159	1.157
83	1.173	1.175	1.175	1.175	1.175	1.176	1.178	1.181	1.183	1.187	1.181	1.179	1.178	1.179	1.176	1.176	1.173	1.173	1.170	1.170
84	1.181	1.181	1.181	1.179	1.181	1.180	1.181	1.181	1.183	1.185	1.182	1.173	1.174	1.172	1.170	1.169	1.167	1.165	1.164	1.164
85	1.169	1.172	1.175	1.176	1.179	1.180	1.183	1.183	1.184	1.187	1.186	1.174	1.172	1.170	1.170	1.165	1.165	1.161	1.161	1.159
86	1.027	1.029	1.031	1.035	1.037	1.043	1.045	1.054	1.052	1.065	1.072	1.072	1.065	1.069	1.069	1.067	1.065	1.069	1.070	1.075
87	1.006	0.998	1.001	0.996	1.001	0.998	0.998	0.998	1.001	0.996	1.001	0.996	0.998	0.993	0.998	0.993	0.998	0.990	0.993	0.987
88	0.998	0.993	0.998	0.993	0.998	0.996	0.996	0.993	0.996	0.993	0.993	0.993	0.990	0.990	0.993	0.990	0.990	0.982	0.990	0.978
89	0.998	0.996	0.996	0.996	0.998	0.996	0.996	0.993	0.993	0.990	0.993	0.990	0.990	0.990	0.987	0.987	0.987	0.987	0.987	0.985
90	0.996	0.998	0.996	0.998	0.996	0.998	0.993	0.993	0.990	0.996	0.990	0.996	0.990	0.993	0.990	0.990	0.985	0.990	0.982	0.987
91	0.996	0.990	0.996	0.993	0.996	0.993	0.996	0.993	0.996	0.993	1.001	1.025	1.037	1.011	0.993	0.990	0.987	0.985	0.985	0.982
92	0.996	0.993	0.996	0.996	0.998	0.996	0.996	0.996	0.996	0.993	1.013	1.060	1.081	1.045	1.006	0.990	0.987	0.985	0.985	0.982
93	0.993	0.996	0.993	0.998	0.993	0.996	0.993	0.996	0.990	0.996	0.987	0.996	0.996	0.993	0.985	0.987	0.982	0.985	0.982	0.985
94	0.996	0.990	0.996	0.990	0.996	0.993	0.996	0.993	0.996	0.990	0.993	0.985	0.987	0.985	0.990	0.985	0.985	0.978	0.985	0.978
95	0.993	0.993	0.993	0.993	0.998	0.998	0.998	0.996	0.998	0.993	0.993	0.993	0.990	0.990	0.990	0.982	0.985	0.978	0.985	0.978
96	0.996	0.996	0.996	0.996	0.996	0.996	0.998	0.996	0.996	0.996	0.993	0.990	0.990	0.985	0.990	0.985	0.987	0.982	0.987	0.978
97	0.996	0.993	0.996	0.996	0.998	0.996	1.001	0.998	1.001	0.993	0.996	0.990	0.990	0.985	0.990	0.985	0.985	0.982	0.985	0.982
98	0.998	1.001	0.996	0.996	0.993	1.001	0.996	0.998	0.996	1.001	0.996	0.993	0.987	0.990	0.985	0.987	0.982	0.985	0.982	0.987

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 44

IR SCAN TIME 12.67 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	1.062	1.039	1.022	1.022	1.013	1.009	1.001	1.004	0.998	1.001	0.996	0.998	0.993	0.996	0.993	0.998	0.993	0.998	0.993	0.996
65	1.166	1.082	1.041	1.027	1.020	1.018	1.006	1.004	0.996	0.996	0.996	0.996	0.993	0.998	0.993	0.996	0.990	0.993	0.990	0.993
66	1.368	1.261	1.143	1.064	1.035	1.020	1.020	1.006	0.998	0.993	0.993	0.990	0.990	0.990	0.993	0.987	0.990	0.987	0.990	0.987
67	1.387	1.385	1.343	1.247	1.114	1.055	1.022	1.020	1.001	0.996	0.985	0.990	0.978	0.987	0.978	0.985	0.975	0.982	0.975	0.985
68	1.255	1.274	1.302	1.309	1.248	1.130	1.065	1.031	1.020	1.009	0.996	0.985	0.985	0.978	0.982	0.975	0.975	0.972	0.972	0.972
69	1.258	1.254	1.254	1.250	1.253	1.230	1.157	1.073	1.035	1.018	1.013	0.996	0.985	0.975	0.975	0.972	0.975	0.972	0.975	0.972
70	1.331	1.296	1.275	1.272	1.271	1.269	1.248	1.179	1.083	1.041	1.020	1.013	1.001	0.990	0.978	0.978	0.975	0.975	0.972	0.975
71	1.451	1.440	1.417	1.376	1.327	1.287	1.263	1.248	1.201	1.117	1.046	1.025	1.013	1.009	0.990	0.987	0.975	0.978	0.972	0.972
72	1.468	1.468	1.468	1.465	1.453	1.429	1.389	1.338	1.287	1.237	1.155	1.070	1.029	1.016	1.006	0.998	0.982	0.978	0.972	0.975
73	1.390	1.412	1.431	1.440	1.444	1.450	1.452	1.448	1.426	1.384	1.327	1.241	1.123	1.054	1.022	1.011	0.996	0.987	0.975	0.972
74	1.208	1.215	1.225	1.244	1.265	1.298	1.329	1.359	1.382	1.406	1.416	1.404	1.343	1.229	1.112	1.048	1.009	1.004	0.987	0.978
75	1.257	1.222	1.199	1.189	1.186	1.184	1.187	1.189	1.194	1.201	1.217	1.233	1.249	1.241	1.160	1.064	1.022	1.006	0.998	0.985
76	1.396	1.373	1.338	1.293	1.246	1.210	1.184	1.176	1.173	1.174	1.173	1.176	1.176	1.179	1.172	1.134	1.059	1.018	1.001	0.998
77	1.366	1.376	1.385	1.388	1.385	1.373	1.352	1.320	1.282	1.245	1.213	1.187	1.178	1.174	1.175	1.170	1.144	1.079	1.025	1.004
78	1.188	1.196	1.204	1.216	1.230	1.248	1.266	1.285	1.300	1.312	1.314	1.307	1.286	1.259	1.234	1.216	1.198	1.174	1.118	1.050
79	1.156	1.155	1.155	1.154	1.153	1.151	1.152	1.154	1.158	1.161	1.166	1.170	1.183	1.194	1.203	1.205	1.202	1.199	1.193	1.156
80	1.156	1.152	1.152	1.151	1.151	1.148	1.148	1.146	1.148	1.151	1.154	1.154	1.154	1.154	1.156	1.156	1.157	1.158	1.164	1.169
81	1.153	1.148	1.148	1.143	1.145	1.144	1.145	1.142	1.144	1.142	1.147	1.147	1.151	1.150	1.150	1.151	1.154	1.152	1.153	1.152
82	1.152	1.151	1.145	1.143	1.139	1.140	1.138	1.140	1.138	1.140	1.140	1.141	1.141	1.144	1.142	1.145	1.148	1.147	1.145	1.148
83	1.165	1.163	1.157	1.156	1.151	1.148	1.145	1.145	1.142	1.141	1.138	1.140	1.136	1.137	1.134	1.136	1.135	1.140	1.138	1.144
84	1.164	1.163	1.164	1.164	1.163	1.162	1.161	1.160	1.160	1.158	1.158	1.156	1.155	1.151	1.148	1.146	1.145	1.142	1.142	1.143
85	1.157	1.156	1.156	1.155	1.156	1.154	1.155	1.154	1.155	1.154	1.156	1.157	1.160	1.163	1.167	1.167	1.170	1.169	1.172	1.172
86	1.076	1.081	1.083	1.089	1.090	1.092	1.093	1.094	1.096	1.098	1.098	1.100	1.100	1.105	1.110	1.119	1.119	1.121	1.126	1.134
87	0.993	0.993	0.993	0.990	0.993	0.990	0.993	0.987	0.993	0.990	0.990	0.990	0.990	0.987	0.990	0.987	0.990	0.990	0.993	0.990
88	0.987	0.978	0.987	0.978	0.985	0.975	0.982	0.978	0.985	0.975	0.978	0.975	0.985	0.982	0.987	0.978	0.985	0.982	0.985	0.978
89	0.985	0.982	0.985	0.978	0.985	0.982	0.982	0.978	0.978	0.978	0.975	0.975	0.978	0.975	0.978	0.972	0.978	0.972	0.978	0.972
90	0.985	0.985	0.982	0.982	0.978	0.982	0.978	0.982	0.978	0.978	0.975	0.978	0.972	0.975	0.978	0.990	0.987	0.985	0.978	0.985
91	0.985	0.978	0.985	0.978	0.978	0.975	0.982	0.975	0.978	0.985	0.998	0.993	0.982	0.975	0.975	0.975	0.978	0.975	0.978	0.975
92	0.985	0.978	0.978	0.978	0.978	0.978	0.978	0.978	0.985	1.006	1.043	1.037	1.006	0.982	0.978	0.975	0.978	0.978	0.978	0.972
93	0.982	0.987	0.985	0.982	0.978	0.985	0.975	0.982	0.975	0.982	0.985	0.990	0.975	0.975	0.972	0.975	0.972	0.978	0.972	0.975
94	0.985	0.978	0.982	0.978	0.978	0.975	0.978	0.972	0.978	0.978	0.978	0.975	0.978	0.975	0.975	0.978	0.978	0.975	0.978	0.972
95	0.982	0.975	0.978	0.972	0.978	0.972	0.978	0.972	0.978	0.972	0.978	0.975	0.978	0.975	0.976	0.972	0.978	0.978	0.982	0.975
96	0.985	0.978	0.982	0.978	0.978	0.975	0.978	0.978	0.975	0.975	0.978	0.975	0.978	0.972	0.975	0.972	0.982	0.975	0.982	0.972
97	0.985	0.978	0.982	0.978	0.985	0.975	0.982	0.978	0.978	0.975	0.982	0.972	0.978	0.975	0.978	0.978	0.982	0.982	0.985	0.978
98	0.978	0.985	0.978	0.985	0.978	0.985	0.978	0.985	0.978	0.985	0.978	0.982	0.978	0.985	0.985	0.998	0.998	0.998	0.987	0.990

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 44

IR SCAN TIME 12.67 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.990	0.996	0.990	0.990	0.987	0.996	0.987	0.993	0.985	0.990	0.982	0.987	0.985	0.987	0.982	0.985	0.978	0.985	0.975	0.982
65	0.990	0.993	0.987	0.993	0.987	0.990	0.985	0.987	0.982	0.985	0.985	0.987	0.978	0.982	0.978	0.982	0.975	0.978	0.975	0.975
66	0.987	0.985	0.987	0.985	0.985	0.978	0.978	0.975	0.978	0.975	0.978	0.972	0.975	0.972	0.972	0.969	0.972	0.969	0.969	0.965
67	0.978	0.982	0.972	0.975	0.972	0.978	0.969	0.975	0.969	0.972	0.969	0.972	0.962	0.965	0.962	0.965	0.958	0.962	0.958	0.962
68	0.972	0.965	0.969	0.962	0.965	0.958	0.965	0.955	0.965	0.955	0.962	0.951	0.958	0.947	0.955	0.947	0.958	0.955	0.958	0.955
69	0.972	0.969	0.969	0.969	0.969	0.965	0.965	0.962	0.962	0.958	0.958	0.955	0.958	0.951	0.955	0.951	0.955	0.947	0.955	0.929
70	0.965	0.972	0.962	0.969	0.965	0.969	0.962	0.965	0.958	0.965	0.958	0.962	0.955	0.962	0.955	0.958	0.955	0.955	0.951	0.958
71	0.969	0.972	0.969	0.969	0.965	0.969	0.962	0.965	0.958	0.962	0.958	0.962	0.955	0.958	0.955	0.958	0.955	0.962	0.955	0.958
72	0.969	0.972	0.965	0.969	0.965	0.972	0.965	0.972	0.962	0.965	0.962	0.965	0.958	0.965	0.958	0.962	0.955	0.955	0.951	0.955
73	0.969	0.972	0.972	0.969	0.969	0.962	0.965	0.965	0.962	0.962	0.962	0.962	0.955	0.958	0.958	0.951	0.962	0.958	0.955	0.955
74	0.972	0.972	0.965	0.969	0.962	0.969	0.962	0.969	0.962	0.965	0.955	0.965	0.958	0.962	0.958	0.958	0.955	0.955	0.951	0.955
75	0.978	0.962	0.965	0.955	0.965	0.955	0.965	0.958	0.958	0.958	0.958	0.951	0.958	0.951	0.955	0.955	0.955	0.951	0.958	0.947
76	0.993	0.990	0.972	0.972	0.965	0.969	0.965	0.965	0.958	0.965	0.955	0.958	0.955	0.958	0.951	0.955	0.947	0.955	0.938	0.951
77	0.996	0.993	0.990	0.985	0.972	0.962	0.962	0.955	0.958	0.955	0.955	0.955	0.958	0.955	0.955	0.951	0.951	0.951	0.955	0.951
78	1.009	0.998	0.990	0.993	0.990	0.993	0.975	0.969	0.955	0.958	0.951	0.958	0.955	0.955	0.951	0.955	0.947	0.951	0.942	0.951
79	1.092	1.035	1.009	0.990	0.990	0.987	0.987	0.985	0.982	0.972	0.962	0.955	0.951	0.942	0.951	0.942	0.947	0.942	0.947	0.938
80	1.164	1.118	1.045	1.004	0.993	0.990	0.990	0.987	0.987	0.985	0.987	0.982	0.982	0.969	0.969	0.962	0.962	0.955	0.962	0.958
81	1.153	1.143	1.105	1.043	1.004	0.985	0.985	0.978	0.982	0.978	0.978	0.975	0.978	0.975	0.975	0.975	0.975	0.972	0.965	0.958
82	1.148	1.152	1.145	1.119	1.055	1.006	0.978	0.982	0.972	0.978	0.969	0.978	0.969	0.978	0.972	0.978	0.975	0.978	0.972	0.978
83	1.146	1.150	1.150	1.148	1.126	1.078	1.013	0.990	0.972	0.975	0.972	0.972	0.969	0.975	0.969	0.975	0.962	0.975	0.962	0.975
84	1.144	1.145	1.148	1.146	1.144	1.126	1.085	1.025	0.987	0.972	0.972	0.969	0.969	0.969	0.972	0.972	0.975	0.972	0.972	0.972
85	1.173	1.174	1.174	1.170	1.168	1.158	1.140	1.100	1.046	0.996	0.975	0.965	0.969	0.962	0.969	0.965	0.972	0.969	0.972	0.972
86	1.140	1.142	1.143	1.144	1.143	1.144	1.139	1.128	1.097	1.046	0.996	0.982	0.972	0.972	0.969	0.972	0.969	0.975	0.969	0.975
87	0.990	0.987	0.987	0.985	0.985	0.985	0.985	0.987	0.987	0.982	0.978	0.972	0.972	0.965	0.975	0.965	0.969	0.972	0.972	0.969
88	0.978	0.972	0.975	0.972	0.975	0.972	0.975	0.972	0.978	0.975	0.975	0.972	0.972	0.965	0.972	0.965	0.965	0.962	0.965	0.965
89	0.978	0.969	0.972	0.972	0.972	0.965	0.972	0.969	0.969	0.969	0.972	0.969	0.972	0.965	0.972	0.969	0.969	0.962	0.969	0.962
90	0.987	0.993	0.978	0.975	0.972	0.975	0.969	0.972	0.969	0.972	0.969	0.969	0.965	0.965	0.958	0.969	0.958	0.969	0.958	0.965
91	0.978	0.975	0.975	0.972	0.972	0.972	0.972	0.969	0.972	0.965	0.965	0.962	0.962	0.962	0.965	0.962	0.962	0.962	0.962	0.962
92	0.978	0.975	0.975	0.972	0.969	0.965	0.969	0.965	0.965	0.962	0.965	0.962	0.965	0.958	0.962	0.962	0.962	0.962	0.962	0.962
93	0.972	0.975	0.965	0.972	0.965	0.972	0.965	0.972	0.969	0.969	0.965	0.969	0.965	0.969	0.965	0.972	0.962	0.969	0.962	0.969
94	0.978	0.972	0.972	0.969	0.972	0.965	0.969	0.965	0.965	0.962	0.965	0.958	0.965	0.962	0.965	0.962	0.962	0.958	0.965	0.962
95	0.982	0.975	0.978	0.972	0.972	0.969	0.972	0.969	0.972	0.969	0.969	0.965	0.969	0.965	0.969	0.962	0.965	0.965	0.969	0.962
96	0.978	0.972	0.975	0.965	0.969	0.962	0.969	0.962	0.972	0.962	0.972	0.965	0.972	0.965	0.969	0.962	0.965	0.962	0.969	0.965
97	0.982	0.978	0.975	0.972	0.972	0.969	0.972	0.969	0.969	0.969	0.972	0.958	0.965	0.962	0.969	0.955	0.972	0.955	0.965	0.958
98	0.990	0.998	0.990	0.982	0.975	0.975	0.969	0.975	0.969	0.975	0.969	0.972	0.965	0.969	0.962	0.969	0.965	0.972	0.965	0.969

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 44

IR SCAN TIME 12.67 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.975	0.982	0.978	0.982	0.975	0.982	0.975	0.978	0.975	0.982
65	0.972	0.975	0.972	0.975	0.969	0.972	0.965	0.978	0.972	0.975
66	0.969	0.965	0.965	0.962	0.965	0.962	0.965	0.962	0.965	0.958
67	0.955	0.958	0.958	0.962	0.955	0.958	0.955	0.958	0.955	0.958
68	0.955	0.951	0.955	0.951	0.955	0.947	0.951	0.942	0.947	0.938
69	0.951	0.934	0.951	0.934	0.947	0.924	0.947	0.924	0.942	0.929
70	0.947	0.955	0.942	0.951	0.942	0.947	0.938	0.942	0.942	0.942
71	0.951	0.955	0.947	0.955	0.947	0.951	0.942	0.947	0.938	0.942
72	0.951	0.955	0.947	0.951	0.942	0.951	0.942	0.947	0.938	0.947
73	0.955	0.955	0.951	0.958	0.947	0.934	0.947	0.942	0.938	0.938
74	0.947	0.951	0.942	0.951	0.942	0.951	0.938	0.947	0.938	0.947
75	0.955	0.947	0.951	0.947	0.951	0.942	0.947	0.942	0.942	0.938
76	0.934	0.951	0.934	0.947	0.938	0.947	0.934	0.947	0.929	0.942
77	0.951	0.947	0.947	0.947	0.947	0.938	0.947	0.938	0.942	0.934
78	0.938	0.951	0.942	0.947	0.938	0.942	0.934	0.942	0.938	0.947
79	0.942	0.934	0.947	0.938	0.947	0.938	0.942	0.934	0.942	0.938
80	0.958	0.958	0.958	0.951	0.955	0.955	0.955	0.955	0.958	0.951
81	0.955	0.947	0.947	0.938	0.942	0.934	0.942	0.934	0.938	0.934
82	0.972	0.978	0.969	0.972	0.962	0.965	0.955	0.955	0.942	0.947
83	0.962	0.975	0.965	0.975	0.965	0.975	0.958	0.972	0.958	0.969
84	0.975	0.972	0.975	0.972	0.972	0.969	0.972	0.969	0.969	0.969
85	0.969	0.965	0.972	0.969	0.972	0.969	0.972	0.965	0.969	0.965
86	0.965	0.972	0.962	0.965	0.962	0.969	0.965	0.969	0.962	0.969
87	0.969	0.969	0.969	0.969	0.969	0.965	0.965	0.962	0.965	0.962
88	0.965	0.962	0.972	0.962	0.969	0.969	0.972	0.965	0.969	0.962
89	0.972	0.962	0.965	0.962	0.965	0.958	0.969	0.965	0.969	0.962
90	0.958	0.965	0.955	0.969	0.958	0.965	0.955	0.965	0.955	0.969
91	0.965	0.962	0.965	0.958	0.962	0.958	0.962	0.958	0.958	0.958
92	0.962	0.962	0.965	0.958	0.962	0.962	0.962	0.962	0.965	0.962
93	0.958	0.965	0.962	0.969	0.958	0.965	0.958	0.965	0.958	0.965
94	0.965	0.962	0.965	0.962	0.965	0.965	0.965	0.962	0.965	0.965
95	0.969	0.965	0.965	0.962	0.965	0.965	0.969	0.965	0.969	0.965
96	0.969	0.962	0.969	0.962	0.969	0.969	0.972	0.965	0.972	0.965
97	0.965	0.958	0.969	0.958	0.965	0.962	0.969	0.969	0.972	0.972
98	0.965	0.965	0.969	0.969	0.962	0.972	0.969	0.969	0.965	0.969

NASA/PI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 12.67 SEC
HRFR = 0.253E-01

GROUP 44

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	0.007	0.010	0.009	0.007	0.008	0.008	0.005	0.008	0.007	0.008	0.007	0.003	0.008	0.010	0.007	0.005	0.008	0.009	0.009	0.008
30	0.009	0.009	0.010	0.009	0.004	0.005	0.004	0.008	0.005	0.008	0.008	0.008	0.007	0.009	0.007	0.008	0.008	0.010	0.008	0.009
31	0.009	0.008	0.005	0.005	0.008	0.008	0.008	0.009	0.008	0.010	0.008	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.007	0.007
32	0.007	0.007	0.007	0.008	0.009	0.010	0.008	0.009	0.005	0.008	0.007	0.010	0.007	0.009	0.007	0.008	0.005	0.007	0.007	0.008
33	0.007	0.009	0.009	0.009	0.008	0.009	0.007	0.009	0.007	0.009	0.008	0.008	0.005	0.005	0.004	0.008	0.007	0.010	0.007	0.011
34	0.010	0.010	0.009	0.007	0.007	0.007	0.005	0.007	0.007	0.005	0.005	0.003	0.005	0.004	0.008	0.008	0.010	0.009	0.010	0.010
35	0.010	0.005	0.003	0.005	0.002	0.005	0.001	0.004	0.001	0.005	0.003	0.008	0.004	0.008	0.007	0.010	0.010	0.011	0.011	0.011
36	0.005	0.005	0.004	0.003	0.003	0.003	0.005	0.004	0.007	0.007	0.007	0.007	0.010	0.009	0.010	0.010	0.010	0.005	0.004	0.004
37	0.004	0.005	0.003	0.004	0.003	0.005	0.004	0.008	0.007	0.008	0.007	0.010	0.009	0.010	0.005	0.003	0.003	0.003	0.003	0.003
38	0.003	0.003	0.005	0.004	0.005	0.005	0.008	0.009	0.010	0.009	0.010	0.006	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
39	0.005	0.004	0.004	0.007	0.007	0.008	0.007	0.010	0.007	0.008	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
40	0.007	0.008	0.008	0.009	0.008	0.009	0.008	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
41	0.008	0.009	0.009	0.009	0.005	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
42	0.010	0.009	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
43	0.007	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
44	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
45	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.017	0.031
46	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.023	0.083	0.136
47	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.002	0.002	0.003	0.004	0.031	0.100	0.150
48	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.003	0.002	0.003	0.004	0.010	0.050	0.121	0.165
49	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.002	0.002	0.003	0.005	0.004	0.016	0.074	0.143	0.177
50	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.002	0.001	0.003	0.002	0.007	0.003	0.009	0.026	0.096	0.158	0.187
51	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.002	0.004	0.004	0.007	0.010	0.045	0.120	0.169	0.190
52	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.003	0.003	0.013	0.064	0.140	0.177	0.195
53	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.014	0.077	0.147	0.179	0.195
54	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.020	0.093	0.154	0.180	0.193
55	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.032	0.105	0.158	0.181	0.194
56	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.007	0.049	0.119	0.164	0.185	0.196
57	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.014	0.068	0.136	0.170	0.187	0.196
58	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.018	0.086	0.148	0.178	0.193	0.204
59	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.034	0.108	0.159	0.180	0.194	0.203
60	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.009	0.054	0.122	0.162	0.180	0.193	0.202
61	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.015	0.067	0.130	0.162	0.179	0.190	0.198
62	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.013	0.074	0.134	0.162	0.177	0.188	0.195
63	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.017	0.081	0.137	0.160	0.173	0.181	0.190

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 12.67 SEC
HRFR = 0.253E-01

GROUP 44

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	0.010	0.007	0.009	0.005	0.009	0.004	0.007	0.003	0.005	0.004	0.008	0.004	0.008	0.005	0.010	0.010	0.010	0.010	0.011	0.011
30	0.005	0.007	0.007	0.008	0.007	0.009	0.007	0.008	0.007	0.011	0.010	0.012	0.012	0.012	0.012	0.013	0.013	0.015	0.011	0.013
31	0.004	0.007	0.007	0.010	0.008	0.011	0.010	0.012	0.011	0.013	0.013	0.015	0.015	0.015	0.013	0.013	0.009	0.008	0.003	0.001
32	0.005	0.010	0.010	0.014	0.011	0.013	0.013	0.014	0.012	0.014	0.011	0.011	0.008	0.005	0.005	0.005	0.005	0.005	0.005	0.005
33	0.009	0.011	0.010	0.012	0.012	0.012	0.011	0.009	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
34	0.011	0.009	0.012	0.009	0.007	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
35	0.008	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
36	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
37	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
38	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
39	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
40	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
41	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
42	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
43	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
44	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
45	0.036	0.035	0.032	0.026	0.022	0.017	0.013	0.009	0.009	0.005	0.005	0.003	0.004	0.003	0.004	0.003	0.002	0.002	0.002	0.001
46	0.159	0.174	0.185	0.196	0.203	0.209	0.209	0.200	0.178	0.148	0.110	0.071	0.039	0.024	0.014	0.011	0.008	0.008	0.004	0.007
47	0.172	0.185	0.196	0.208	0.223	0.238	0.257	0.273	0.287	0.293	0.293	0.285	0.263	0.227	0.176	0.112	0.056	0.025	0.016	0.010
48	0.185	0.199	0.211	0.223	0.236	0.248	0.260	0.272	0.282	0.289	0.296	0.296	0.290	0.288	0.292	0.280	0.221	0.126	0.060	0.031
49	0.196	0.209	0.223	0.235	0.249	0.265	0.280	0.290	0.292	0.292	0.295	0.298	0.300	0.301	0.305	0.309	0.308	0.265	0.171	0.081
50	0.203	0.216	0.227	0.241	0.254	0.269	0.286	0.304	0.315	0.325	0.327	0.323	0.315	0.311	0.312	0.316	0.318	0.329	0.326	0.245
51	0.204	0.215	0.227	0.242	0.256	0.272	0.287	0.303	0.321	0.331	0.334	0.333	0.330	0.320	0.312	0.302	0.297	0.296	0.306	0.325
52	0.207	0.218	0.227	0.241	0.255	0.271	0.288	0.306	0.322	0.331	0.333	0.338	0.344	0.350	0.349	0.344	0.330	0.314	0.298	0.288
53	0.204	0.214	0.222	0.235	0.247	0.264	0.281	0.300	0.318	0.334	0.341	0.342	0.340	0.342	0.349	0.359	0.361	0.354	0.348	0.325
54	0.205	0.212	0.221	0.232	0.246	0.261	0.277	0.293	0.311	0.326	0.339	0.348	0.351	0.353	0.356	0.353	0.355	0.363	0.372	0.375
55	0.204	0.212	0.220	0.229	0.242	0.256	0.270	0.287	0.303	0.317	0.328	0.336	0.340	0.346	0.354	0.359	0.365	0.368	0.365	0.371
56	0.205	0.212	0.220	0.229	0.242	0.254	0.269	0.285	0.298	0.310	0.317	0.322	0.327	0.330	0.337	0.343	0.355	0.367	0.381	0.388
57	0.204	0.210	0.219	0.228	0.240	0.253	0.266	0.279	0.292	0.303	0.311	0.314	0.321	0.329	0.334	0.335	0.337	0.344	0.356	0.367
58	0.211	0.216	0.225	0.236	0.247	0.261	0.275	0.292	0.303	0.313	0.316	0.320	0.328	0.336	0.334	0.333	0.337	0.343	0.344	0.352
59	0.210	0.216	0.225	0.237	0.249	0.263	0.277	0.293	0.309	0.317	0.321	0.326	0.334	0.341	0.338	0.333	0.338	0.342	0.339	0.337
60	0.208	0.214	0.224	0.231	0.240	0.254	0.268	0.284	0.300	0.310	0.318	0.329	0.342	0.349	0.345	0.341	0.343	0.344	0.341	0.339
61	0.203	0.209	0.218	0.227	0.236	0.248	0.259	0.272	0.281	0.287	0.290	0.301	0.317	0.328	0.336	0.345	0.347	0.344	0.341	0.345
62	0.200	0.206	0.213	0.220	0.229	0.238	0.252	0.266	0.277	0.282	0.285	0.287	0.289	0.286	0.286	0.290	0.299	0.312	0.320	0.329
63	0.195	0.202	0.209	0.217	0.225	0.235	0.247	0.261	0.274	0.283	0.289	0.301	0.312	0.315	0.308	0.296	0.277	0.266	0.263	0.269

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 12.67 SEC
HRFR = 0.253E-01

GROUP 44

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	0.013	0.012	0.013	0.012	0.012	0.010	0.011	0.008	0.007	0.003	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
30	0.009	0.009	0.004	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
31	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
32	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
33	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
34	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
35	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
36	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
37	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
38	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
39	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
40	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
41	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
42	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
43	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
44	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
45	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
46	0.004	0.005	0.003	0.004	0.002	0.003	0.001	0.002	0.002	0.002	0.002	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002
47	0.010	0.008	0.008	0.004	0.005	0.003	0.004	0.003	0.003	0.002	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001
48	0.019	0.012	0.011	0.010	0.010	0.007	0.007	0.005	0.005	0.003	0.004	0.002	0.003	0.002	0.003	0.002	0.003	0.002	0.002	0.002
49	0.041	0.021	0.020	0.013	0.011	0.009	0.009	0.007	0.008	0.005	0.007	0.004	0.004	0.003	0.003	0.002	0.003	0.002	0.003	0.001
50	0.125	0.056	0.031	0.025	0.021	0.018	0.011	0.011	0.008	0.009	0.008	0.008	0.005	0.007	0.004	0.005	0.003	0.004	0.002	0.004
51	0.294	0.178	0.077	0.036	0.021	0.017	0.019	0.014	0.013	0.010	0.010	0.009	0.008	0.007	0.007	0.004	0.005	0.003	0.004	0.002
52	0.291	0.280	0.196	0.098	0.046	0.025	0.018	0.017	0.012	0.010	0.004	0.005	0.002	0.004	0.001	0.003	0.003	0.002	0.002	0.002
53	0.302	0.290	0.275	0.211	0.109	0.048	0.025	0.018	0.015	0.012	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
54	0.367	0.349	0.329	0.316	0.265	0.156	0.069	0.035	0.021	0.017	0.014	0.005	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
55	0.382	0.388	0.384	0.371	0.363	0.350	0.270	0.141	0.062	0.031	0.020	0.016	0.011	0.004	0.002	0.002	0.002	0.002	0.002	0.001
56	0.390	0.387	0.387	0.390	0.392	0.400	0.410	0.341	0.187	0.081	0.041	0.022	0.018	0.012	0.007	0.001	0.002	0.001	0.002	0.003
57	0.379	0.387	0.385	0.377	0.375	0.379	0.396	0.416	0.376	0.239	0.110	0.053	0.029	0.019	0.016	0.008	0.002	0.002	0.003	0.002
58	0.364	0.372	0.378	0.386	0.389	0.389	0.390	0.400	0.414	0.387	0.273	0.148	0.068	0.036	0.020	0.017	0.009	0.007	0.004	0.005
59	0.341	0.351	0.358	0.363	0.369	0.377	0.387	0.400	0.417	0.431	0.404	0.277	0.131	0.059	0.031	0.017	0.016	0.010	0.010	0.003
60	0.338	0.340	0.345	0.349	0.349	0.351	0.360	0.374	0.397	0.423	0.448	0.408	0.286	0.159	0.072	0.036	0.020	0.015	0.012	0.005
61	0.349	0.345	0.344	0.348	0.351	0.352	0.349	0.342	0.340	0.351	0.355	0.339	0.360	0.348	0.234	0.109	0.048	0.026	0.015	0.012
62	0.341	0.345	0.346	0.344	0.343	0.348	0.358	0.369	0.378	0.354	0.288	0.247	0.255	0.296	0.334	0.282	0.155	0.066	0.035	0.018
63	0.288	0.309	0.330	0.345	0.357	0.365	0.375	0.391	0.410	0.404	0.367	0.349	0.312	0.252	0.206	0.217	0.255	0.215	0.112	0.051

IR HEAT TRANSFER COEFFICIENT = H(,9TO)/HRFR
IR SCAN TIME 12.67 SEC
GROUP 44 HRFR = 0.253E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
30	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
31	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
32	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
33	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
34	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
35	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
36	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
37	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
38	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
39	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
40	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
41	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
42	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
43	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
44	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
45	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
46	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
47	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
48	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
49	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
50	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
51	0.003	0.001	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
52	0.001	0.003	0.003	0.003	0.003	0.004	0.001	0.003	0.001	0.003	0.002	0.003	0.001	0.002	0.001	0.003	0.001	0.002	0.002	0.002
53	0.003	0.002	0.002	0.003	0.002	0.003	0.001	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.001
54	0.002	0.002	0.003	0.003	0.004	0.003	0.004	0.003	0.005	0.003	0.004	0.003	0.004	0.003	0.003	0.002	0.002	0.002	0.002	0.002
55	0.004	0.003	0.005	0.004	0.005	0.004	0.005	0.004	0.007	0.004	0.007	0.005	0.005	0.003	0.004	0.003	0.004	0.002	0.003	0.002
56	0.007	0.007	0.008	0.007	0.007	0.005	0.007	0.005	0.007	0.005	0.007	0.004	0.005	0.003	0.005	0.003	0.004	0.002	0.003	0.001
57	0.005	0.003	0.005	0.004	0.005	0.003	0.003	0.002	0.003	0.002	0.003	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
58	0.003	0.005	0.003	0.004	0.003	0.004	0.003	0.002	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
59	0.003	0.003	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
60	0.004	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
61	0.008	0.007	0.003	0.003	0.002	0.002	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
62	0.013	0.009	0.008	0.002	0.003	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
63	0.025	0.016	0.011	0.008	0.003	0.004	0.001	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
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MAR 7,1978

IR HEAT TRANSFER COEFFICIENT - H(,9TO)/HRFR
IR SCAN TIME 12.67 SEC
HRFR = 0.253E-01

GROUP 44

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
30	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
31	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
32	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
33	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
34	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
35	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
36	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
37	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
38	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
39	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
40	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
41	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
42	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
43	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
44	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
45	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
46	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
47	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
48	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
49	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
50	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
51	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
52	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
53	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
54	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
55	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
56	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
57	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
58	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
59	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
60	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
61	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
62	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
63	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 12.67 SEC
HRFR = 0.253E-01

GROUP 44

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
30	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
31	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
32	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
33	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
34	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
35	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
36	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
37	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
38	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
39	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
40	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
41	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
42	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
43	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
44	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
45	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
46	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
47	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
48	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
49	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
50	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
51	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
52	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
53	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
54	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
55	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
56	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
57	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
58	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
59	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
60	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
61	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
62	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
63	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 12.67 SEC
GROUP 44 HREF = 0.253E-01

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.028	0.096	0.143	0.162	0.175	0.184	0.192
65	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.051	0.116	0.150	0.166	0.178	0.186	0.193
66	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.008	0.068	0.127	0.152	0.168	0.178	0.187	0.194
67	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.016	0.087	0.132	0.152	0.164	0.174	0.180	0.187
68	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.036	0.098	0.131	0.145	0.157	0.164	0.171	0.179
69	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.045	0.104	0.131	0.145	0.156	0.164	0.171	0.176
70	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.002	0.057	0.112	0.134	0.148	0.157	0.164	0.170	0.177
71	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.011	0.068	0.117	0.136	0.148	0.157	0.165	0.171	0.177
72	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.014	0.079	0.123	0.139	0.151	0.159	0.166	0.172	0.177
73	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.034	0.096	0.130	0.144	0.155	0.162	0.169	0.175	0.181
74	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.049	0.105	0.131	0.145	0.153	0.160	0.166	0.172	0.179
75	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.060	0.102	0.117	0.127	0.134	0.140	0.145	0.151	0.154
76	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.009	0.062	0.087	0.098	0.104	0.110	0.112	0.117	0.120	0.125
77	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.015	0.053	0.072	0.079	0.083	0.086	0.089	0.092	0.094	0.096
78	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.014	0.049	0.058	0.067	0.069	0.074	0.074	0.077	0.078	0.081
79	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.022	0.047	0.057	0.063	0.066	0.068	0.071	0.071	0.074	0.076
80	0.004	0.010	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.029	0.053	0.060	0.064	0.068	0.069	0.072	0.073	0.074	0.076
81	0.009	0.022	0.031	0.015	0.002	0.002	0.002	0.002	0.002	0.008	0.040	0.056	0.064	0.065	0.069	0.069	0.073	0.073	0.076	0.077
82	0.036	0.042	0.050	0.040	0.014	0.002	0.002	0.002	0.002	0.018	0.047	0.060	0.066	0.068	0.069	0.072	0.072	0.074	0.074	0.078
83	0.035	0.037	0.054	0.050	0.020	0.007	0.007	0.007	0.007	0.033	0.064	0.073	0.073	0.074	0.073	0.074	0.073	0.074	0.075	0.077
84	0.016	0.014	0.023	0.023	0.010	0.002	0.002	0.002	0.008	0.044	0.080	0.090	0.093	0.093	0.093	0.089	0.087	0.084	0.082	0.081
85	0.012	0.010	0.009	0.011	0.009	0.001	0.002	0.003	0.010	0.010	0.012	0.012	0.014	0.012	0.019	0.022	0.031	0.036	0.045	0.053
86	0.002	0.001	0.002	0.005	0.002	0.002	0.001	0.005	0.008	0.009	0.008	0.009	0.008	0.008	0.007	0.008	0.004	0.004	0.001	0.004
87	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.007	0.010	0.005	0.007	0.005	0.005	0.003	0.004	0.004	0.004	0.004	0.004	0.003
88	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.009	0.005	0.008	0.005	0.007	0.004	0.003	0.003	0.003	0.002	0.003	0.003
89	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.008	0.007	0.005	0.005	0.007	0.003	0.003	0.001	0.001	0.002	0.001	0.001
90	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.007	0.005	0.005	0.003	0.003	0.001	0.001	0.001	0.001	0.001	0.001
91	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.002	0.004	0.002	0.004	0.001	0.003	0.002	0.002	0.001	0.001	0.001
92	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.003	0.003	0.005	0.004	0.004	0.002	0.003	0.001	0.003	0.002	0.001	0.001
93	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.005	0.003	0.005	0.003	0.003	0.002	0.003	0.001	0.001	0.001	0.001
94	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.005	0.004	0.005	0.005	0.007	0.005	0.007	0.005	0.005	0.002	0.001	0.001
95	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.007	0.007	0.007	0.005	0.008	0.007	0.009	0.007	0.007	0.004	0.002	0.002
96	0.003	0.003	0.003	0.003	0.004	0.002	0.002	0.003	0.010	0.010	0.010	0.010	0.012	0.012	0.013	0.013	0.012	0.009	0.003	0.003
97	0.003	0.003	0.004	0.005	0.007	0.003	0.002	0.004	0.010	0.009	0.010	0.011	0.014	0.013	0.015	0.013	0.013	0.008	0.004	0.001
98	0.004	0.005	0.004	0.008	0.005	0.005	0.002	0.007	0.010	0.010	0.008	0.012	0.011	0.015	0.012	0.013	0.011	0.009	0.007	0.008

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
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MAR 7,1978

IR HEAT TRANSFER COEFFICIENT = H(.STO)/HRFR
IR SCAN TIME 12.67 SEC
GROUP 44 HRFR = 0.253E-01

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	0.196	0.203	0.209	0.216	0.224	0.237	0.247	0.261	0.274	0.285	0.291	0.304	0.319	0.324	0.324	0.328	0.325	0.317	0.297	0.269
65	0.197	0.205	0.212	0.220	0.229	0.239	0.248	0.260	0.273	0.286	0.289	0.299	0.311	0.318	0.318	0.327	0.331	0.337	0.336	0.338
66	0.200	0.206	0.215	0.223	0.232	0.241	0.252	0.263	0.273	0.288	0.298	0.300	0.304	0.311	0.316	0.319	0.324	0.326	0.326	0.330
67	0.192	0.199	0.207	0.215	0.224	0.235	0.245	0.258	0.269	0.283	0.294	0.301	0.302	0.303	0.310	0.317	0.316	0.316	0.317	0.321
68	0.185	0.191	0.199	0.208	0.219	0.228	0.239	0.252	0.267	0.281	0.297	0.309	0.314	0.318	0.320	0.322	0.326	0.329	0.332	0.332
69	0.181	0.188	0.196	0.203	0.213	0.222	0.230	0.239	0.252	0.267	0.283	0.297	0.306	0.314	0.322	0.324	0.328	0.332	0.337	0.339
70	0.182	0.188	0.196	0.203	0.209	0.220	0.227	0.233	0.241	0.254	0.265	0.276	0.284	0.289	0.293	0.298	0.304	0.311	0.316	0.322
71	0.180	0.187	0.193	0.201	0.206	0.215	0.223	0.230	0.238	0.248	0.256	0.263	0.269	0.272	0.273	0.276	0.280	0.284	0.286	0.286
72	0.182	0.188	0.193	0.201	0.208	0.215	0.223	0.232	0.239	0.249	0.257	0.264	0.269	0.273	0.273	0.273	0.273	0.277	0.279	0.280
73	0.187	0.193	0.199	0.207	0.215	0.224	0.232	0.241	0.248	0.254	0.260	0.266	0.274	0.280	0.278	0.276	0.275	0.276	0.279	0.283
74	0.184	0.191	0.197	0.204	0.211	0.221	0.229	0.238	0.247	0.255	0.262	0.270	0.277	0.283	0.282	0.281	0.280	0.280	0.281	0.286
75	0.159	0.165	0.172	0.179	0.187	0.194	0.202	0.209	0.216	0.225	0.234	0.240	0.244	0.248	0.252	0.257	0.264	0.269	0.273	0.277
76	0.127	0.132	0.135	0.140	0.144	0.150	0.154	0.160	0.163	0.169	0.174	0.178	0.182	0.187	0.191	0.195	0.199	0.204	0.208	0.214
77	0.098	0.101	0.103	0.105	0.106	0.111	0.113	0.115	0.118	0.119	0.121	0.122	0.125	0.126	0.128	0.129	0.131	0.132	0.134	0.136
78	0.082	0.085	0.086	0.089	0.090	0.092	0.093	0.094	0.094	0.096	0.096	0.096	0.096	0.096	0.096	0.097	0.097	0.099	0.099	0.100
79	0.078	0.079	0.080	0.081	0.084	0.083	0.087	0.087	0.089	0.088	0.090	0.089	0.091	0.089	0.091	0.089	0.091	0.090	0.092	0.092
80	0.078	0.079	0.081	0.082	0.085	0.085	0.087	0.088	0.090	0.090	0.092	0.091	0.092	0.091	0.091	0.090	0.090	0.089	0.090	0.090
81	0.079	0.080	0.083	0.084	0.086	0.088	0.089	0.091	0.093	0.093	0.094	0.093	0.094	0.093	0.094	0.093	0.094	0.093	0.094	0.093
82	0.079	0.081	0.083	0.085	0.087	0.089	0.090	0.093	0.093	0.094	0.094	0.094	0.093	0.094	0.093	0.094	0.094	0.095	0.094	0.096
83	0.079	0.081	0.084	0.087	0.088	0.092	0.093	0.095	0.096	0.097	0.097	0.098	0.097	0.098	0.096	0.096	0.096	0.097	0.096	0.097
84	0.080	0.081	0.084	0.085	0.089	0.092	0.094	0.096	0.097	0.099	0.101	0.101	0.101	0.100	0.100	0.100	0.101	0.100	0.101	0.101
85	0.057	0.062	0.069	0.076	0.083	0.086	0.088	0.090	0.094	0.099	0.115	0.117	0.102	0.090	0.088	0.086	0.089	0.089	0.092	0.092
86	0.003	0.003	0.002	0.005	0.003	0.005	0.003	0.005	0.003	0.007	0.005	0.010	0.005	0.008	0.005	0.009	0.007	0.011	0.009	0.012
87	0.003	0.003	0.005	0.003	0.004	0.003	0.004	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001
88	0.004	0.003	0.004	0.003	0.004	0.003	0.004	0.003	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
89	0.001	0.001	0.002	0.003	0.004	0.003	0.004	0.003	0.003	0.002	0.003	0.001	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001
90	0.001	0.001	0.001	0.002	0.002	0.001	0.001	0.003	0.001	0.003	0.002	0.003	0.001	0.002	0.002	0.001	0.001	0.001	0.001	0.001
91	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.009	0.037	0.054	0.034	0.009	0.001	0.001	0.001	0.001	0.001
92	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.008	0.034	0.055	0.037	0.012	0.002	0.002	0.002	0.002	0.002
93	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.003	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
94	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
95	0.002	0.002	0.002	0.002	0.002	0.001	0.002	0.002	0.004	0.003	0.004	0.003	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001
96	0.003	0.003	0.003	0.003	0.003	0.002	0.004	0.003	0.005	0.004	0.007	0.003	0.005	0.001	0.001	0.001	0.001	0.001	0.001	0.001
97	0.002	0.001	0.003	0.003	0.004	0.003	0.004	0.005	0.005	0.005	0.007	0.007	0.007	0.003	0.003	0.001	0.001	0.001	0.001	0.001
98	0.005	0.007	0.005	0.007	0.005	0.007	0.005	0.008	0.005	0.009	0.004	0.005	0.003	0.005	0.003	0.003	0.001	0.002	0.001	0.002

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 12.67 SEC
GROUP 44 HRFR = 0.253E-01

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	0.241	0.221	0.215	0.230	0.258	0.294	0.333	0.373	0.404	0.392	0.387	0.392	0.388	0.382	0.351	0.286	0.210	0.157	0.126	0.076
65	0.329	0.311	0.276	0.234	0.197	0.177	0.179	0.201	0.228	0.256	0.296	0.331	0.354	0.370	0.382	0.384	0.365	0.314	0.237	0.159
66	0.333	0.335	0.335	0.330	0.319	0.293	0.255	0.215	0.175	0.151	0.146	0.150	0.169	0.197	0.232	0.269	0.305	0.332	0.344	0.317
67	0.325	0.328	0.328	0.330	0.337	0.350	0.355	0.350	0.314	0.266	0.222	0.187	0.163	0.152	0.148	0.150	0.161	0.185	0.215	0.245
68	0.334	0.337	0.343	0.342	0.342	0.352	0.367	0.378	0.364	0.348	0.333	0.302	0.260	0.214	0.180	0.160	0.153	0.152	0.150	0.148
69	0.341	0.342	0.345	0.350	0.356	0.365	0.379	0.392	0.377	0.358	0.350	0.344	0.339	0.326	0.301	0.267	0.228	0.190	0.166	0.157
70	0.328	0.336	0.345	0.354	0.360	0.370	0.382	0.397	0.380	0.363	0.357	0.349	0.343	0.341	0.333	0.325	0.319	0.307	0.281	0.249
71	0.286	0.286	0.288	0.293	0.297	0.303	0.319	0.348	0.347	0.342	0.348	0.350	0.349	0.349	0.347	0.342	0.341	0.341	0.342	0.342
72	0.280	0.280	0.275	0.269	0.259	0.253	0.249	0.252	0.238	0.235	0.248	0.264	0.281	0.298	0.314	0.329	0.338	0.343	0.348	0.354
73	0.286	0.288	0.283	0.279	0.278	0.282	0.288	0.291	0.276	0.244	0.214	0.191	0.174	0.166	0.165	0.174	0.184	0.201	0.222	0.246
74	0.291	0.298	0.302	0.303	0.299	0.303	0.316	0.337	0.342	0.320	0.300	0.283	0.262	0.236	0.206	0.178	0.152	0.134	0.122	0.119
75	0.281	0.288	0.297	0.303	0.307	0.317	0.331	0.348	0.336	0.312	0.317	0.316	0.314	0.308	0.299	0.286	0.269	0.246	0.218	0.184
76	0.219	0.226	0.232	0.240	0.248	0.258	0.269	0.286	0.267	0.254	0.280	0.290	0.294	0.296	0.299	0.302	0.303	0.303	0.298	0.289
77	0.138	0.140	0.143	0.145	0.148	0.150	0.154	0.158	0.162	0.159	0.160	0.165	0.172	0.178	0.186	0.194	0.205	0.214	0.223	0.233
78	0.100	0.101	0.101	0.102	0.102	0.103	0.104	0.106	0.106	0.104	0.099	0.100	0.099	0.099	0.098	0.098	0.098	0.100	0.100	0.103
79	0.093	0.093	0.094	0.094	0.094	0.094	0.096	0.097	0.098	0.095	0.093	0.092	0.092	0.092	0.090	0.089	0.088	0.087	0.085	0.085
80	0.091	0.090	0.092	0.092	0.093	0.093	0.094	0.094	0.097	0.095	0.093	0.090	0.091	0.089	0.089	0.088	0.088	0.087	0.086	0.085
81	0.094	0.094	0.094	0.094	0.095	0.095	0.097	0.097	0.098	0.097	0.094	0.092	0.092	0.090	0.090	0.089	0.088	0.086	0.085	0.083
82	0.095	0.097	0.097	0.099	0.099	0.101	0.102	0.104	0.105	0.107	0.101	0.099	0.098	0.097	0.095	0.094	0.092	0.090	0.087	0.086
83	0.096	0.097	0.097	0.097	0.097	0.098	0.099	0.101	0.102	0.105	0.101	0.100	0.099	0.100	0.098	0.098	0.096	0.096	0.094	0.094
84	0.101	0.101	0.101	0.100	0.101	0.101	0.101	0.101	0.102	0.104	0.102	0.096	0.096	0.095	0.094	0.093	0.092	0.091	0.090	0.090
85	0.093	0.095	0.097	0.098	0.100	0.101	0.102	0.103	0.103	0.105	0.104	0.096	0.095	0.094	0.094	0.091	0.091	0.088	0.088	0.087
86	0.013	0.014	0.015	0.017	0.018	0.021	0.022	0.027	0.026	0.033	0.037	0.037	0.033	0.035	0.035	0.034	0.033	0.035	0.036	0.038
87	0.003	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
88	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
89	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
90	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
91	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.012	0.018	0.005	0.005	0.005	0.005	0.005	0.005	0.005
92	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.007	0.031	0.041	0.022	0.003	0.003	0.003	0.003	0.003	0.003
93	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
94	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
95	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
96	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
97	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
98	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 12.67 SEC
HRFR = 0.253E-01

GROUP 44

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.031	0.019	0.011	0.011	0.007	0.004	0.001	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
65	0.092	0.042	0.020	0.013	0.010	0.009	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
66	0.247	0.157	0.077	0.032	0.017	0.010	0.010	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
67	0.265	0.264	0.224	0.146	0.060	0.028	0.011	0.010	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
68	0.152	0.166	0.189	0.195	0.147	0.069	0.033	0.015	0.010	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
69	0.154	0.152	0.152	0.149	0.150	0.134	0.086	0.037	0.017	0.009	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
70	0.213	0.184	0.167	0.165	0.164	0.162	0.147	0.100	0.043	0.020	0.010	0.007	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
71	0.334	0.321	0.296	0.254	0.209	0.177	0.158	0.147	0.114	0.062	0.023	0.012	0.007	0.004	0.004	0.004	0.004	0.004	0.004	0.004
72	0.355	0.355	0.355	0.350	0.336	0.309	0.267	0.219	0.177	0.139	0.084	0.036	0.014	0.008	0.003	0.003	0.003	0.003	0.003	0.003
73	0.269	0.291	0.311	0.322	0.326	0.333	0.336	0.331	0.305	0.262	0.210	0.142	0.066	0.027	0.011	0.005	0.005	0.005	0.005	0.005
74	0.119	0.124	0.131	0.144	0.160	0.185	0.211	0.238	0.261	0.284	0.295	0.282	0.224	0.133	0.059	0.024	0.004	0.002	0.002	0.002
75	0.154	0.128	0.113	0.106	0.104	0.103	0.105	0.106	0.110	0.114	0.125	0.136	0.148	0.142	0.088	0.032	0.011	0.003	0.003	0.003
76	0.274	0.252	0.219	0.182	0.146	0.120	0.103	0.098	0.096	0.096	0.096	0.098	0.098	0.100	0.095	0.072	0.030	0.009	0.001	0.001
77	0.245	0.254	0.263	0.267	0.263	0.252	0.232	0.204	0.173	0.145	0.122	0.105	0.099	0.096	0.097	0.094	0.078	0.041	0.012	0.002
78	0.106	0.111	0.116	0.125	0.134	0.147	0.160	0.175	0.187	0.197	0.199	0.193	0.176	0.155	0.137	0.124	0.112	0.096	0.062	0.025
79	0.085	0.084	0.084	0.084	0.083	0.082	0.083	0.084	0.087	0.088	0.092	0.094	0.102	0.110	0.115	0.117	0.115	0.113	0.109	0.085
80	0.085	0.083	0.083	0.082	0.082	0.080	0.080	0.079	0.080	0.082	0.084	0.084	0.084	0.084	0.085	0.085	0.086	0.087	0.090	0.093
81	0.083	0.080	0.080	0.077	0.079	0.078	0.079	0.077	0.078	0.077	0.080	0.080	0.082	0.081	0.081	0.082	0.084	0.083	0.083	0.083
82	0.083	0.082	0.079	0.077	0.075	0.076	0.074	0.076	0.074	0.076	0.076	0.076	0.076	0.078	0.077	0.079	0.080	0.080	0.079	0.080
83	0.091	0.089	0.086	0.085	0.082	0.080	0.079	0.079	0.077	0.076	0.074	0.076	0.073	0.074	0.072	0.073	0.073	0.076	0.074	0.078
84	0.090	0.089	0.090	0.090	0.089	0.089	0.088	0.088	0.088	0.087	0.087	0.085	0.084	0.082	0.080	0.079	0.079	0.077	0.077	0.077
85	0.086	0.085	0.085	0.084	0.085	0.084	0.084	0.084	0.084	0.084	0.085	0.086	0.088	0.089	0.092	0.092	0.094	0.093	0.095	0.095
86	0.039	0.041	0.043	0.046	0.047	0.048	0.048	0.049	0.050	0.051	0.051	0.052	0.052	0.055	0.058	0.063	0.063	0.064	0.067	0.072
87	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
88	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
89	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
90	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
91	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
92	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.021	0.018	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
93	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
94	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
95	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
96	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
97	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
98	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 12.67 SEC
HRFR = 0.253E-01

GROUP 44

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
65	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
66	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
67	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
68	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
69	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
70	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
71	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
72	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
73	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
74	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
75	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
76	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
77	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
78	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
79	0.048	0.017	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
80	0.090	0.062	0.022	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
81	0.083	0.077	0.055	0.021	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
82	0.080	0.083	0.079	0.063	0.028	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
83	0.079	0.081	0.081	0.080	0.067	0.040	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
84	0.078	0.079	0.080	0.079	0.078	0.067	0.044	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
85	0.096	0.096	0.096	0.094	0.093	0.087	0.076	0.052	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023
86	0.076	0.077	0.077	0.078	0.077	0.078	0.075	0.068	0.051	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023
87	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
88	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
89	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
90	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
91	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
92	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
93	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
94	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
95	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
96	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
97	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
98	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 12.67 SEC
GROUP 44 HRFR = 0.253E-01

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
65	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
66	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
67	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
68	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
69	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
70	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
71	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
72	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
73	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
74	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
75	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
76	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
77	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
78	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
79	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
80	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
81	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
82	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
83	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
84	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
85	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023
86	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023
87	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
88	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
89	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
90	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
91	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
92	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
93	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
94	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
95	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
96	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
97	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
98	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

GROUP 45

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
449 32	594.023	594.023	594.066	594.066	0.000	591.671
449 33	594.110	594.241	594.066	594.153	0.000	591.671
449 34	594.284	594.371	594.066	594.328	0.000	591.671
449 35	594.458	594.458	594.066	594.458	0.000	591.671
449 36	594.502	594.589	594.066	594.589	0.000	591.671
449 37	594.589	594.632	594.066	594.632	0.000	591.671
449 37	594.589	594.676	594.066	594.676	0.000	591.671
449 38	594.676	594.763	594.066	594.719	0.000	591.671
449 39	594.763	594.806	594.066	594.806	0.000	591.671
449 40	594.806	594.850	594.066	594.850	0.000	591.671
449 41	594.850	594.937	594.066	594.894	0.000	591.671
449 42	594.894	594.981	594.066	594.937	0.000	591.671
449 43	594.894	594.981	594.066	594.937	0.000	591.671
449 43	594.894	594.981	594.066	594.937	0.000	591.671
449 43	594.937	594.981	594.066	594.981	0.000	591.671
449 44	594.981	595.024	594.066	594.981	0.000	591.671
449 45	595.024	595.068	594.066	595.024	0.000	591.671
449 46	595.068	595.111	594.066	595.068	0.000	591.671
449 47	595.068	595.155	594.066	595.068	0.000	591.671

350

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

GROUP	* * * * MODEL DESCRIPTION * * * *		ALPHA-SECTOR	ALPHA-MODEL	PCK1/2	HR	MIN	SEC
	TITLE TYPE	GAP HEIGHT	DEG	DEG				
45	RSI FORWARD	0.01 0.010	-10.01	40.01	0.053	4	48	40

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/F FT-1	HRFR BTU/FT2-SEC-R	INITIAL TEMP DEG R
7.96	319.86	1289.67	94.33	0.0338	3790.	0.301E-04	0.759E-07	0.150E+07	0.253E-01	540.7

IR CAMERA INFORMATION	
MOUNTING LOCATION	260
F STOP	1.8
LENS-DEG	15
SENSITIVITY	1000.
BLACK LEVEL VOLTAGE	2.4538
LINE SCAN PHI	.90
MODEL EMISSIVITY	0.96
REF EMISSIVITY	0.94
WINDOW FACTOR	0.860

TIME RECORDS	
LIFT OFF	0.00
CENTER LINE	1.99
IR SCAN TIME	10.37
DELTA TIME,SEC	9.26
PHOTO 1 TIME	.449
PHOTO 2 TIME	0
PHOTO 3 TIME	0
PHOTO 4 TIME	0

REFERENCE TARGET INFORMATION	
TCR5	591.98
TCR6	591.28

DIGITAL DATA AREA PRINTOUT LOCATION

LINE 29 THROUGH 98
POINT 1 THROUGH 110

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 45

IR SCAN TIME 9.26 SEC
INITIAL TEMP 540.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	1.043	1.043	1.046	1.043	1.044	1.043	1.039	1.041	1.040	1.040	1.040	1.035	1.040	1.044	1.043	1.040	1.044	1.044	1.045	1.041
30	1.046	1.045	1.044	1.045	1.039	1.039	1.040	1.043	1.043	1.044	1.041	1.045	1.044	1.045	1.044	1.045	1.044	1.046	1.043	1.043
31	1.045	1.041	1.041	1.041	1.045	1.044	1.046	1.044	1.045	1.044	1.047	1.044	1.046	1.045	1.046	1.044	1.044	1.040	1.040	1.036
32	1.044	1.044	1.044	1.045	1.045	1.048	1.046	1.046	1.043	1.048	1.044	1.045	1.043	1.044	1.040	1.041	1.036	1.039	1.038	1.040
33	1.046	1.047	1.047	1.046	1.044	1.045	1.045	1.046	1.043	1.044	1.043	1.041	1.035	1.035	1.034	1.040	1.043	1.046	1.044	1.045
34	1.049	1.047	1.046	1.045	1.044	1.045	1.040	1.040	1.038	1.038	1.033	1.035	1.035	1.038	1.040	1.044	1.045	1.047	1.046	1.048
35	1.045	1.044	1.039	1.043	1.034	1.038	1.031	1.035	1.033	1.036	1.036	1.039	1.039	1.043	1.041	1.047	1.046	1.047	1.044	1.039
36	1.040	1.039	1.038	1.039	1.035	1.034	1.036	1.038	1.039	1.039	1.040	1.043	1.045	1.045	1.046	1.043	1.038	1.029	1.022	1.009
37	1.035	1.034	1.033	1.035	1.035	1.038	1.038	1.040	1.040	1.044	1.044	1.045	1.043	1.036	1.029	1.021	1.009	1.003	0.996	0.996
38	1.034	1.035	1.036	1.039	1.038	1.041	1.040	1.044	1.044	1.044	1.038	1.031	1.023	1.013	1.004	0.999	0.998	0.998	0.996	0.998
39	1.039	1.038	1.039	1.040	1.044	1.043	1.044	1.043	1.036	1.027	1.019	1.009	1.004	0.999	1.001	0.998	0.999	0.998	1.001	0.998
40	1.041	1.041	1.044	1.044	1.044	1.041	1.033	1.026	1.013	1.007	1.001	1.001	0.999	1.001	0.999	1.001	0.999	1.001	0.999	1.003
41	1.046	1.046	1.047	1.044	1.036	1.023	1.015	1.004	1.004	0.999	1.004	1.003	1.004	1.001	1.004	1.003	1.006	1.003	1.006	1.004
42	1.049	1.047	1.038	1.022	1.015	1.003	1.004	0.998	1.006	0.998	1.004	0.999	1.006	1.003	1.006	1.004	1.006	1.004	1.007	1.006
43	1.038	1.023	1.016	1.007	1.007	1.004	1.004	1.003	1.004	1.003	1.006	1.004	1.007	1.003	1.007	1.003	1.009	1.004	1.010	1.006
44	1.016	1.010	1.009	1.009	1.006	1.009	1.006	1.007	1.004	1.007	1.006	1.009	1.007	1.010	1.007	1.012	1.010	1.016	1.023	1.035
45	1.015	1.012	1.015	1.012	1.012	1.009	1.012	1.010	1.012	1.012	1.013	1.010	1.013	1.013	1.018	1.015	1.021	1.040	1.108	1.180
46	1.018	1.018	1.018	1.018	1.015	1.018	1.015	1.018	1.015	1.018	1.018	1.019	1.021	1.023	1.021	1.023	1.027	1.072	1.179	1.272
47	1.021	1.021	1.019	1.022	1.021	1.021	1.021	1.019	1.021	1.021	1.022	1.021	1.023	1.022	1.025	1.026	1.035	1.085	1.198	1.288
48	1.023	1.021	1.019	1.022	1.021	1.023	1.021	1.023	1.021	1.023	1.023	1.025	1.025	1.026	1.026	1.029	1.038	1.100	1.215	1.300
49	1.023	1.023	1.019	1.023	1.019	1.023	1.021	1.023	1.021	1.023	1.023	1.026	1.026	1.029	1.029	1.033	1.045	1.109	1.224	1.306
50	1.022	1.023	1.021	1.023	1.022	1.023	1.022	1.022	1.022	1.023	1.023	1.025	1.025	1.027	1.026	1.033	1.045	1.127	1.241	1.313
51	1.019	1.019	1.019	1.021	1.018	1.021	1.019	1.021	1.021	1.022	1.021	1.023	1.023	1.025	1.029	1.031	1.059	1.163	1.269	1.325
52	1.013	1.012	1.013	1.012	1.015	1.010	1.013	1.012	1.015	1.013	1.016	1.015	1.021	1.019	1.023	1.026	1.073	1.192	1.289	1.335
53	1.006	1.006	1.004	1.004	1.004	1.004	1.004	1.006	1.004	1.007	1.007	1.009	1.007	1.013	1.015	1.027	1.094	1.223	1.306	1.342
54	0.999	0.996	0.999	0.999	0.999	0.999	1.001	0.999	1.003	1.001	1.004	1.004	1.007	1.007	1.013	1.030	1.125	1.250	1.319	1.347
55	0.996	0.996	0.994	0.994	0.994	0.998	0.996	0.999	0.999	1.001	1.001	1.006	1.006	1.012	1.012	1.035	1.141	1.264	1.326	1.352
56	0.998	1.001	0.999	0.989	0.998	0.991	0.999	0.993	1.003	1.001	1.004	1.004	1.009	1.007	1.015	1.039	1.155	1.272	1.329	1.353
57	0.999	0.998	0.998	0.998	1.001	0.999	1.001	0.998	1.003	1.001	1.006	1.004	1.010	1.007	1.016	1.043	1.163	1.275	1.327	1.348
58	1.001	0.999	1.003	0.999	1.003	1.001	1.004	1.003	1.007	1.004	1.009	1.007	1.013	1.012	1.021	1.060	1.189	1.289	1.332	1.351
59	1.003	1.001	1.004	1.003	1.006	1.003	1.007	1.004	1.010	1.009	1.013	1.010	1.015	1.016	1.027	1.097	1.229	1.307	1.338	1.354
60	1.003	1.004	1.001	1.004	1.001	1.006	1.004	1.009	1.007	1.010	1.010	1.015	1.015	1.021	1.035	1.126	1.250	1.314	1.340	1.355
61	0.999	0.996	1.001	0.999	1.001	0.999	1.006	1.004	1.007	1.007	1.012	1.013	1.018	1.022	1.049	1.161	1.271	1.321	1.344	1.357
62	0.993	0.994	0.994	0.996	0.996	0.996	0.999	1.003	1.004	1.006	1.013	1.016	1.021	1.023	1.068	1.194	1.286	1.323	1.343	1.355
63	0.989	0.989	0.989	0.991	0.991	0.993	0.993	0.999	0.999	1.004	1.006	1.012	1.015	1.025	1.077	1.207	1.290	1.323	1.339	1.350

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 45

IR SCAN TIME 9.26 SEC
INITIAL TEMP 540.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	1.045	1.041	1.045	1.040	1.043	1.035	1.038	1.035	1.038	1.036	1.039	1.035	1.040	1.039	1.044	1.045	1.047	1.046	1.047	1.047
30	1.040	1.039	1.038	1.039	1.038	1.036	1.038	1.039	1.043	1.047	1.047	1.048	1.048	1.049	1.049	1.052	1.048	1.046	1.039	1.039
31	1.038	1.036	1.040	1.043	1.047	1.045	1.048	1.046	1.049	1.049	1.054	1.053	1.051	1.044	1.043	1.035	1.033	1.023	1.021	1.012
32	1.043	1.045	1.044	1.048	1.048	1.053	1.049	1.051	1.047	1.046	1.039	1.036	1.029	1.022	1.012	1.004	0.996	0.993	0.987	0.989
33	1.046	1.048	1.047	1.049	1.046	1.045	1.036	1.031	1.026	1.019	1.009	1.003	0.993	0.991	0.989	0.989	0.987	0.989	0.987	0.989
34	1.047	1.046	1.039	1.031	1.025	1.016	1.007	1.001	0.993	0.993	0.987	0.989	0.987	0.989	0.989	0.989	0.987	0.989	0.989	0.989
35	1.031	1.023	1.007	1.003	0.994	0.991	0.993	0.993	0.991	0.991	0.989	0.991	0.982	0.993	0.991	0.989	0.993	0.993	0.983	0.983
36	1.003	0.989	0.996	0.989	0.994	0.991	0.993	0.989	0.993	0.989	0.993	0.989	0.994	0.994	0.994	0.993	0.996	0.993	0.994	0.993
37	0.996	0.996	0.996	0.996	0.996	0.996	0.993	0.996	0.996	0.994	0.996	0.996	0.996	0.996	0.993	0.998	0.989	0.998	0.989	0.998
38	0.996	0.998	0.996	0.998	0.996	0.998	0.996	0.998	0.996	0.998	0.998	0.998	0.998	0.996	0.996	0.998	0.996	0.998	0.996	0.998
39	0.999	0.999	1.003	0.999	1.001	0.999	1.001	0.999	1.001	0.999	1.004	1.001	1.004	1.001	1.004	1.003	1.004	0.999	0.999	0.999
40	0.999	1.003	1.001	1.003	1.003	1.004	1.003	1.004	1.003	1.006	1.004	1.006	1.004	1.006	1.004	1.006	1.003	1.004	1.001	1.004
41	1.006	1.004	1.007	1.006	1.007	1.006	1.009	1.007	1.009	1.006	1.009	1.006	1.007	1.004	1.007	1.006	1.009	1.004	1.009	1.004
42	1.009	1.007	1.010	1.006	1.010	1.007	1.012	1.007	1.012	1.010	1.012	1.009	1.010	1.009	1.010	1.007	1.012	1.009	1.010	1.007
43	1.012	1.007	1.013	1.010	1.013	1.012	1.015	1.010	1.015	1.012	1.015	1.013	1.016	1.013	1.016	1.012	1.015	1.010	1.013	1.010
44	1.044	1.047	1.044	1.038	1.033	1.029	1.025	1.023	1.021	1.022	1.021	1.021	1.021	1.021	1.015	1.021	1.013	1.018	1.012	1.015
45	1.217	1.229	1.227	1.216	1.200	1.179	1.156	1.131	1.105	1.080	1.058	1.043	1.035	1.027	1.029	1.025	1.026	1.023	1.023	1.022
46	1.323	1.351	1.369	1.384	1.395	1.401	1.399	1.384	1.355	1.313	1.258	1.200	1.147	1.102	1.066	1.048	1.036	1.033	1.030	1.031
47	1.335	1.360	1.377	1.395	1.415	1.435	1.455	1.471	1.480	1.480	1.469	1.442	1.396	1.331	1.254	1.178	1.114	1.069	1.051	1.041
48	1.343	1.368	1.385	1.401	1.417	1.436	1.456	1.475	1.488	1.496	1.499	1.495	1.490	1.483	1.459	1.397	1.298	1.199	1.117	1.072
49	1.346	1.370	1.388	1.404	1.420	1.437	1.455	1.471	1.484	1.496	1.506	1.511	1.512	1.512	1.510	1.503	1.467	1.375	1.263	1.168
50	1.345	1.365	1.380	1.397	1.414	1.433	1.451	1.470	1.485	1.499	1.510	1.518	1.523	1.529	1.530	1.526	1.521	1.504	1.427	1.308
51	1.349	1.365	1.377	1.392	1.409	1.427	1.446	1.466	1.484	1.494	1.498	1.501	1.505	1.511	1.516	1.520	1.518	1.515	1.511	1.455
52	1.357	1.371	1.383	1.395	1.410	1.426	1.445	1.465	1.485	1.499	1.507	1.512	1.516	1.520	1.527	1.534	1.538	1.537	1.531	1.525
53	1.359	1.371	1.381	1.393	1.407	1.423	1.440	1.458	1.475	1.490	1.500	1.507	1.513	1.518	1.523	1.527	1.532	1.538	1.538	1.533
54	1.363	1.373	1.382	1.393	1.408	1.424	1.441	1.456	1.475	1.487	1.498	1.504	1.510	1.518	1.523	1.527	1.530	1.533	1.537	1.540
55	1.366	1.377	1.385	1.395	1.407	1.422	1.437	1.455	1.470	1.483	1.491	1.495	1.499	1.504	1.510	1.520	1.529	1.534	1.537	1.539
56	1.366	1.375	1.384	1.393	1.406	1.419	1.435	1.450	1.464	1.474	1.480	1.485	1.488	1.491	1.495	1.500	1.509	1.521	1.532	1.538
57	1.360	1.367	1.375	1.385	1.398	1.413	1.429	1.446	1.460	1.472	1.479	1.482	1.489	1.494	1.496	1.496	1.499	1.504	1.513	1.522
58	1.363	1.369	1.376	1.385	1.397	1.410	1.426	1.444	1.462	1.474	1.482	1.486	1.494	1.498	1.497	1.497	1.500	1.500	1.503	1.508
59	1.364	1.370	1.377	1.385	1.395	1.408	1.422	1.436	1.454	1.465	1.474	1.484	1.496	1.503	1.501	1.501	1.504	1.503	1.501	1.503
60	1.364	1.370	1.376	1.385	1.393	1.404	1.419	1.434	1.447	1.457	1.463	1.474	1.487	1.496	1.499	1.503	1.508	1.509	1.508	1.507
61	1.366	1.371	1.377	1.385	1.393	1.403	1.416	1.429	1.442	1.450	1.456	1.465	1.476	1.483	1.489	1.493	1.495	1.497	1.504	1.511
62	1.362	1.368	1.375	1.382	1.390	1.398	1.409	1.424	1.437	1.444	1.450	1.460	1.471	1.479	1.484	1.487	1.489	1.487	1.488	1.495
63	1.357	1.362	1.370	1.378	1.386	1.396	1.409	1.424	1.438	1.446	1.451	1.461	1.472	1.477	1.480	1.482	1.486	1.489	1.488	1.487

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 45

IR SCAN TIME 9.26 SEC
INITIAL TEMP 540.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	1.051	1.047	1.046	1.041	1.039	1.035	1.034	1.030	1.026	1.019	1.019	1.013	1.012	1.007	1.006	1.001	0.999	0.996	0.996	0.993
30	1.033	1.033	1.023	1.022	1.013	1.013	1.003	1.003	0.993	0.994	0.985	0.989	0.983	0.987	0.985	0.985	0.985	0.985	0.985	0.985
31	1.007	0.999	0.996	0.991	0.991	0.987	0.987	0.985	0.985	0.983	0.985	0.985	0.985	0.983	0.985	0.980	0.985	0.980	0.985	0.978
32	0.987	0.987	0.985	0.987	0.985	0.985	0.985	0.987	0.983	0.983	0.982	0.983	0.983	0.982	0.982	0.982	0.980	0.983	0.982	0.982
33	0.987	0.989	0.985	0.989	0.985	0.987	0.985	0.985	0.985	0.987	0.985	0.983	0.983	0.985	0.983	0.985	0.982	0.983	0.982	0.983
34	0.987	0.989	0.987	0.989	0.985	0.989	0.985	0.989	0.987	0.987	0.987	0.987	0.985	0.985	0.985	0.985	0.983	0.983	0.983	0.983
35	0.991	0.991	0.993	0.994	0.991	0.985	0.989	0.991	0.987	0.991	0.989	0.989	0.987	0.987	0.987	0.985	0.987	0.985	0.987	0.985
36	0.993	0.993	0.994	0.993	0.994	0.991	0.993	0.989	0.993	0.989	0.993	0.989	0.991	0.989	0.989	0.989	0.991	0.987	0.987	0.985
37	0.987	0.996	0.989	0.996	0.989	0.996	0.989	0.996	0.987	0.993	0.987	0.994	0.993	0.994	0.991	0.993	0.989	0.993	0.989	0.991
38	0.996	0.998	0.996	0.998	0.996	0.996	0.994	0.996	0.996	0.996	0.994	0.994	0.994	0.994	0.989	0.993	0.989	0.993	0.987	0.993
39	1.003	0.999	0.999	0.998	0.999	0.996	0.999	0.996	0.998	0.996	0.996	0.996	0.996	0.993	0.996	0.994	0.996	0.993	0.994	0.993
40	1.003	1.004	1.001	1.004	1.004	1.001	0.998	0.999	0.999	0.999	0.998	0.998	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996
41	1.006	1.004	1.006	1.004	1.006	1.004	1.006	1.003	1.004	1.001	1.004	0.999	1.001	0.998	0.999	0.998	0.999	0.998	0.998	0.994
42	1.009	1.006	1.009	1.004	1.007	1.004	1.006	1.004	1.006	1.003	1.003	1.001	1.003	1.001	1.003	0.998	1.001	0.998	0.999	0.996
43	1.012	1.009	1.012	1.007	1.012	1.007	1.009	1.006	1.007	1.006	1.007	1.004	1.006	1.003	1.006	1.003	1.003	1.001	1.003	0.999
44	1.012	1.013	1.009	1.013	1.009	1.012	1.007	1.010	1.006	1.010	1.009	1.010	1.006	1.009	1.006	1.007	1.006	1.007	1.004	1.006
45	1.023	1.021	1.021	1.018	1.021	1.018	1.016	1.015	1.016	1.013	1.016	1.012	1.015	1.010	1.013	1.007	1.012	1.006	1.010	1.006
46	1.027	1.029	1.027	1.027	1.023	1.023	1.021	1.022	1.021	1.021	1.018	1.021	1.021	1.019	1.016	1.018	1.015	1.018	1.015	1.016
47	1.038	1.035	1.035	1.031	1.033	1.029	1.029	1.025	1.026	1.023	1.025	1.022	1.023	1.021	1.022	1.021	1.021	1.019	1.019	1.019
48	1.048	1.045	1.039	1.036	1.034	1.033	1.030	1.030	1.029	1.029	1.025	1.026	1.023	1.026	1.022	1.022	1.022	1.022	1.021	1.022
49	1.100	1.067	1.048	1.044	1.038	1.038	1.035	1.034	1.029	1.031	1.029	1.030	1.027	1.026	1.026	1.025	1.025	1.025	1.023	1.025
50	1.201	1.123	1.080	1.059	1.045	1.043	1.038	1.038	1.035	1.035	1.033	1.033	1.030	1.030	1.027	1.027	1.026	1.026	1.025	1.023
51	1.334	1.216	1.126	1.078	1.053	1.045	1.038	1.038	1.034	1.034	1.031	1.033	1.029	1.029	1.029	1.026	1.025	1.026	1.023	1.025
52	1.482	1.372	1.246	1.145	1.084	1.054	1.041	1.031	1.031	1.026	1.026	1.023	1.023	1.021	1.023	1.018	1.021	1.018	1.021	1.018
53	1.531	1.493	1.379	1.245	1.142	1.082	1.049	1.034	1.025	1.022	1.018	1.018	1.015	1.015	1.013	1.013	1.009	1.012	1.012	1.016
54	1.540	1.537	1.496	1.382	1.253	1.150	1.087	1.052	1.034	1.023	1.021	1.015	1.016	1.013	1.013	1.012	1.012	1.012	1.015	1.016
55	1.541	1.541	1.546	1.536	1.452	1.312	1.189	1.107	1.062	1.039	1.026	1.022	1.018	1.016	1.013	1.015	1.013	1.016	1.016	1.022
56	1.537	1.534	1.534	1.543	1.553	1.488	1.348	1.215	1.123	1.070	1.044	1.029	1.023	1.021	1.018	1.015	1.018	1.018	1.021	1.021
57	1.530	1.531	1.529	1.527	1.533	1.549	1.520	1.403	1.259	1.153	1.088	1.051	1.034	1.023	1.023	1.018	1.019	1.018	1.021	1.021
58	1.514	1.519	1.525	1.528	1.530	1.535	1.546	1.522	1.419	1.280	1.166	1.092	1.057	1.035	1.030	1.023	1.023	1.021	1.023	1.021
59	1.508	1.511	1.514	1.520	1.528	1.535	1.543	1.550	1.518	1.405	1.260	1.148	1.085	1.051	1.038	1.029	1.026	1.022	1.023	1.019
60	1.508	1.511	1.512	1.511	1.514	1.526	1.541	1.555	1.562	1.522	1.410	1.272	1.159	1.089	1.055	1.040	1.030	1.027	1.023	1.022
61	1.512	1.512	1.513	1.513	1.515	1.518	1.527	1.539	1.538	1.522	1.510	1.434	1.298	1.176	1.099	1.059	1.043	1.030	1.029	1.025
62	1.501	1.507	1.511	1.515	1.521	1.529	1.540	1.535	1.502	1.479	1.487	1.500	1.443	1.311	1.187	1.106	1.064	1.043	1.033	1.031
63	1.484	1.484	1.487	1.496	1.511	1.531	1.549	1.546	1.525	1.510	1.478	1.440	1.432	1.410	1.313	1.191	1.109	1.066	1.043	1.035

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 9.26 SEC
GROUP 45 INITIAL TEMP 540.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.993	0.989	0.989	0.985	0.987	0.985	0.987	0.985	0.987	0.985	0.987	0.985	0.987	0.985	0.987	0.985	0.987	0.985	0.987	0.987
30	0.985	0.987	0.983	0.985	0.983	0.985	0.982	0.985	0.982	0.983	0.982	0.982	0.982	0.983	0.983	0.985	0.983	0.985	0.983	0.985
31	0.985	0.978	0.983	0.980	0.982	0.978	0.980	0.976	0.982	0.978	0.983	0.980	0.982	0.982	0.983	0.982	0.982	0.982	0.983	0.980
32	0.982	0.982	0.982	0.982	0.978	0.982	0.978	0.980	0.980	0.978	0.978	0.980	0.978	0.980	0.971	0.980	0.976	0.980	0.974	0.980
33	0.982	0.982	0.980	0.982	0.978	0.980	0.980	0.980	0.978	0.978	0.978	0.980	0.978	0.978	0.978	0.980	0.978	0.980	0.978	0.978
34	0.982	0.983	0.982	0.982	0.980	0.982	0.982	0.982	0.980	0.982	0.978	0.982	0.980	0.980	0.978	0.980	0.978	0.982	0.978	0.978
35	0.985	0.987	0.993	0.983	0.985	0.980	0.983	0.985	0.978	0.983	0.983	0.983	0.980	0.980	0.980	0.980	0.982	0.980	0.980	0.974
36	0.987	0.987	0.987	0.985	0.985	0.983	0.985	0.982	0.985	0.982	0.985	0.983	0.985	0.980	0.983	0.982	0.983	0.980	0.982	0.978
37	0.989	0.989	0.987	0.989	0.987	0.989	0.987	0.987	0.985	0.985	0.985	0.987	0.985	0.991	0.985	0.985	0.983	0.985	0.983	0.983
38	0.985	0.991	0.987	0.991	0.985	0.989	0.985	0.989	0.985	0.989	0.987	0.989	0.987	0.989	0.987	0.987	0.985	0.987	0.985	0.985
39	0.994	0.993	0.993	0.991	0.994	0.991	0.993	0.989	0.991	0.989	0.991	0.987	0.989	0.987	0.991	0.985	0.989	0.982	0.989	0.983
40	0.993	0.994	0.993	0.994	0.993	0.993	0.993	0.993	0.993	0.991	0.991	0.993	0.989	0.991	0.991	0.993	0.989	0.989	0.989	0.989
41	0.998	0.996	0.998	0.994	0.996	0.994	0.996	0.993	0.996	0.993	0.996	0.993	0.996	0.993	0.994	0.993	0.994	0.991	0.993	0.989
42	0.999	0.998	0.998	0.996	0.998	0.996	0.996	0.996	0.998	0.993	0.996	0.994	0.996	0.993	0.996	0.993	0.996	0.993	0.994	0.993
43	1.003	0.999	1.001	0.998	0.999	0.998	0.999	0.996	0.998	0.996	0.998	0.996	0.998	0.996	0.998	0.996	0.996	0.996	0.996	0.994
44	1.003	1.006	0.999	1.004	1.003	1.004	0.999	1.003	1.001	0.999	0.999	1.001	0.999	0.999	0.999	0.999	0.998	0.999	0.998	0.999
45	1.013	1.006	1.010	1.007	1.009	1.004	1.009	1.007	1.009	1.006	1.009	1.006	1.009	1.003	1.007	1.004	1.006	1.004	1.007	1.003
46	1.013	1.015	1.013	1.015	1.012	1.013	1.012	1.010	1.010	1.013	1.004	1.012	1.004	1.012	1.004	1.010	1.004	1.012	1.003	1.010
47	1.019	1.018	1.019	1.016	1.018	1.016	1.018	1.013	1.015	1.013	1.015	1.013	1.015	1.012	1.013	1.012	1.013	1.012	1.013	1.012
48	1.021	1.021	1.018	1.019	1.018	1.021	1.016	1.021	1.016	1.018	1.015	1.016	1.015	1.016	1.013	1.015	1.013	1.015	1.013	1.016
49	1.022	1.023	1.021	1.022	1.021	1.022	1.021	1.022	1.021	1.021	1.019	1.019	1.018	1.016	1.016	1.019	1.015	1.016	1.013	1.018
50	1.023	1.025	1.022	1.025	1.021	1.025	1.021	1.022	1.021	1.021	1.021	1.021	1.021	1.021	1.018	1.018	1.018	1.019	1.019	1.021
51	1.023	1.025	1.023	1.025	1.023	1.023	1.023	1.023	1.023	1.023	1.021	1.023	1.021	1.022	1.021	1.021	1.021	1.021	1.019	1.021
52	1.023	1.019	1.023	1.021	1.026	1.023	1.026	1.023	1.026	1.023	1.025	1.023	1.023	1.022	1.023	1.021	1.023	1.021	1.022	1.021
53	1.019	1.022	1.022	1.023	1.023	1.025	1.023	1.026	1.023	1.026	1.023	1.025	1.022	1.023	1.021	1.025	1.021	1.022	1.018	1.021
54	1.022	1.023	1.025	1.025	1.027	1.026	1.027	1.027	1.029	1.027	1.029	1.027	1.029	1.025	1.026	1.025	1.026	1.023	1.023	1.021
55	1.022	1.025	1.026	1.029	1.027	1.029	1.027	1.029	1.027	1.029	1.027	1.029	1.027	1.029	1.025	1.027	1.023	1.025	1.023	1.023
56	1.023	1.025	1.027	1.027	1.029	1.026	1.029	1.026	1.029	1.026	1.027	1.025	1.026	1.025	1.025	1.023	1.023	1.021	1.022	1.019
57	1.023	1.022	1.023	1.022	1.023	1.021	1.022	1.021	1.023	1.021	1.023	1.019	1.021	1.018	1.021	1.019	1.019	1.015	1.018	1.013
58	1.023	1.021	1.023	1.022	1.023	1.022	1.023	1.022	1.022	1.021	1.022	1.021	1.022	1.021	1.021	1.021	1.022	1.018	1.021	1.018
59	1.022	1.018	1.019	1.018	1.019	1.015	1.018	1.013	1.015	1.012	1.013	1.009	1.013	1.007	1.012	1.007	1.010	1.007	1.009	1.007
60	1.021	1.021	1.016	1.019	1.018	1.018	1.013	1.015	1.010	1.012	1.007	1.012	1.006	1.010	1.006	1.009	1.006	1.009	1.004	1.007
61	1.025	1.022	1.023	1.021	1.022	1.018	1.021	1.015	1.016	1.013	1.015	1.012	1.013	1.009	1.012	1.010	1.009	1.006	1.010	1.007
62	1.026	1.025	1.023	1.023	1.022	1.021	1.021	1.021	1.012	1.016	1.015	1.015	1.016	1.015	1.013	1.013	1.010	1.013	1.009	1.006
63	1.029	1.027	1.023	1.023	1.021	1.021	1.018	1.016	1.015	1.016	1.013	1.013	1.012	1.013	1.010	1.012	1.009	1.012	1.009	1.012

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VAF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 45

IR SCAN TIME 9.26. SEC
INITIAL TEMP 540.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.987	0.985	0.987	0.987	0.989	0.985	0.987	0.985	0.989	0.985	0.985	0.983	0.983	0.982	0.985	0.980	0.982	0.980	0.983	0.980
30	0.983	0.985	0.985	0.985	0.985	0.985	0.982	0.985	0.983	0.985	0.982	0.983	0.982	0.983	0.982	0.982	0.980	0.980	0.980	0.978
31	0.983	0.982	0.982	0.982	0.985	0.980	0.983	0.982	0.983	0.982	0.983	0.982	0.983	0.980	0.982	0.980	0.980	0.978	0.978	0.980
32	0.974	0.980	0.974	0.980	0.976	0.980	0.976	0.980	0.976	0.980	0.980	0.980	0.978	0.980	0.978	0.978	0.976	0.978	0.976	0.976
33	0.976	0.978	0.978	0.978	0.974	0.976	0.976	0.976	0.976	0.978	0.976	0.978	0.971	0.978	0.971	0.976	0.971	0.976	0.969	0.974
34	0.978	0.978	0.976	0.976	0.976	0.978	0.976	0.976	0.976	0.978	0.976	0.974	0.976	0.974	0.976	0.974	0.978	0.974	0.976	0.974	0.974
35	0.980	0.980	0.982	0.980	0.978	0.980	0.980	0.980	0.978	0.978	0.976	0.976	0.978	0.976	0.978	0.976	0.976	0.978	0.976	0.978
36	0.982	0.978	0.982	0.980	0.982	0.980	0.980	0.978	0.980	0.978	0.980	0.978	0.980	0.976	0.978	0.978	0.978	0.978	0.980	0.978
37	0.983	0.983	0.980	0.983	0.980	0.982	0.980	0.982	0.980	0.982	0.980	0.980	0.982	0.980	0.980	0.980	0.980	0.980	0.978	0.980
38	0.983	0.987	0.985	0.985	0.985	0.985	0.985	0.985	0.982	0.983	0.982	0.983	0.982	0.983	0.982	0.982	0.982	0.982	0.982	0.982
39	0.989	0.982	0.989	0.983	0.987	0.982	0.987	0.983	0.987	0.985	0.985	0.983	0.985	0.983	0.985	0.982	0.985	0.985	0.985	0.982
40	0.987	0.989	0.987	0.989	0.985	0.987	0.985	0.987	0.985	0.985	0.982	0.987	0.982	0.985	0.982	0.985	0.982	0.985	0.982	0.985
41	0.993	0.989	0.993	0.989	0.993	0.989	0.991	0.987	0.989	0.985	0.989	0.987	0.991	0.987	0.989	0.985	0.987	0.985	0.987	0.983
42	0.994	0.993	0.994	0.991	0.991	0.991	0.993	0.987	0.993	0.989	0.993	0.987	0.993	0.985	0.989	0.987	0.987	0.987	0.989	0.987
43	0.996	0.993	0.996	0.993	0.994	0.993	0.994	0.993	0.994	0.991	0.993	0.993	0.993	0.991	0.993	0.989	0.993	0.989	0.993	0.989
44	0.999	0.999	0.996	0.998	0.996	0.999	0.996	0.996	0.996	0.996	0.996	0.996	0.993	0.996	0.996	0.996	0.996	0.996	0.993	0.996
45	1.006	1.003	1.006	1.004	1.006	1.004	1.006	1.003	1.006	1.003	1.004	1.003	1.004	1.003	1.003	0.999	1.003	0.999	1.003	0.999
46	1.006	1.012	1.006	1.010	1.006	1.010	1.009	1.010	1.007	1.010	1.007	1.009	1.009	1.009	1.006	1.007	1.006	1.007	1.004	1.007
47	1.015	1.013	1.015	1.013	1.015	1.012	1.012	1.010	1.012	1.009	1.012	1.006	1.012	1.007	1.012	1.009	1.012	1.009	1.009	1.007
48	1.013	1.015	1.015	1.018	1.015	1.016	1.013	1.015	1.013	1.013	1.012	1.013	1.012	1.013	1.009	1.012	1.010	1.010	1.009	1.012
49	1.015	1.018	1.016	1.019	1.016	1.016	1.015	1.016	1.015	1.013	1.013	1.013	1.013	1.015	1.013	1.015	1.013	1.013	1.012	1.015
50	1.018	1.019	1.018	1.018	1.016	1.018	1.013	1.015	1.013	1.015	1.015	1.015	1.013	1.016	1.012	1.015	1.013	1.013	1.012	1.013
51	1.018	1.019	1.016	1.019	1.015	1.016	1.015	1.015	1.012	1.013	1.012	1.013	1.009	1.012	1.010	1.012	1.010	1.010	1.009	1.010
52	1.022	1.021	1.021	1.015	1.015	1.012	1.012	1.009	1.009	1.007	1.009	1.004	1.007	1.004	1.006	1.003	1.006	1.003	1.004	1.001
53	1.018	1.019	1.015	1.018	1.012	1.010	1.004	1.004	1.001	1.001	0.999	0.999	0.996	0.998	0.996	0.996	0.996	0.996	0.994	0.996
54	1.023	1.021	1.021	1.015	1.015	1.006	1.006	0.999	0.999	0.993	0.996	0.993	0.994	0.991	0.996	0.989	0.993	0.987	0.991	0.987
55	1.021	1.021	1.018	1.016	1.012	1.010	1.004	1.003	0.998	0.998	0.993	0.994	0.993	0.993	0.993	0.989	0.987	0.991	0.987	0.989
56	1.021	1.016	1.018	1.013	1.013	1.007	1.006	1.001	0.999	0.996	0.996	0.993	0.994	0.991	0.994	0.991	0.993	0.989	0.989	0.987
57	1.015	1.012	1.013	1.009	1.010	1.006	1.006	0.999	1.001	0.998	0.999	0.994	0.996	0.993	0.996	0.993	0.996	0.993	0.993	0.991
58	1.021	1.016	1.019	1.015	1.016	1.015	1.018	1.013	1.013	1.009	1.012	1.009	1.009	1.007	1.009	1.006	1.007	1.006	1.006	1.003
59	1.009	1.006	1.009	1.006	1.007	1.004	1.006	1.003	1.003	0.999	1.001	0.998	1.001	0.999	0.999	0.998	0.999	0.996	0.999	0.996
60	1.004	1.007	1.004	1.009	1.004	1.006	1.004	1.006	1.001	1.004	1.003	1.001	0.999	1.001	0.999	0.999	0.999	0.999	0.998	0.999
61	1.009	1.006	1.009	1.006	1.009	1.003	1.007	1.003	1.004	1.001	1.004	1.003	1.004	0.999	1.003	0.998	1.001	0.998	0.999	0.999
62	1.013	1.013	1.012	1.009	1.007	1.009	1.007	1.003	1.003	1.004	1.001	1.003	1.003	1.004	1.004	1.001	1.001	1.001	1.001	1.004
63	1.009	1.009	1.006	1.009	1.006	1.007	1.004	1.006	1.004	1.006	1.003	1.004	1.001	1.003	0.999	1.001	0.998	0.998	0.996	0.998

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 9.26 SEC
INITIAL TEMP 540.7 DEG. R

GROUP 45

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.980	0.980	0.980	0.978	0.980	0.978	0.980	0.978	0.980	0.978
30	0.976	0.978	0.976	0.978	0.976	0.978	0.976	0.978	0.976	0.978
31	0.976	0.976	0.978	0.974	0.976	0.971	0.978	0.974	0.976	0.974
32	0.974	0.976	0.974	0.976	0.974	0.971	0.974	0.976	0.971	0.976
33	0.969	0.974	0.969	0.974	0.967	0.974	0.967	0.974	0.971	0.971
34	0.974	0.974	0.974	0.974	0.971	0.974	0.971	0.971	0.971	0.976
35	0.978	0.976	0.976	0.976	0.976	0.976	0.974	0.976	0.976	0.978
36	0.980	0.976	0.980	0.978	0.976	0.978	0.978	0.976	0.978	0.976
37	0.980	0.982	0.978	0.982	0.980	0.980	0.978	0.980	0.978	0.978
38	0.982	0.982	0.980	0.982	0.980	0.982	0.980	0.980	0.980	0.982
39	0.985	0.982	0.985	0.985	0.983	0.982	0.985	0.982	0.985	0.982
40	0.982	0.985	0.982	0.983	0.982	0.985	0.983	0.987	0.983	0.985
41	0.987	0.985	0.987	0.985	0.987	0.985	0.987	0.982	0.987	0.982
42	0.993	0.987	0.989	0.985	0.989	0.987	0.987	0.985	0.989	0.989
43	0.996	0.989	0.994	0.989	0.993	0.989	0.994	0.989	0.993	0.989
44	0.996	0.996	0.991	0.994	0.994	0.996	0.996	0.996	0.993	0.996
45	1.001	0.999	1.003	0.998	1.001	0.998	1.001	0.999	0.999	0.998
46	1.006	1.007	1.006	1.007	1.004	1.009	1.004	1.006	1.003	1.004
47	1.012	1.007	1.010	1.010	1.010	1.007	1.010	1.007	1.010	1.006
48	1.010	1.012	1.009	1.010	1.007	1.012	1.006	1.009	1.007	1.010
49	1.012	1.013	1.010	1.013	1.012	1.012	1.009	1.010	1.009	1.010
50	1.012	1.012	1.012	1.012	1.009	1.012	1.007	1.012	1.009	1.010
51	1.007	1.009	1.007	1.009	1.006	1.009	1.006	1.007	1.006	1.006
52	1.004	0.999	1.003	1.001	1.001	0.999	0.999	0.998	1.001	0.998
53	0.994	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.989	0.991
54	0.989	0.987	0.989	0.985	0.989	0.985	0.987	0.982	0.985	0.980
55	0.985	0.985	0.985	0.985	0.978	0.985	0.976	0.982	0.974	0.982
56	0.987	0.985	0.987	0.985	0.987	0.985	0.985	0.982	0.983	0.982
57	0.993	0.989	0.993	0.989	0.993	0.985	0.991	0.987	0.987	0.985
58	1.006	1.003	1.004	1.001	1.003	0.999	0.999	0.998	0.999	0.996
59	0.998	0.996	0.998	0.993	0.996	0.993	0.996	0.993	0.996	0.993
60	0.998	0.999	0.998	0.998	0.996	0.998	0.996	0.996	0.996	0.996
61	1.001	0.998	1.001	0.998	1.001	0.996	0.998	0.996	0.998	0.996
62	0.999	0.994	0.999	0.999	0.998	1.001	0.998	0.994	0.998	0.999
63	0.996	0.996	0.996	0.996	0.991	0.996	0.994	0.996	0.993	0.994

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 45

IR SCAN TIME 9.26 SEC
INITIAL TEMP 540.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.985	0.983	0.985	0.983	0.985	0.985	0.994	0.993	0.998	0.994	1.003	1.004	1.013	1.021	1.089	1.218	1.293	1.322	1.340	1.351
65	0.982	0.983	0.982	0.982	0.982	0.985	0.989	0.991	0.993	0.996	0.999	1.006	1.010	1.023	1.095	1.224	1.292	1.320	1.336	1.347
66	0.982	0.980	0.980	0.983	0.982	0.985	0.987	0.991	0.993	0.996	0.999	1.004	1.010	1.027	1.122	1.242	1.297	1.322	1.335	1.344
67	0.982	0.982	0.980	0.982	0.982	0.985	0.989	0.991	0.993	0.996	0.998	1.004	1.010	1.044	1.161	1.263	1.303	1.323	1.335	1.343
68	0.983	0.980	0.982	0.980	0.982	0.982	0.989	0.989	0.994	0.996	0.996	1.003	1.013	1.066	1.194	1.275	1.307	1.325	1.336	1.344
69	0.983	0.982	0.980	0.980	0.982	0.985	0.987	0.991	0.993	0.994	0.996	1.003	1.015	1.100	1.225	1.288	1.313	1.329	1.339	1.348
70	0.982	0.982	0.982	0.978	0.983	0.987	0.989	0.989	0.994	0.996	0.999	1.003	1.031	1.133	1.244	1.293	1.315	1.328	1.338	1.345
71	0.983	0.980	0.978	0.980	0.982	0.985	0.987	0.991	0.987	0.996	0.993	1.004	1.033	1.146	1.243	1.286	1.305	1.319	1.328	1.336
72	0.982	0.980	0.982	0.978	0.982	0.983	0.989	0.989	0.994	0.996	0.999	1.001	1.038	1.145	1.239	1.276	1.294	1.306	1.315	1.322
73	0.980	0.980	0.978	0.978	0.982	0.982	0.989	0.991	0.993	0.993	0.998	0.999	1.043	1.147	1.231	1.264	1.281	1.291	1.300	1.306
74	0.978	0.978	0.980	0.978	0.982	0.983	0.989	0.989	0.993	0.993	0.996	1.003	1.055	1.162	1.233	1.259	1.273	1.282	1.290	1.296
75	0.978	0.978	0.980	0.978	0.982	0.982	0.987	0.989	0.993	0.991	0.996	1.007	1.083	1.189	1.239	1.259	1.271	1.278	1.285	1.290
76	0.978	0.978	0.978	0.978	0.980	0.983	0.985	0.989	0.991	0.993	0.996	1.018	1.110	1.207	1.244	1.260	1.270	1.278	1.283	1.287
77	0.982	0.987	0.996	1.001	1.001	0.998	1.004	0.999	0.999	0.993	0.999	1.031	1.139	1.218	1.248	1.261	1.271	1.277	1.281	1.286
78	0.998	1.004	1.018	1.043	1.030	1.019	1.004	1.004	1.003	1.006	0.999	1.053	1.160	1.224	1.245	1.259	1.265	1.272	1.275	1.281
79	1.010	1.018	1.039	1.078	1.044	1.023	1.018	1.013	1.004	1.007	1.015	1.067	1.165	1.220	1.239	1.250	1.257	1.262	1.264	1.269
80	1.019	1.022	1.054	1.112	1.089	1.040	1.022	1.013	1.018	1.015	1.023	1.076	1.171	1.218	1.235	1.243	1.248	1.252	1.255	1.258
81	1.103	1.074	1.082	1.142	1.161	1.099	1.051	1.025	1.015	1.017	1.026	1.064	1.175	1.218	1.233	1.241	1.245	1.246	1.248	1.249
82	1.204	1.126	1.103	1.147	1.188	1.136	1.070	1.033	1.018	1.012	1.031	1.106	1.191	1.224	1.237	1.242	1.246	1.247	1.248	1.249
83	1.187	1.111	1.089	1.118	1.156	1.119	1.062	1.029	1.007	1.013	1.060	1.167	1.241	1.259	1.260	1.259	1.257	1.255	1.253	1.250
84	1.099	1.069	1.059	1.065	1.079	1.082	1.066	1.044	1.033	1.051	1.068	1.106	1.158	1.184	1.199	1.216	1.231	1.245	1.254	1.258
85	1.060	1.048	1.046	1.044	1.053	1.057	1.058	1.044	1.044	1.049	1.060	1.056	1.059	1.060	1.065	1.064	1.070	1.072	1.080	1.087
86	1.040	1.031	1.023	1.025	1.027	1.031	1.029	1.027	1.034	1.046	1.049	1.048	1.048	1.049	1.047	1.048	1.047	1.049	1.046	1.045
87	1.021	1.016	1.010	1.010	1.012	1.012	1.016	1.021	1.034	1.049	1.057	1.045	1.046	1.044	1.046	1.043	1.043	1.040	1.044	1.043
88	1.006	1.006	1.004	1.007	1.006	1.012	1.012	1.021	1.036	1.054	1.056	1.048	1.044	1.044	1.040	1.039	1.036	1.038	1.035	1.036
89	0.996	1.001	1.006	1.010	1.007	1.009	1.006	1.019	1.019	1.044	1.049	1.048	1.044	1.044	1.039	1.036	1.035	1.035	1.033	1.030
90	0.998	0.999	1.003	1.004	1.004	1.004	1.004	1.007	1.015	1.031	1.039	1.039	1.038	1.036	1.035	1.033	1.031	1.031	1.029	1.030
91	0.998	0.999	1.003	1.004	1.001	1.004	1.003	1.004	1.009	1.023	1.033	1.036	1.036	1.035	1.033	1.034	1.031	1.030	1.029	1.029
92	1.001	1.001	1.004	0.999	1.004	1.001	1.009	1.006	1.012	1.016	1.033	1.035	1.036	1.034	1.033	1.027	1.031	1.029	1.030	1.027
93	1.012	1.012	1.009	1.009	1.007	1.010	1.012	1.018	1.016	1.022	1.030	1.033	1.031	1.031	1.029	1.027	1.025	1.023	1.023	1.026
94	1.021	1.018	1.021	1.018	1.021	1.019	1.021	1.021	1.025	1.027	1.035	1.034	1.033	1.030	1.030	1.026	1.027	1.025	1.025	1.023
95	1.025	1.022	1.022	1.023	1.025	1.025	1.023	1.023	1.027	1.035	1.040	1.038	1.031	1.033	1.030	1.033	1.031	1.033	1.029	1.027
96	1.025	1.023	1.025	1.025	1.027	1.025	1.027	1.025	1.027	1.038	1.045	1.040	1.040	1.038	1.041	1.041	1.045	1.043	1.040	1.033
97	1.026	1.025	1.026	1.027	1.029	1.029	1.027	1.026	1.027	1.035	1.044	1.039	1.039	1.038	1.045	1.046	1.048	1.044	1.044	1.033
98	1.025	1.022	1.026	1.026	1.030	1.027	1.029	1.023	1.029	1.035	1.047	1.041	1.038	1.036	1.040	1.044	1.047	1.044	1.044	1.036

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 45

IR SCAN TIME 9.26 SEC
INITIAL TEMP 540.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	1.358	1.362	1.370	1.376	1.383	1.393	1.405	1.417	1.431	1.442	1.448	1.458	1.469	1.472	1.476	1.478	1.482	1.484	1.487	1.490
65	1.353	1.357	1.364	1.373	1.380	1.389	1.399	1.410	1.421	1.436	1.443	1.450	1.460	1.466	1.469	1.476	1.480	1.483	1.484	1.489
66	1.351	1.356	1.362	1.370	1.378	1.387	1.396	1.407	1.418	1.431	1.444	1.449	1.453	1.460	1.467	1.473	1.480	1.483	1.484	1.487
67	1.350	1.356	1.362	1.370	1.377	1.386	1.395	1.406	1.418	1.431	1.444	1.453	1.456	1.458	1.464	1.469	1.470	1.472	1.477	1.483
68	1.352	1.357	1.364	1.371	1.380	1.388	1.397	1.406	1.417	1.428	1.440	1.450	1.454	1.456	1.458	1.462	1.467	1.470	1.474	1.475
69	1.354	1.360	1.366	1.374	1.381	1.391	1.398	1.404	1.414	1.425	1.437	1.447	1.452	1.455	1.457	1.456	1.457	1.459	1.461	1.463
70	1.352	1.357	1.364	1.373	1.380	1.388	1.399	1.406	1.412	1.424	1.436	1.445	1.452	1.454	1.455	1.457	1.459	1.461	1.463	1.463
71	1.342	1.348	1.354	1.363	1.371	1.379	1.389	1.399	1.409	1.420	1.432	1.441	1.448	1.452	1.453	1.456	1.459	1.462	1.462	1.463
72	1.329	1.334	1.341	1.347	1.355	1.363	1.373	1.383	1.393	1.403	1.415	1.424	1.433	1.438	1.442	1.444	1.450	1.456	1.460	1.463
73	1.313	1.319	1.325	1.331	1.338	1.347	1.357	1.365	1.374	1.381	1.388	1.395	1.404	1.411	1.414	1.414	1.416	1.420	1.428	1.436
74	1.302	1.307	1.313	1.319	1.325	1.331	1.339	1.347	1.355	1.363	1.369	1.374	1.381	1.387	1.388	1.388	1.387	1.387	1.389	1.392
75	1.295	1.299	1.304	1.310	1.317	1.324	1.331	1.337	1.343	1.349	1.356	1.361	1.363	1.364	1.365	1.365	1.367	1.367	1.365	1.363
76	1.292	1.298	1.302	1.307	1.312	1.319	1.326	1.333	1.339	1.344	1.349	1.356	1.359	1.362	1.363	1.364	1.363	1.362	1.360	1.359
77	1.290	1.295	1.301	1.305	1.311	1.317	1.325	1.332	1.339	1.343	1.347	1.351	1.354	1.356	1.358	1.359	1.360	1.359	1.359	1.358
78	1.285	1.291	1.296	1.302	1.307	1.314	1.321	1.328	1.334	1.342	1.346	1.349	1.351	1.352	1.352	1.354	1.354	1.355	1.355	1.355
79	1.272	1.278	1.283	1.289	1.293	1.300	1.305	1.313	1.319	1.326	1.331	1.335	1.338	1.339	1.338	1.340	1.340	1.341	1.341	1.342
80	1.261	1.264	1.269	1.273	1.278	1.283	1.288	1.294	1.301	1.306	1.312	1.315	1.317	1.317	1.317	1.315	1.314	1.312	1.313	1.312
81	1.252	1.254	1.258	1.262	1.267	1.271	1.276	1.280	1.284	1.288	1.292	1.293	1.295	1.294	1.294	1.292	1.291	1.289	1.287	1.285
82	1.250	1.252	1.255	1.258	1.263	1.268	1.273	1.278	1.282	1.285	1.288	1.288	1.288	1.287	1.286	1.283	1.282	1.280	1.278	1.276
83	1.250	1.251	1.253	1.256	1.261	1.266	1.272	1.276	1.283	1.286	1.289	1.291	1.292	1.291	1.290	1.287	1.285	1.282	1.281	1.278
84	1.266	1.267	1.260	1.262	1.266	1.271	1.274	1.278	1.282	1.286	1.290	1.293	1.292	1.289	1.286	1.285	1.283	1.282	1.281	1.280
85	1.103	1.115	1.128	1.147	1.173	1.191	1.201	1.203	1.209	1.216	1.246	1.279	1.265	1.230	1.217	1.216	1.220	1.225	1.229	1.232
86	1.043	1.045	1.040	1.043	1.041	1.044	1.041	1.044	1.043	1.046	1.044	1.053	1.051	1.048	1.044	1.047	1.044	1.047	1.047	1.052
87	1.044	1.040	1.040	1.038	1.038	1.036	1.038	1.035	1.036	1.035	1.034	1.033	1.033	1.033	1.033	1.031	1.031	1.030	1.030	1.027
88	1.035	1.036	1.036	1.035	1.035	1.036	1.035	1.034	1.035	1.035	1.033	1.031	1.030	1.029	1.027	1.027	1.025	1.026	1.023	1.023
89	1.027	1.029	1.026	1.029	1.027	1.029	1.030	1.030	1.030	1.030	1.031	1.031	1.031	1.029	1.027	1.023	1.023	1.023	1.023	1.023
90	1.029	1.027	1.023	1.023	1.022	1.023	1.021	1.023	1.022	1.026	1.026	1.030	1.040	1.045	1.033	1.029	1.026	1.026	1.023	1.023
91	1.027	1.027	1.026	1.025	1.023	1.023	1.022	1.023	1.023	1.023	1.031	1.078	1.151	1.165	1.112	1.059	1.033	1.026	1.023	1.023
92	1.027	1.025	1.026	1.023	1.025	1.021	1.023	1.021	1.023	1.021	1.026	1.043	1.092	1.108	1.077	1.041	1.029	1.023	1.023	1.021
93	1.021	1.025	1.018	1.023	1.015	1.019	1.013	1.018	1.013	1.016	1.013	1.019	1.015	1.021	1.016	1.022	1.018	1.021	1.018	1.022
94	1.023	1.022	1.023	1.021	1.021	1.018	1.019	1.015	1.016	1.013	1.018	1.018	1.021	1.018	1.021	1.018	1.021	1.016	1.019	1.015
95	1.023	1.023	1.022	1.022	1.021	1.021	1.018	1.016	1.015	1.016	1.015	1.018	1.018	1.019	1.018	1.021	1.018	1.021	1.019	1.021
96	1.029	1.027	1.025	1.022	1.022	1.019	1.019	1.016	1.019	1.015	1.018	1.016	1.019	1.016	1.018	1.013	1.019	1.016	1.021	1.016
97	1.031	1.027	1.029	1.023	1.023	1.021	1.023	1.021	1.023	1.021	1.022	1.018	1.019	1.016	1.018	1.015	1.016	1.015	1.021	1.015
98	1.035	1.033	1.033	1.029	1.031	1.025	1.031	1.030	1.030	1.027	1.029	1.023	1.022	1.019	1.021	1.015	1.023	1.023	1.039	1.056

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IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 9.26 SEC
GROUP 45 INITIAL TEMP 540.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	1.489	1.486	1.482	1.477	1.480	1.499	1.528	1.535	1.533	1.535	1.533	1.519	1.476	1.408	1.346	1.267	1.172	1.097	1.060	1.041
65	1.492	1.495	1.494	1.493	1.490	1.483	1.476	1.464	1.468	1.486	1.503	1.518	1.524	1.515	1.477	1.404	1.304	1.198	1.113	1.066
66	1.489	1.491	1.493	1.496	1.501	1.511	1.512	1.482	1.440	1.407	1.400	1.419	1.449	1.480	1.505	1.512	1.479	1.396	1.275	1.165
67	1.487	1.489	1.491	1.498	1.507	1.518	1.524	1.514	1.504	1.482	1.441	1.391	1.359	1.366	1.398	1.441	1.480	1.494	1.453	1.344
68	1.479	1.484	1.486	1.491	1.505	1.520	1.525	1.516	1.511	1.508	1.502	1.488	1.460	1.413	1.363	1.340	1.354	1.393	1.439	1.446
69	1.465	1.470	1.476	1.482	1.495	1.515	1.523	1.513	1.510	1.509	1.507	1.504	1.501	1.495	1.477	1.439	1.386	1.341	1.327	1.351
70	1.465	1.467	1.470	1.475	1.485	1.500	1.506	1.498	1.496	1.497	1.502	1.504	1.503	1.504	1.504	1.500	1.491	1.462	1.412	1.353
71	1.464	1.467	1.471	1.474	1.479	1.497	1.507	1.496	1.488	1.483	1.482	1.486	1.489	1.494	1.500	1.504	1.505	1.505	1.503	1.491
72	1.465	1.466	1.466	1.466	1.473	1.490	1.497	1.486	1.485	1.483	1.480	1.476	1.472	1.467	1.461	1.461	1.468	1.477	1.489	1.499
73	1.443	1.446	1.446	1.450	1.461	1.480	1.503	1.504	1.493	1.486	1.482	1.477	1.475	1.474	1.469	1.465	1.456	1.440	1.421	1.413
74	1.395	1.397	1.397	1.396	1.404	1.427	1.458	1.470	1.465	1.465	1.468	1.470	1.470	1.473	1.472	1.473	1.472	1.467	1.460	1.446
75	1.363	1.364	1.365	1.362	1.362	1.367	1.378	1.369	1.351	1.352	1.366	1.383	1.402	1.419	1.434	1.445	1.452	1.455	1.457	1.458
76	1.358	1.358	1.356	1.355	1.354	1.356	1.358	1.336	1.310	1.293	1.278	1.269	1.266	1.273	1.287	1.305	1.327	1.353	1.378	1.402
77	1.358	1.357	1.357	1.356	1.357	1.358	1.364	1.367	1.351	1.332	1.316	1.297	1.277	1.257	1.240	1.229	1.224	1.226	1.232	1.244
78	1.354	1.354	1.354	1.354	1.354	1.356	1.366	1.372	1.362	1.352	1.344	1.336	1.324	1.310	1.292	1.271	1.250	1.231	1.217	1.209
79	1.343	1.343	1.343	1.343	1.343	1.347	1.353	1.361	1.356	1.350	1.348	1.345	1.340	1.335	1.330	1.321	1.310	1.297	1.278	1.257
80	1.313	1.314	1.316	1.316	1.318	1.320	1.329	1.338	1.340	1.333	1.334	1.335	1.334	1.334	1.333	1.332	1.331	1.327	1.321	1.312
81	1.283	1.282	1.281	1.280	1.281	1.281	1.285	1.290	1.291	1.286	1.285	1.287	1.290	1.292	1.296	1.299	1.304	1.307	1.309	1.309
82	1.274	1.271	1.269	1.267	1.265	1.263	1.264	1.267	1.267	1.258	1.253	1.250	1.249	1.246	1.245	1.244	1.244	1.245	1.247	1.248
83	1.276	1.273	1.271	1.268	1.267	1.264	1.264	1.265	1.266	1.258	1.252	1.247	1.243	1.238	1.235	1.232	1.230	1.226	1.223	1.219
84	1.279	1.278	1.277	1.275	1.273	1.271	1.269	1.269	1.269	1.262	1.254	1.251	1.246	1.242	1.237	1.233	1.229	1.226	1.223	1.220
85	1.237	1.244	1.249	1.251	1.255	1.258	1.262	1.266	1.269	1.260	1.252	1.248	1.246	1.239	1.235	1.230	1.228	1.225	1.223	1.220
86	1.052	1.057	1.057	1.063	1.064	1.073	1.078	1.086	1.097	1.102	1.099	1.101	1.104	1.104	1.104	1.109	1.114	1.118	1.122	1.128
87	1.030	1.029	1.033	1.030	1.034	1.031	1.034	1.034	1.036	1.033	1.034	1.031	1.033	1.030	1.033	1.031	1.031	1.030	1.033	1.033
88	1.023	1.025	1.023	1.026	1.025	1.026	1.025	1.025	1.025	1.027	1.025	1.025	1.023	1.025	1.023	1.023	1.022	1.023	1.022	1.025
89	1.026	1.022	1.022	1.019	1.023	1.019	1.022	1.022	1.016	1.025	1.023	1.022	1.021	1.021	1.019	1.021	1.021	1.021	1.023	1.016
90	1.022	1.023	1.021	1.022	1.021	1.023	1.021	1.023	1.023	1.025	1.025	1.026	1.023	1.022	1.021	1.022	1.018	1.021	1.018	1.019
91	1.021	1.021	1.021	1.021	1.021	1.022	1.023	1.025	1.029	1.055	1.086	1.082	1.053	1.033	1.023	1.021	1.021	1.019	1.018	1.019
92	1.023	1.021	1.022	1.021	1.022	1.021	1.023	1.023	1.029	1.061	1.106	1.103	1.069	1.039	1.026	1.021	1.022	1.019	1.022	1.021
93	1.021	1.022	1.021	1.022	1.021	1.023	1.021	1.023	1.021	1.023	1.025	1.029	1.025	1.023	1.021	1.022	1.021	1.022	1.021	1.023
94	1.019	1.015	1.021	1.018	1.021	1.021	1.023	1.021	1.023	1.021	1.023	1.021	1.025	1.022	1.023	1.021	1.023	1.021	1.025	1.023
95	1.018	1.018	1.018	1.021	1.021	1.022	1.022	1.022	1.021	1.023	1.022	1.022	1.022	1.022	1.021	1.022	1.019	1.023	1.021	1.026
96	1.019	1.018	1.021	1.018	1.022	1.021	1.023	1.025	1.023	1.022	1.023	1.023	1.025	1.022	1.025	1.022	1.025	1.023	1.027	1.026
97	1.018	1.016	1.019	1.016	1.016	1.021	1.023	1.021	1.025	1.023	1.026	1.023	1.025	1.023	1.026	1.022	1.027	1.025	1.029	1.029
98	1.047	1.031	1.025	1.016	1.021	1.021	1.022	1.021	1.023	1.023	1.026	1.025	1.029	1.026	1.027	1.027	1.029	1.029	1.033	1.031

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 45

IR SCAN TIME 9.26 SEC
INITIAL TEMP 540.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	1.033	1.027	1.026	1.022	1.023	1.018	1.019	1.015	1.018	1.012	1.015	1.010	1.013	1.010	1.012	1.007	1.009	1.007	1.010	1.006
65	1.044	1.034	1.027	1.022	1.019	1.018	1.015	1.015	1.012	1.012	1.009	1.010	1.007	1.009	1.006	1.007	1.006	1.006	1.006	1.006
66	1.089	1.054	1.033	1.023	1.018	1.016	1.012	1.010	1.009	1.007	1.006	1.007	1.003	1.004	1.001	1.003	0.999	1.003	0.999	0.999
67	1.216	1.120	1.064	1.036	1.016	1.015	1.006	1.007	0.999	1.004	0.998	0.999	0.994	0.998	0.993	0.996	0.993	0.994	0.991	0.996
68	1.365	1.233	1.131	1.069	1.039	1.018	1.009	1.003	1.003	0.996	0.998	0.994	0.996	0.993	0.993	0.989	0.991	0.989	0.989	0.987
69	1.371	1.325	1.220	1.128	1.067	1.039	1.016	1.006	0.999	0.996	0.994	0.994	0.989	0.989	0.987	0.989	0.985	0.985	0.982	0.983
70	1.312	1.291	1.248	1.164	1.094	1.054	1.033	1.015	1.009	0.998	0.998	0.993	0.993	0.987	0.989	0.985	0.987	0.985	0.983	0.982
71	1.455	1.397	1.337	1.277	1.192	1.112	1.062	1.038	1.018	1.006	0.996	0.996	0.993	0.991	0.987	0.987	0.985	0.985	0.982	0.983
72	1.503	1.499	1.480	1.433	1.358	1.256	1.156	1.085	1.049	1.023	1.009	0.996	0.996	0.989	0.991	0.985	0.987	0.983	0.983	0.982
73	1.420	1.438	1.457	1.473	1.476	1.442	1.361	1.245	1.141	1.073	1.038	1.012	1.001	0.993	0.993	0.987	0.985	0.985	0.983	0.980
74	1.418	1.380	1.354	1.352	1.375	1.405	1.421	1.383	1.284	1.173	1.095	1.043	1.019	0.994	0.993	0.980	0.985	0.983	0.983	0.980
75	1.459	1.456	1.440	1.405	1.356	1.312	1.295	1.303	1.299	1.233	1.140	1.072	1.038	1.015	0.999	0.989	0.985	0.982	0.982	0.978
76	1.421	1.438	1.449	1.455	1.452	1.433	1.392	1.337	1.285	1.243	1.182	1.109	1.059	1.031	1.015	1.001	0.989	0.983	0.978	0.978
77	1.263	1.289	1.321	1.356	1.391	1.417	1.433	1.436	1.416	1.368	1.303	1.224	1.139	1.074	1.039	1.018	1.006	0.993	0.987	0.978
78	1.206	1.207	1.210	1.217	1.230	1.253	1.286	1.330	1.373	1.403	1.402	1.364	1.290	1.193	1.106	1.052	1.022	1.010	0.998	0.989
79	1.236	1.218	1.208	1.204	1.204	1.205	1.205	1.209	1.219	1.241	1.274	1.305	1.309	1.269	1.188	1.108	1.054	1.025	1.012	1.006
80	1.302	1.285	1.263	1.240	1.224	1.212	1.207	1.204	1.202	1.203	1.205	1.208	1.215	1.220	1.214	1.174	1.111	1.056	1.026	1.012
81	1.310	1.310	1.308	1.299	1.286	1.268	1.251	1.232	1.219	1.208	1.204	1.202	1.202	1.200	1.201	1.194	1.163	1.106	1.057	1.025
82	1.253	1.258	1.267	1.275	1.283	1.287	1.289	1.284	1.274	1.256	1.236	1.219	1.208	1.201	1.199	1.198	1.195	1.168	1.117	1.061
83	1.217	1.214	1.215	1.216	1.221	1.226	1.233	1.241	1.251	1.258	1.261	1.258	1.247	1.231	1.218	1.207	1.204	1.196	1.171	1.121
84	1.217	1.214	1.210	1.207	1.207	1.206	1.205	1.206	1.207	1.209	1.212	1.217	1.222	1.228	1.230	1.230	1.226	1.220	1.209	1.183
85	1.218	1.214	1.212	1.208	1.206	1.203	1.202	1.200	1.200	1.199	1.200	1.200	1.201	1.203	1.207	1.213	1.221	1.227	1.231	1.226
86	1.133	1.136	1.137	1.140	1.142	1.145	1.145	1.147	1.148	1.154	1.159	1.163	1.161	1.164	1.167	1.171	1.173	1.178	1.184	1.188
87	1.034	1.034	1.034	1.034	1.034	1.034	1.035	1.033	1.038	1.039	1.045	1.047	1.052	1.052	1.055	1.055	1.057	1.056	1.060	1.062
88	1.021	1.025	1.021	1.025	1.018	1.022	1.018	1.019	1.019	1.022	1.018	1.025	1.023	1.027	1.026	1.026	1.023	1.025	1.023	1.026
89	1.016	1.018	1.019	1.021	1.018	1.021	1.021	1.018	1.019	1.018	1.019	1.021	1.027	1.023	1.025	1.023	1.022	1.023	1.022	1.025
90	1.018	1.019	1.018	1.019	1.018	1.019	1.018	1.016	1.016	1.018	1.022	1.027	1.026	1.027	1.027	1.031	1.030	1.029	1.025	1.023
91	1.018	1.019	1.018	1.021	1.021	1.026	1.035	1.039	1.029	1.023	1.021	1.023	1.023	1.027	1.027	1.031	1.030	1.030	1.026	1.026
92	1.022	1.021	1.022	1.021	1.023	1.040	1.074	1.080	1.061	1.039	1.029	1.027	1.029	1.030	1.031	1.031	1.031	1.030	1.030	1.027
93	1.022	1.023	1.021	1.023	1.023	1.026	1.031	1.035	1.033	1.031	1.027	1.030	1.031	1.035	1.036	1.038	1.035	1.035	1.033	1.034
94	1.026	1.025	1.026	1.025	1.027	1.027	1.029	1.027	1.029	1.030	1.033	1.035	1.039	1.040	1.045	1.045	1.047	1.044	1.046	1.044
95	1.023	1.027	1.025	1.029	1.027	1.030	1.027	1.033	1.029	1.033	1.033	1.039	1.044	1.049	1.051	1.056	1.054	1.055	1.053	1.055
96	1.029	1.029	1.031	1.030	1.033	1.033	1.039	1.038	1.036	1.036	1.039	1.044	1.049	1.051	1.059	1.060	1.062	1.056	1.059	1.054
97	1.031	1.033	1.035	1.034	1.036	1.038	1.040	1.043	1.046	1.043	1.044	1.047	1.055	1.059	1.066	1.066	1.069	1.064	1.063	1.062
98	1.034	1.035	1.039	1.036	1.041	1.040	1.044	1.040	1.043	1.040	1.047	1.052	1.060	1.064	1.072	1.071	1.072	1.068	1.066	1.062

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 45

IR SCAN TIME 9.26 SEC
INITIAL TEMP 540.7 DEG. R

*** PUINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	1.010	1.006	1.009	1.006	1.007	1.004	1.006	1.001	1.004	1.001	1.001	0.998	0.999	0.996	1.001	0.996	0.999	0.996	0.998	0.993
65	1.004	1.006	1.003	1.004	1.001	1.001	0.999	1.001	0.998	0.998	0.996	0.998	0.996	0.996	0.994	0.994	0.993	0.993	0.991	0.991
66	0.999	0.998	0.998	0.998	0.996	0.996	0.996	0.996	0.993	0.994	0.989	0.993	0.989	0.993	0.989	0.987	0.985	0.987	0.985	0.985
67	0.993	0.994	0.991	0.991	0.991	0.993	0.987	0.989	0.985	0.987	0.985	0.985	0.982	0.982	0.983	0.982	0.980	0.980	0.980	0.980
68	0.987	0.982	0.987	0.980	0.985	0.980	0.983	0.978	0.982	0.976	0.980	0.974	0.978	0.974	0.978	0.971	0.976	0.971	0.971	0.971
69	0.982	0.982	0.982	0.982	0.980	0.980	0.978	0.978	0.976	0.976	0.974	0.974	0.971	0.974	0.971	0.971	0.969	0.969	0.967	0.969
70	0.983	0.978	0.980	0.978	0.980	0.976	0.978	0.974	0.976	0.974	0.976	0.971	0.974	0.969	0.971	0.967	0.967	0.965	0.967	0.965
71	0.982	0.982	0.976	0.980	0.978	0.978	0.976	0.978	0.976	0.976	0.971	0.974	0.969	0.971	0.967	0.969	0.967	0.967	0.965	0.967
72	0.982	0.982	0.982	0.978	0.980	0.978	0.978	0.974	0.976	0.974	0.974	0.971	0.971	0.969	0.971	0.971	0.971	0.965	0.969	0.965
73	0.982	0.980	0.982	0.978	0.980	0.976	0.978	0.976	0.978	0.974	0.976	0.971	0.974	0.969	0.971	0.967	0.969	0.965	0.967	0.965
74	0.983	0.980	0.980	0.978	0.980	0.978	0.978	0.976	0.976	0.971	0.974	0.971	0.974	0.969	0.971	0.967	0.971	0.967	0.967	0.965
75	0.980	0.974	0.978	0.971	0.978	0.971	0.976	0.971	0.974	0.969	0.971	0.967	0.971	0.965	0.971	0.965	0.971	0.965	0.967	0.963
76	0.976	0.978	0.974	0.976	0.974	0.974	0.971	0.971	0.969	0.971	0.967	0.969	0.967	0.969	0.965	0.967	0.965	0.967	0.960	0.965
77	0.980	0.976	0.978	0.974	0.976	0.971	0.974	0.971	0.974	0.969	0.971	0.967	0.969	0.965	0.967	0.965	0.967	0.965	0.967	0.965
78	0.980	0.978	0.974	0.974	0.971	0.971	0.969	0.971	0.967	0.969	0.967	0.969	0.965	0.969	0.965	0.965	0.963	0.965	0.963	0.965
79	0.998	0.991	0.980	0.978	0.971	0.971	0.969	0.971	0.969	0.967	0.965	0.967	0.965	0.967	0.965	0.967	0.965	0.965	0.963	0.965
80	1.010	1.004	1.001	0.993	0.989	0.978	0.976	0.971	0.971	0.967	0.969	0.965	0.967	0.965	0.967	0.965	0.967	0.965	0.967	0.963
81	1.015	1.007	1.009	1.004	1.004	0.999	0.998	0.989	0.985	0.980	0.976	0.971	0.967	0.965	0.967	0.963	0.963	0.960	0.963	0.958
82	1.030	1.012	1.013	1.004	1.007	1.001	1.006	1.001	1.003	0.996	0.996	0.987	0.989	0.982	0.980	0.974	0.974	0.963	0.967	0.963
83	1.068	1.033	1.019	1.012	1.010	1.004	1.007	1.004	1.006	1.004	1.006	1.003	1.003	0.998	0.999	0.987	0.994	0.980	0.989	0.974
84	1.134	1.079	1.038	1.019	1.012	1.010	1.006	1.007	1.004	1.006	1.004	1.006	1.004	1.007	1.006	1.007	1.004	1.006	1.001	0.999
85	1.203	1.154	1.096	1.049	1.026	1.013	1.013	1.007	1.010	1.006	1.007	1.006	1.009	1.007	1.012	1.007	1.012	1.006	1.009	1.007
86	1.186	1.171	1.128	1.077	1.040	1.022	1.016	1.015	1.012	1.012	1.009	1.010	1.007	1.010	1.007	1.010	1.007	1.009	1.006	1.007
87	1.069	1.069	1.063	1.044	1.030	1.021	1.019	1.013	1.015	1.010	1.013	1.012	1.012	1.007	1.012	1.009	1.012	1.007	1.010	1.006
88	1.025	1.027	1.023	1.023	1.018	1.016	1.013	1.013	1.010	1.012	1.009	1.010	1.009	1.010	1.009	1.010	1.007	1.009	1.007	1.007
89	1.023	1.022	1.022	1.018	1.018	1.016	1.016	1.016	1.015	1.016	1.016	1.012	1.009	1.012	1.012	1.010	1.010	1.009	1.007	1.007
90	1.021	1.022	1.021	1.021	1.015	1.016	1.015	1.016	1.016	1.016	1.013	1.015	1.012	1.013	1.012	1.015	1.009	1.012	1.006	1.009
91	1.023	1.022	1.021	1.021	1.018	1.019	1.016	1.019	1.018	1.021	1.018	1.019	1.018	1.018	1.016	1.018	1.015	1.015	1.012	1.012
92	1.027	1.025	1.023	1.022	1.025	1.022	1.025	1.023	1.025	1.023	1.023	1.023	1.023	1.022	1.023	1.022	1.022	1.021	1.021	1.016
93	1.033	1.033	1.031	1.034	1.033	1.034	1.033	1.034	1.033	1.034	1.033	1.033	1.033	1.033	1.031	1.031	1.029	1.029	1.027	1.026
94	1.046	1.044	1.047	1.046	1.049	1.045	1.047	1.045	1.047	1.044	1.047	1.044	1.046	1.044	1.045	1.043	1.043	1.039	1.039	1.038
95	1.053	1.057	1.056	1.060	1.059	1.060	1.058	1.059	1.057	1.059	1.059	1.061	1.060	1.061	1.059	1.061	1.059	1.061	1.059	1.062
96	1.060	1.061	1.064	1.064	1.069	1.068	1.072	1.072	1.075	1.078	1.082	1.083	1.087	1.087	1.090	1.089	1.089	1.089	1.091	1.090
97	1.062	1.065	1.070	1.071	1.077	1.080	1.084	1.087	1.091	1.094	1.099	1.100	1.106	1.106	1.109	1.106	1.109	1.107	1.109	1.106
98	1.065	1.066	1.071	1.074	1.079	1.082	1.087	1.090	1.094	1.095	1.099	1.100	1.103	1.105	1.107	1.106	1.108	1.108	1.110	1.109

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 45

IR SCAN TIME 9.26 SEC
INITIAL TEMP 540.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.996	0.993	0.996	0.993	0.994	0.996	0.993	0.991	0.993	0.989
65	0.991	0.991	0.987	0.989	0.987	0.987	0.985	0.985	0.983	0.985
66	0.982	0.982	0.982	0.983	0.980	0.982	0.980	0.980	0.978	0.978
67	0.976	0.978	0.976	0.976	0.976	0.976	0.974	0.974	0.974	0.974
68	0.974	0.969	0.971	0.967	0.971	0.967	0.969	0.965	0.967	0.967
69	0.960	0.967	0.960	0.967	0.958	0.963	0.958	0.965	0.956	0.963
70	0.967	0.965	0.965	0.963	0.965	0.960	0.963	0.958	0.960	0.958
71	0.965	0.967	0.963	0.965	0.960	0.963	0.958	0.960	0.958	0.960
72	0.969	0.965	0.967	0.965	0.967	0.960	0.963	0.960	0.963	0.958
73	0.967	0.960	0.965	0.963	0.965	0.960	0.960	0.960	0.960	0.958
74	0.967	0.963	0.965	0.963	0.965	0.963	0.963	0.960	0.960	0.956
75	0.967	0.963	0.963	0.960	0.963	0.960	0.963	0.958	0.960	0.958
76	0.958	0.963	0.958	0.958	0.956	0.958	0.953	0.958	0.953	0.958
77	0.965	0.963	0.963	0.958	0.963	0.958	0.960	0.956	0.958	0.958
78	0.960	0.963	0.960	0.963	0.960	0.960	0.958	0.958	0.956	0.956
79	0.963	0.965	0.963	0.965	0.963	0.963	0.960	0.963	0.960	0.963
80	0.967	0.963	0.967	0.960	0.965	0.960	0.965	0.960	0.965	0.960
81	0.960	0.958	0.960	0.956	0.960	0.956	0.958	0.956	0.956	0.953
82	0.963	0.960	0.963	0.956	0.960	0.956	0.958	0.953	0.960	0.956
83	0.978	0.965	0.971	0.953	0.965	0.948	0.960	0.951	0.958	0.951
84	0.996	0.996	0.989	0.987	0.982	0.978	0.971	0.967	0.963	0.965
85	1.009	1.003	1.004	0.999	0.999	0.996	0.994	0.987	0.985	0.980
86	1.006	1.009	1.003	1.007	1.004	1.003	0.999	0.998	0.996	0.993
87	1.006	1.004	1.007	1.007	1.007	1.004	1.004	0.999	1.001	0.998
88	1.004	1.006	1.006	1.007	1.006	1.006	1.003	1.003	1.001	0.999
89	1.012	1.007	1.006	1.010	1.009	1.009	1.006	1.007	1.004	1.006
90	1.004	1.009	1.006	1.012	1.009	1.013	1.007	1.010	1.006	1.012
91	1.010	1.010	1.012	1.012	1.012	1.015	1.015	1.016	1.015	1.016
92	1.019	1.016	1.019	1.018	1.021	1.018	1.022	1.021	1.025	1.023
93	1.025	1.025	1.025	1.026	1.025	1.027	1.027	1.031	1.030	1.031
94	1.038	1.038	1.039	1.038	1.041	1.040	1.044	1.044	1.047	1.045
95	1.060	1.062	1.062	1.064	1.062	1.065	1.065	1.066	1.066	1.068
96	1.091	1.090	1.091	1.090	1.091	1.090	1.091	1.090	1.092	1.091
97	1.109	1.106	1.109	1.106	1.108	1.107	1.110	1.110	1.115	1.115
98	1.111	1.112	1.113	1.113	1.115	1.117	1.129	1.151	1.182	1.207

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 9.26 SEC
HREF = 0.253E-01.

GROUP 45

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	0.023	0.023	0.025	0.023	0.024	0.023	0.021	0.023	0.022	0.022	0.022	0.019	0.022	0.024	0.023	0.022	0.024	0.024	0.025	0.023
30	0.025	0.025	0.024	0.025	0.021	0.021	0.022	0.023	0.023	0.024	0.023	0.025	0.024	0.025	0.024	0.025	0.024	0.025	0.023	0.023
31	0.025	0.023	0.023	0.023	0.025	0.024	0.025	0.024	0.025	0.024	0.026	0.024	0.025	0.025	0.025	0.024	0.024	0.022	0.022	0.020
32	0.024	0.024	0.024	0.025	0.025	0.027	0.025	0.025	0.023	0.027	0.024	0.025	0.023	0.024	0.022	0.023	0.020	0.021	0.021	0.022
33	0.025	0.026	0.026	0.025	0.024	0.025	0.025	0.025	0.023	0.024	0.023	0.023	0.019	0.019	0.019	0.022	0.023	0.025	0.024	0.025
34	0.027	0.026	0.025	0.025	0.024	0.025	0.022	0.022	0.021	0.021	0.018	0.019	0.019	0.021	0.022	0.024	0.025	0.026	0.025	0.027
35	0.025	0.024	0.021	0.023	0.019	0.021	0.017	0.019	0.018	0.020	0.020	0.021	0.021	0.023	0.023	0.026	0.025	0.026	0.024	0.021
36	0.022	0.021	0.021	0.021	0.019	0.019	0.020	0.021	0.021	0.021	0.022	0.023	0.025	0.025	0.025	0.023	0.021	0.016	0.012	0.005
37	0.019	0.019	0.018	0.019	0.019	0.021	0.021	0.022	0.022	0.024	0.024	0.025	0.023	0.020	0.016	0.011	0.005	0.001	0.001	0.001
38	0.019	0.019	0.020	0.021	0.021	0.023	0.022	0.024	0.024	0.024	0.021	0.017	0.013	0.007	0.002	0.002	0.002	0.002	0.002	0.002
39	0.021	0.021	0.021	0.022	0.024	0.023	0.024	0.023	0.020	0.015	0.010	0.005	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001
40	0.023	0.023	0.024	0.024	0.024	0.023	0.018	0.014	0.007	0.004	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
41	0.025	0.025	0.026	0.024	0.020	0.013	0.008	0.002	0.002	0.002	0.002	0.001	0.002	0.001	0.002	0.001	0.003	0.001	0.003	0.002
42	0.027	0.026	0.021	0.012	0.008	0.001	0.002	0.002	0.003	0.003	0.002	0.002	0.003	0.001	0.003	0.002	0.003	0.002	0.004	0.003
43	0.021	0.013	0.009	0.004	0.004	0.002	0.002	0.001	0.002	0.001	0.003	0.002	0.004	0.001	0.004	0.001	0.005	0.002	0.006	0.003
44	0.009	0.006	0.005	0.005	0.003	0.005	0.003	0.004	0.002	0.004	0.003	0.005	0.004	0.006	0.004	0.006	0.006	0.009	0.013	0.019
45	0.008	0.006	0.008	0.006	0.006	0.005	0.006	0.006	0.006	0.006	0.007	0.006	0.007	0.007	0.010	0.008	0.011	0.022	0.062	0.110
46	0.010	0.010	0.010	0.010	0.008	0.010	0.008	0.010	0.008	0.010	0.010	0.010	0.011	0.013	0.011	0.013	0.015	0.041	0.109	0.180
47	0.011	0.011	0.010	0.012	0.011	0.011	0.011	0.010	0.011	0.011	0.012	0.011	0.013	0.012	0.013	0.014	0.019	0.048	0.123	0.193
48	0.013	0.011	0.010	0.012	0.011	0.013	0.011	0.013	0.011	0.013	0.013	0.013	0.013	0.014	0.014	0.016	0.021	0.058	0.135	0.204
49	0.013	0.013	0.010	0.013	0.010	0.013	0.011	0.013	0.011	0.013	0.013	0.014	0.014	0.016	0.016	0.018	0.025	0.063	0.142	0.209
50	0.012	0.013	0.011	0.013	0.012	0.013	0.012	0.012	0.012	0.013	0.013	0.013	0.013	0.015	0.014	0.018	0.025	0.075	0.155	0.215
51	0.010	0.010	0.010	0.011	0.010	0.011	0.010	0.011	0.011	0.012	0.011	0.013	0.013	0.013	0.016	0.017	0.033	0.098	0.178	0.226
52	0.007	0.006	0.007	0.006	0.008	0.006	0.007	0.006	0.008	0.007	0.009	0.008	0.011	0.010	0.013	0.014	0.041	0.119	0.195	0.235
53	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.003	0.002	0.004	0.004	0.005	0.004	0.007	0.008	0.015	0.054	0.141	0.209	0.242
54	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.004	0.004	0.007	0.016	0.073	0.162	0.220	0.247
55	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.001	0.001	0.003	0.003	0.006	0.006	0.019	0.084	0.173	0.227	0.252
56	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.005	0.004	0.008	0.021	0.093	0.180	0.230	0.252
57	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.002	0.006	0.004	0.009	0.023	0.098	0.182	0.228	0.247
58	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.004	0.002	0.005	0.004	0.007	0.006	0.011	0.034	0.116	0.194	0.233	0.251
59	0.001	0.001	0.002	0.001	0.003	0.001	0.004	0.002	0.006	0.005	0.007	0.006	0.008	0.009	0.015	0.056	0.146	0.210	0.238	0.253
60	0.001	0.002	0.001	0.002	0.001	0.003	0.002	0.005	0.004	0.006	0.006	0.008	0.008	0.011	0.019	0.074	0.162	0.216	0.240	0.255
61	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.002	0.004	0.004	0.006	0.007	0.010	0.012	0.027	0.097	0.180	0.222	0.244	0.257
62	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.003	0.007	0.009	0.011	0.013	0.038	0.120	0.192	0.224	0.243	0.254
63	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.003	0.006	0.008	0.013	0.043	0.129	0.195	0.224	0.239	0.250

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 9.26 SEC
HRFR = 0.253E-01

GROUP 45

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	0.025	0.023	0.025	0.022	0.023	0.019	0.021	0.019	0.021	0.020	0.021	0.019	0.022	0.021	0.024	0.025	0.026	0.025	0.026	0.026
30	0.022	0.021	0.021	0.021	0.021	0.020	0.021	0.021	0.023	0.026	0.026	0.027	0.027	0.027	0.027	0.029	0.027	0.025	0.021	0.021
31	0.021	0.020	0.022	0.023	0.026	0.025	0.027	0.025	0.027	0.027	0.030	0.029	0.028	0.024	0.023	0.019	0.018	0.013	0.011	0.006
32	0.023	0.025	0.024	0.027	0.027	0.029	0.027	0.028	0.026	0.025	0.021	0.020	0.016	0.012	0.006	0.002	0.002	0.002	0.002	0.002
33	0.025	0.027	0.026	0.027	0.025	0.025	0.020	0.017	0.014	0.010	0.005	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.026	0.025	0.021	0.017	0.013	0.009	0.004	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.017	0.013	0.004	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
39	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.002	0.001	0.002	0.001	0.002	0.002	0.002	0.002
40	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.002	0.001	0.003	0.002	0.003	0.002	0.003	0.002	0.003	0.001	0.002	0.001	0.002
41	0.003	0.002	0.004	0.003	0.004	0.003	0.005	0.004	0.005	0.003	0.005	0.003	0.004	0.002	0.004	0.003	0.005	0.002	0.005	0.002
42	0.005	0.004	0.006	0.003	0.006	0.004	0.006	0.004	0.006	0.006	0.006	0.005	0.006	0.005	0.006	0.004	0.006	0.005	0.006	0.004
43	0.006	0.004	0.007	0.006	0.007	0.006	0.008	0.006	0.008	0.006	0.008	0.007	0.009	0.007	0.009	0.006	0.008	0.006	0.007	0.006
44	0.024	0.026	0.024	0.021	0.018	0.016	0.013	0.013	0.011	0.012	0.011	0.011	0.011	0.011	0.008	0.011	0.007	0.010	0.006	0.008
45	0.137	0.146	0.145	0.136	0.124	0.109	0.094	0.077	0.060	0.045	0.032	0.023	0.019	0.015	0.016	0.013	0.014	0.013	0.013	0.012
46	0.224	0.250	0.268	0.283	0.294	0.301	0.299	0.284	0.254	0.215	0.168	0.125	0.087	0.059	0.037	0.027	0.020	0.018	0.016	0.017
47	0.235	0.259	0.277	0.295	0.316	0.339	0.363	0.382	0.394	0.394	0.381	0.348	0.296	0.231	0.165	0.109	0.066	0.039	0.028	0.023
48	0.243	0.267	0.284	0.301	0.319	0.341	0.364	0.387	0.404	0.415	0.419	0.414	0.408	0.399	0.368	0.297	0.202	0.124	0.068	0.041
49	0.245	0.269	0.287	0.305	0.322	0.341	0.362	0.382	0.399	0.416	0.429	0.436	0.438	0.437	0.435	0.425	0.377	0.274	0.173	0.102
50	0.245	0.264	0.280	0.297	0.316	0.336	0.359	0.381	0.401	0.419	0.434	0.446	0.454	0.462	0.464	0.458	0.451	0.426	0.331	0.211
51	0.249	0.264	0.277	0.292	0.309	0.330	0.352	0.377	0.400	0.413	0.418	0.423	0.427	0.436	0.444	0.449	0.447	0.442	0.437	0.363
52	0.256	0.270	0.282	0.295	0.311	0.329	0.350	0.375	0.401	0.420	0.431	0.437	0.443	0.450	0.460	0.469	0.475	0.474	0.465	0.456
53	0.259	0.270	0.280	0.292	0.307	0.326	0.345	0.366	0.388	0.407	0.421	0.431	0.439	0.446	0.453	0.460	0.466	0.476	0.475	0.468
54	0.262	0.273	0.281	0.293	0.308	0.326	0.346	0.367	0.387	0.404	0.418	0.427	0.435	0.446	0.454	0.459	0.463	0.468	0.474	0.479
55	0.265	0.276	0.284	0.295	0.308	0.324	0.342	0.362	0.382	0.398	0.408	0.415	0.419	0.426	0.435	0.449	0.462	0.469	0.474	0.477
56	0.265	0.274	0.283	0.293	0.306	0.321	0.339	0.357	0.374	0.387	0.395	0.400	0.405	0.409	0.414	0.421	0.434	0.450	0.466	0.476
57	0.259	0.266	0.274	0.284	0.298	0.314	0.333	0.352	0.370	0.384	0.393	0.397	0.406	0.413	0.416	0.416	0.419	0.427	0.439	0.452
58	0.262	0.268	0.275	0.284	0.297	0.311	0.329	0.350	0.371	0.387	0.396	0.403	0.413	0.419	0.417	0.416	0.421	0.422	0.425	0.432
59	0.264	0.269	0.276	0.285	0.295	0.308	0.324	0.341	0.361	0.375	0.387	0.400	0.416	0.426	0.423	0.422	0.427	0.426	0.422	0.425
60	0.263	0.269	0.275	0.285	0.293	0.305	0.321	0.338	0.354	0.365	0.373	0.387	0.404	0.416	0.420	0.426	0.431	0.433	0.432	0.430
61	0.265	0.270	0.276	0.284	0.293	0.304	0.317	0.332	0.347	0.357	0.364	0.375	0.389	0.398	0.406	0.412	0.414	0.416	0.427	0.436
62	0.261	0.267	0.274	0.281	0.289	0.298	0.310	0.327	0.341	0.349	0.357	0.369	0.383	0.393	0.399	0.403	0.406	0.404	0.405	0.414
63	0.256	0.262	0.269	0.278	0.286	0.296	0.310	0.326	0.342	0.352	0.358	0.370	0.384	0.391	0.395	0.397	0.402	0.407	0.404	0.403

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 9.26 SEC
GROUP 45 HREF = 0.253E-01

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	0.028	0.026	0.025	0.023	0.021	0.019	0.019	0.016	0.014	0.010	0.010	0.007	0.006	0.004	0.003	0.001	0.001	0.001	0.001	0.001
30	0.018	0.018	0.013	0.012	0.007	0.007	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
31	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
32	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
33	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
39	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
40	0.001	0.002	0.001	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
41	0.003	0.002	0.003	0.002	0.003	0.002	0.003	0.001	0.002	0.001	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
42	0.005	0.003	0.005	0.002	0.004	0.002	0.003	0.002	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
43	0.006	0.005	0.006	0.004	0.006	0.004	0.005	0.003	0.004	0.003	0.004	0.002	0.003	0.001	0.003	0.001	0.001	0.001	0.001	0.001
44	0.006	0.007	0.005	0.007	0.005	0.006	0.004	0.006	0.003	0.006	0.005	0.006	0.003	0.005	0.003	0.004	0.003	0.004	0.002	0.003
45	0.013	0.011	0.011	0.010	0.011	0.010	0.009	0.008	0.010	0.007	0.009	0.006	0.008	0.006	0.007	0.004	0.006	0.003	0.006	0.003
46	0.015	0.016	0.015	0.015	0.013	0.013	0.011	0.012	0.011	0.011	0.010	0.011	0.011	0.010	0.009	0.010	0.008	0.010	0.008	0.009
47	0.021	0.019	0.019	0.017	0.018	0.016	0.016	0.013	0.014	0.013	0.013	0.012	0.013	0.011	0.012	0.011	0.011	0.010	0.010	0.010
48	0.027	0.025	0.021	0.020	0.019	0.018	0.016	0.016	0.016	0.016	0.013	0.014	0.013	0.014	0.012	0.012	0.012	0.012	0.011	0.012
49	0.058	0.038	0.027	0.024	0.021	0.021	0.019	0.019	0.016	0.017	0.016	0.016	0.015	0.014	0.014	0.013	0.013	0.013	0.013	0.013
50	0.125	0.072	0.045	0.033	0.025	0.023	0.021	0.021	0.019	0.019	0.018	0.018	0.016	0.016	0.015	0.015	0.014	0.014	0.013	0.013
51	0.234	0.136	0.074	0.044	0.029	0.025	0.021	0.021	0.019	0.019	0.017	0.018	0.016	0.016	0.016	0.014	0.013	0.014	0.013	0.013
52	0.396	0.271	0.159	0.086	0.048	0.030	0.023	0.017	0.017	0.014	0.014	0.013	0.013	0.011	0.013	0.010	0.011	0.010	0.011	0.010
53	0.466	0.412	0.278	0.159	0.085	0.046	0.027	0.019	0.013	0.012	0.010	0.010	0.008	0.008	0.007	0.007	0.005	0.006	0.006	0.009
54	0.479	0.474	0.415	0.282	0.164	0.089	0.049	0.029	0.019	0.013	0.011	0.008	0.009	0.007	0.007	0.006	0.006	0.006	0.008	0.009
55	0.480	0.480	0.487	0.472	0.359	0.214	0.116	0.062	0.035	0.021	0.014	0.012	0.010	0.009	0.007	0.008	0.007	0.009	0.009	0.012
56	0.474	0.469	0.469	0.483	0.498	0.405	0.248	0.136	0.072	0.040	0.024	0.016	0.013	0.011	0.010	0.008	0.010	0.010	0.011	0.011
57	0.463	0.465	0.462	0.460	0.469	0.492	0.449	0.303	0.170	0.091	0.050	0.028	0.019	0.013	0.013	0.010	0.010	0.010	0.011	0.011
58	0.440	0.448	0.457	0.461	0.463	0.471	0.487	0.452	0.321	0.187	0.100	0.053	0.032	0.019	0.016	0.013	0.013	0.011	0.013	0.011
59	0.432	0.436	0.440	0.450	0.461	0.471	0.483	0.493	0.447	0.305	0.170	0.088	0.048	0.028	0.021	0.016	0.014	0.012	0.013	0.010
60	0.432	0.437	0.437	0.436	0.441	0.458	0.481	0.502	0.513	0.452	0.311	0.180	0.095	0.051	0.031	0.022	0.016	0.015	0.013	0.012
61	0.437	0.437	0.439	0.440	0.441	0.446	0.459	0.477	0.475	0.452	0.434	0.338	0.202	0.107	0.057	0.033	0.023	0.016	0.016	0.013
62	0.423	0.431	0.437	0.442	0.450	0.462	0.478	0.471	0.423	0.393	0.404	0.421	0.348	0.213	0.115	0.061	0.036	0.023	0.018	0.017
63	0.400	0.399	0.403	0.415	0.436	0.465	0.493	0.489	0.457	0.434	0.392	0.345	0.336	0.311	0.215	0.118	0.063	0.037	0.023	0.019

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 9.26 SEC
GROUP 45 HRFR = 0.253E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
30	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
31	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
32	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
33	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
39	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
40	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
41	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
42	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
43	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
44	0.001	0.003	0.003	0.002	0.001	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
45	0.007	0.003	0.006	0.004	0.005	0.002	0.005	0.004	0.005	0.003	0.005	0.003	0.005	0.001	0.004	0.002	0.003	0.002	0.004	0.001
46	0.007	0.008	0.007	0.008	0.006	0.007	0.006	0.006	0.006	0.007	0.002	0.006	0.002	0.006	0.002	0.006	0.002	0.006	0.001	0.006
47	0.010	0.010	0.010	0.009	0.010	0.009	0.010	0.007	0.008	0.007	0.008	0.007	0.008	0.006	0.007	0.006	0.007	0.006	0.007	0.006
48	0.011	0.011	0.010	0.010	0.010	0.011	0.009	0.011	0.009	0.010	0.008	0.009	0.008	0.009	0.007	0.008	0.007	0.008	0.007	0.009
49	0.012	0.013	0.011	0.012	0.011	0.012	0.011	0.012	0.011	0.011	0.010	0.010	0.010	0.009	0.009	0.010	0.008	0.009	0.007	0.010
50	0.013	0.013	0.012	0.013	0.011	0.013	0.011	0.012	0.011	0.011	0.011	0.011	0.011	0.010	0.010	0.010	0.010	0.010	0.010	0.011
51	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.011	0.013	0.011	0.012	0.011	0.011	0.011	0.011	0.010	0.011
52	0.013	0.010	0.013	0.011	0.014	0.013	0.014	0.013	0.014	0.013	0.013	0.013	0.013	0.012	0.013	0.011	0.013	0.011	0.012	0.011
53	0.010	0.012	0.012	0.013	0.013	0.013	0.013	0.014	0.013	0.014	0.013	0.013	0.012	0.013	0.011	0.013	0.011	0.012	0.010	0.011
54	0.012	0.013	0.013	0.013	0.015	0.014	0.015	0.015	0.016	0.015	0.016	0.015	0.016	0.013	0.014	0.013	0.014	0.013	0.013	0.011
55	0.012	0.013	0.014	0.016	0.015	0.016	0.015	0.016	0.015	0.016	0.015	0.016	0.015	0.016	0.013	0.015	0.013	0.013	0.013	0.013
56	0.013	0.013	0.015	0.015	0.016	0.014	0.016	0.014	0.016	0.014	0.015	0.013	0.014	0.013	0.013	0.013	0.013	0.011	0.012	0.010
57	0.013	0.012	0.013	0.012	0.013	0.011	0.012	0.011	0.013	0.011	0.013	0.010	0.011	0.010	0.011	0.010	0.010	0.008	0.010	0.007
58	0.013	0.011	0.013	0.012	0.013	0.012	0.013	0.012	0.012	0.011	0.012	0.011	0.012	0.011	0.011	0.011	0.012	0.010	0.011	0.010
59	0.012	0.010	0.010	0.010	0.010	0.008	0.010	0.007	0.008	0.006	0.007	0.005	0.007	0.004	0.006	0.004	0.006	0.004	0.005	0.004
60	0.011	0.011	0.009	0.010	0.010	0.010	0.007	0.008	0.006	0.006	0.004	0.006	0.003	0.006	0.003	0.005	0.003	0.005	0.002	0.004
61	0.013	0.012	0.013	0.011	0.012	0.010	0.011	0.008	0.009	0.007	0.008	0.006	0.007	0.005	0.006	0.006	0.005	0.003	0.006	0.004
62	0.014	0.013	0.013	0.013	0.012	0.011	0.011	0.011	0.006	0.009	0.008	0.008	0.009	0.008	0.007	0.007	0.006	0.007	0.005	0.003
63	0.016	0.015	0.013	0.013	0.011	0.011	0.010	0.010	0.008	0.009	0.007	0.007	0.006	0.007	0.006	0.006	0.005	0.006	0.005	0.006

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 9.26 SEC
GROUP 45 HREF = 0.253E-01

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
30	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
31	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
32	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
33	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
39	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
40	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
41	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
42	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
43	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
44	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
45	0.003	0.001	0.003	0.002	0.003	0.002	0.003	0.001	0.003	0.001	0.002	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001
46	0.003	0.006	0.003	0.006	0.003	0.006	0.005	0.006	0.004	0.006	0.004	0.005	0.005	0.005	0.003	0.004	0.003	0.004	0.002	0.004
47	0.006	0.007	0.008	0.007	0.008	0.006	0.006	0.006	0.006	0.005	0.006	0.003	0.006	0.004	0.006	0.005	0.006	0.005	0.005	0.004
48	0.007	0.008	0.008	0.010	0.008	0.009	0.007	0.008	0.007	0.007	0.006	0.007	0.006	0.007	0.005	0.006	0.006	0.006	0.005	0.006
49	0.008	0.010	0.009	0.010	0.009	0.009	0.008	0.009	0.008	0.007	0.007	0.007	0.007	0.008	0.007	0.008	0.007	0.007	0.006	0.008
50	0.010	0.010	0.010	0.010	0.009	0.010	0.007	0.008	0.007	0.008	0.008	0.008	0.007	0.009	0.006	0.008	0.007	0.007	0.006	0.007
51	0.010	0.010	0.009	0.010	0.008	0.009	0.008	0.008	0.006	0.007	0.006	0.007	0.005	0.006	0.006	0.006	0.006	0.006	0.005	0.006
52	0.012	0.011	0.011	0.008	0.008	0.006	0.006	0.005	0.005	0.004	0.005	0.002	0.004	0.002	0.003	0.001	0.003	0.001	0.002	0.001
53	0.010	0.010	0.008	0.010	0.006	0.006	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
54	0.013	0.011	0.011	0.008	0.008	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
55	0.011	0.011	0.010	0.009	0.006	0.006	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
56	0.011	0.009	0.010	0.007	0.007	0.004	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
57	0.008	0.006	0.007	0.005	0.006	0.003	0.003	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
58	0.011	0.009	0.010	0.008	0.009	0.008	0.010	0.007	0.007	0.005	0.006	0.005	0.005	0.004	0.005	0.003	0.004	0.003	0.003	0.001
59	0.005	0.003	0.005	0.003	0.004	0.002	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
60	0.002	0.004	0.002	0.005	0.002	0.003	0.002	0.003	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
61	0.005	0.003	0.005	0.003	0.005	0.001	0.004	0.001	0.002	0.001	0.002	0.001	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001
62	0.007	0.007	0.006	0.005	0.004	0.005	0.004	0.001	0.001	0.002	0.001	0.001	0.001	0.002	0.002	0.001	0.001	0.001	0.001	0.002
63	0.005	0.005	0.003	0.005	0.003	0.004	0.002	0.003	0.002	0.003	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREFR
IR SCAN TIME 9.26 SEC
HREFR = 0.253E-01

GROUP 45

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
30	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
31	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
32	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
33	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
39	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
40	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
41	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
42	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
43	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
44	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
45	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
46	0.003	0.004	0.003	0.004	0.002	0.005	0.002	0.003	0.001	0.002
47	0.006	0.004	0.006	0.006	0.006	0.004	0.006	0.004	0.006	0.003
48	0.006	0.006	0.005	0.006	0.004	0.006	0.003	0.005	0.004	0.006
49	0.006	0.007	0.006	0.007	0.006	0.006	0.005	0.006	0.005	0.006
50	0.006	0.006	0.006	0.006	0.005	0.006	0.004	0.006	0.005	0.006
51	0.004	0.005	0.004	0.005	0.003	0.005	0.003	0.004	0.003	0.003
52	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
53	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
54	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
55	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
56	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
57	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
58	0.003	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001
59	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
60	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
61	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
62	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001
63	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 9.26 SEC
GROUP 45 HREF = 0.253E-01.

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.007	0.011	0.050	0.137	0.198	0.223	0.240	0.250
65	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.006	0.013	0.055	0.142	0.197	0.222	0.236	0.247
66	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.006	0.015	0.071	0.156	0.201	0.223	0.235	0.244
67	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.006	0.024	0.097	0.172	0.206	0.225	0.236	0.243
68	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.007	0.037	0.120	0.182	0.210	0.226	0.236	0.244
69	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.008	0.058	0.143	0.193	0.215	0.230	0.239	0.247
70	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.001	0.017	0.078	0.158	0.198	0.217	0.229	0.238	0.245
71	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.002	0.018	0.087	0.157	0.192	0.208	0.220	0.229	0.237
72	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.001	0.021	0.087	0.153	0.183	0.199	0.209	0.217	0.223
73	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.023	0.087	0.148	0.174	0.187	0.196	0.203	0.209
74	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.031	0.098	0.149	0.170	0.181	0.189	0.195	0.200
75	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.004	0.047	0.116	0.154	0.169	0.179	0.185	0.191	0.195
76	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.010	0.064	0.129	0.158	0.170	0.178	0.185	0.189	0.192
77	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.017	0.082	0.138	0.160	0.171	0.179	0.184	0.188	0.192
78	0.003	0.002	0.010	0.023	0.016	0.010	0.002	0.002	0.001	0.003	0.003	0.029	0.096	0.142	0.158	0.169	0.174	0.180	0.183	0.187
79	0.006	0.010	0.021	0.044	0.024	0.013	0.010	0.007	0.002	0.004	0.008	0.038	0.100	0.139	0.154	0.163	0.167	0.172	0.174	0.178
80	0.010	0.012	0.030	0.065	0.051	0.022	0.012	0.007	0.010	0.008	0.013	0.043	0.104	0.138	0.151	0.157	0.161	0.163	0.166	0.168
81	0.059	0.042	0.046	0.085	0.097	0.057	0.028	0.013	0.008	0.006	0.014	0.048	0.106	0.137	0.149	0.155	0.158	0.159	0.161	0.162
82	0.127	0.074	0.059	0.087	0.116	0.080	0.040	0.018	0.010	0.006	0.017	0.061	0.118	0.142	0.152	0.156	0.159	0.160	0.161	0.161
83	0.115	0.064	0.050	0.067	0.094	0.069	0.035	0.013	0.004	0.007	0.034	0.101	0.155	0.170	0.170	0.169	0.168	0.166	0.164	0.163
84	0.057	0.039	0.033	0.037	0.045	0.047	0.037	0.024	0.018	0.028	0.038	0.061	0.095	0.113	0.123	0.136	0.148	0.158	0.165	0.169
85	0.034	0.027	0.025	0.024	0.029	0.032	0.032	0.024	0.024	0.027	0.034	0.031	0.033	0.034	0.037	0.036	0.040	0.041	0.045	0.049
86	0.022	0.017	0.013	0.013	0.015	0.017	0.016	0.015	0.019	0.025	0.027	0.027	0.027	0.027	0.026	0.027	0.026	0.027	0.025	0.025
87	0.011	0.009	0.006	0.006	0.006	0.006	0.009	0.011	0.019	0.027	0.032	0.025	0.025	0.024	0.025	0.023	0.023	0.022	0.024	0.023
88	0.003	0.003	0.002	0.004	0.003	0.006	0.006	0.011	0.020	0.030	0.031	0.027	0.024	0.024	0.022	0.021	0.020	0.021	0.019	0.020
89	0.001	0.001	0.003	0.006	0.004	0.005	0.003	0.010	0.010	0.024	0.027	0.027	0.024	0.024	0.021	0.020	0.019	0.019	0.018	0.016
90	0.003	0.003	0.001	0.002	0.002	0.002	0.002	0.004	0.008	0.017	0.021	0.021	0.021	0.020	0.019	0.018	0.017	0.017	0.016	0.016
91	0.006	0.006	0.001	0.002	0.001	0.002	0.001	0.002	0.005	0.013	0.018	0.020	0.020	0.019	0.018	0.019	0.017	0.016	0.016	0.016
92	0.001	0.001	0.002	0.002	0.002	0.001	0.005	0.003	0.006	0.009	0.018	0.019	0.020	0.019	0.018	0.015	0.017	0.016	0.016	0.015
93	0.006	0.006	0.005	0.005	0.004	0.006	0.006	0.010	0.009	0.012	0.016	0.018	0.017	0.017	0.016	0.015	0.013	0.013	0.013	0.014
94	0.011	0.010	0.011	0.010	0.011	0.010	0.011	0.011	0.013	0.015	0.019	0.019	0.018	0.016	0.016	0.014	0.015	0.013	0.013	0.013
95	0.013	0.012	0.012	0.013	0.013	0.013	0.013	0.013	0.015	0.019	0.022	0.021	0.017	0.018	0.016	0.018	0.017	0.018	0.016	0.015
96	0.013	0.013	0.013	0.013	0.015	0.013	0.015	0.013	0.015	0.021	0.025	0.022	0.022	0.021	0.023	0.023	0.025	0.023	0.022	0.018
97	0.014	0.013	0.014	0.015	0.016	0.016	0.015	0.014	0.015	0.019	0.024	0.021	0.021	0.021	0.025	0.025	0.027	0.024	0.024	0.018
98	0.013	0.012	0.014	0.014	0.016	0.015	0.016	0.013	0.016	0.019	0.026	0.023	0.021	0.020	0.022	0.024	0.026	0.024	0.024	0.020

IR HEAT TRANSFER COEFFICIENT - H(.9IO)/HREF
IR SCAN TIME 9.26 SEC
GROUP 45 HREF = 0.253E-01

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	0.257	0.261	0.269	0.275	0.282	0.293	0.306	0.319	0.335	0.347	0.355	0.366	0.380	0.385	0.389	0.392	0.397	0.399	0.403	0.407
65	0.252	0.257	0.264	0.272	0.279	0.289	0.299	0.311	0.323	0.340	0.348	0.357	0.369	0.376	0.381	0.389	0.394	0.398	0.399	0.406
66	0.251	0.255	0.261	0.269	0.277	0.286	0.296	0.308	0.320	0.335	0.349	0.355	0.360	0.369	0.377	0.386	0.395	0.398	0.399	0.403
67	0.250	0.255	0.261	0.269	0.276	0.285	0.295	0.307	0.320	0.334	0.349	0.360	0.364	0.366	0.374	0.381	0.382	0.384	0.391	0.399
68	0.251	0.256	0.263	0.270	0.279	0.288	0.297	0.307	0.319	0.331	0.345	0.357	0.362	0.364	0.367	0.372	0.377	0.382	0.386	0.388
69	0.253	0.259	0.265	0.273	0.281	0.291	0.298	0.305	0.315	0.328	0.341	0.353	0.359	0.363	0.365	0.364	0.365	0.368	0.371	0.373
70	0.251	0.257	0.264	0.272	0.279	0.288	0.299	0.306	0.314	0.326	0.340	0.351	0.359	0.361	0.363	0.365	0.368	0.371	0.372	0.373
71	0.242	0.248	0.254	0.263	0.270	0.278	0.289	0.299	0.310	0.322	0.335	0.346	0.355	0.360	0.361	0.364	0.368	0.371	0.372	0.373
72	0.229	0.235	0.241	0.247	0.255	0.263	0.272	0.283	0.293	0.303	0.316	0.326	0.336	0.343	0.347	0.350	0.357	0.364	0.369	0.372
73	0.216	0.221	0.226	0.231	0.238	0.247	0.256	0.264	0.273	0.281	0.288	0.295	0.304	0.312	0.315	0.315	0.317	0.322	0.331	0.340
74	0.206	0.210	0.215	0.220	0.226	0.232	0.239	0.247	0.254	0.262	0.268	0.274	0.281	0.286	0.288	0.287	0.287	0.286	0.288	0.292
75	0.199	0.203	0.207	0.213	0.219	0.225	0.231	0.237	0.243	0.248	0.255	0.260	0.262	0.264	0.264	0.264	0.266	0.266	0.264	0.262
76	0.197	0.202	0.205	0.210	0.215	0.221	0.227	0.233	0.239	0.244	0.249	0.255	0.258	0.261	0.262	0.263	0.262	0.261	0.259	0.259
77	0.195	0.199	0.204	0.208	0.213	0.219	0.226	0.232	0.239	0.243	0.247	0.250	0.253	0.255	0.258	0.258	0.259	0.258	0.258	0.257
78	0.191	0.196	0.200	0.205	0.210	0.216	0.222	0.229	0.235	0.242	0.246	0.248	0.250	0.251	0.251	0.253	0.253	0.254	0.254	0.254
79	0.180	0.185	0.189	0.194	0.198	0.203	0.208	0.216	0.220	0.227	0.231	0.235	0.238	0.239	0.238	0.240	0.240	0.241	0.241	0.242
80	0.171	0.173	0.177	0.181	0.185	0.189	0.194	0.198	0.204	0.209	0.214	0.217	0.219	0.219	0.219	0.217	0.216	0.215	0.215	0.214
81	0.164	0.165	0.168	0.172	0.176	0.179	0.183	0.186	0.190	0.193	0.197	0.198	0.199	0.199	0.198	0.197	0.196	0.194	0.192	0.191
82	0.163	0.163	0.166	0.168	0.173	0.177	0.181	0.185	0.188	0.191	0.193	0.193	0.193	0.192	0.192	0.189	0.188	0.187	0.185	0.183
83	0.163	0.163	0.165	0.167	0.171	0.175	0.180	0.185	0.189	0.192	0.195	0.196	0.197	0.196	0.195	0.192	0.191	0.188	0.187	0.185
84	0.175	0.175	0.171	0.172	0.175	0.180	0.182	0.185	0.188	0.192	0.195	0.198	0.197	0.194	0.192	0.191	0.189	0.189	0.187	0.187
85	0.059	0.067	0.075	0.087	0.105	0.118	0.125	0.127	0.131	0.136	0.159	0.186	0.174	0.147	0.137	0.136	0.139	0.143	0.146	0.148
86	0.023	0.025	0.022	0.023	0.023	0.024	0.023	0.024	0.023	0.025	0.024	0.029	0.028	0.027	0.024	0.026	0.024	0.026	0.026	0.029
87	0.024	0.022	0.022	0.021	0.021	0.020	0.021	0.019	0.020	0.019	0.019	0.018	0.018	0.018	0.018	0.017	0.017	0.016	0.016	0.015
88	0.019	0.020	0.020	0.019	0.019	0.020	0.019	0.019	0.019	0.019	0.018	0.017	0.016	0.016	0.015	0.015	0.013	0.014	0.013	0.013
89	0.015	0.016	0.014	0.016	0.015	0.016	0.016	0.016	0.016	0.016	0.017	0.017	0.017	0.016	0.015	0.013	0.013	0.013	0.013	0.013
90	0.016	0.015	0.013	0.013	0.012	0.013	0.011	0.013	0.012	0.014	0.014	0.016	0.022	0.025	0.018	0.016	0.014	0.014	0.013	0.013
91	0.015	0.015	0.014	0.013	0.013	0.013	0.012	0.013	0.013	0.013	0.017	0.044	0.090	0.100	0.065	0.033	0.018	0.014	0.013	0.013
92	0.015	0.013	0.014	0.013	0.013	0.011	0.013	0.011	0.013	0.011	0.014	0.023	0.053	0.062	0.043	0.023	0.016	0.013	0.013	0.011
93	0.011	0.013	0.010	0.013	0.008	0.010	0.007	0.010	0.007	0.009	0.007	0.010	0.008	0.011	0.009	0.012	0.010	0.011	0.010	0.012
94	0.013	0.012	0.013	0.011	0.011	0.010	0.010	0.008	0.009	0.007	0.010	0.010	0.011	0.010	0.011	0.010	0.011	0.009	0.010	0.008
95	0.013	0.013	0.012	0.012	0.011	0.011	0.010	0.009	0.008	0.009	0.008	0.010	0.010	0.010	0.010	0.011	0.010	0.011	0.010	0.011
96	0.016	0.015	0.013	0.012	0.012	0.010	0.010	0.009	0.010	0.008	0.010	0.009	0.010	0.009	0.010	0.007	0.010	0.009	0.011	0.009
97	0.017	0.015	0.016	0.013	0.013	0.011	0.013	0.011	0.013	0.011	0.012	0.010	0.010	0.009	0.010	0.008	0.009	0.008	0.011	0.008
98	0.019	0.018	0.018	0.016	0.017	0.013	0.017	0.016	0.016	0.015	0.016	0.013	0.012	0.010	0.011	0.008	0.013	0.013	0.021	0.031

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 9.26 SEC
HRFR = 0.253E-01

GROUP 45

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	0.407	0.403	0.397	0.391	0.395	0.419	0.460	0.472	0.468	0.470	0.469	0.447	0.389	0.309	0.245	0.176	0.104	0.056	0.034	0.023
65	0.410	0.414	0.412	0.412	0.408	0.399	0.389	0.374	0.379	0.402	0.426	0.446	0.455	0.442	0.391	0.305	0.207	0.123	0.066	0.037
66	0.406	0.408	0.411	0.415	0.423	0.436	0.437	0.396	0.345	0.308	0.300	0.321	0.356	0.395	0.428	0.438	0.393	0.296	0.182	0.100
67	0.404	0.406	0.409	0.418	0.431	0.446	0.455	0.441	0.426	0.397	0.346	0.291	0.258	0.265	0.298	0.346	0.394	0.413	0.360	0.244
68	0.393	0.399	0.402	0.408	0.427	0.449	0.457	0.443	0.436	0.432	0.424	0.405	0.369	0.314	0.262	0.240	0.253	0.292	0.344	0.352
69	0.376	0.382	0.389	0.397	0.414	0.442	0.454	0.439	0.434	0.433	0.431	0.426	0.422	0.414	0.391	0.344	0.286	0.241	0.228	0.251
70	0.375	0.378	0.381	0.388	0.401	0.421	0.429	0.418	0.416	0.417	0.423	0.427	0.425	0.426	0.427	0.421	0.408	0.372	0.313	0.252
71	0.374	0.378	0.383	0.387	0.393	0.416	0.431	0.416	0.405	0.398	0.397	0.402	0.406	0.413	0.421	0.427	0.428	0.428	0.426	0.408
72	0.375	0.376	0.376	0.376	0.385	0.407	0.417	0.403	0.401	0.398	0.394	0.389	0.384	0.377	0.370	0.370	0.379	0.390	0.406	0.419
73	0.349	0.352	0.352	0.357	0.370	0.394	0.425	0.426	0.411	0.402	0.397	0.391	0.388	0.386	0.381	0.375	0.364	0.345	0.324	0.314
74	0.295	0.297	0.297	0.296	0.305	0.330	0.367	0.382	0.376	0.376	0.380	0.381	0.382	0.385	0.385	0.386	0.384	0.378	0.370	0.353
75	0.262	0.264	0.264	0.261	0.261	0.266	0.277	0.288	0.251	0.252	0.265	0.282	0.302	0.321	0.338	0.351	0.359	0.364	0.366	0.367
76	0.257	0.257	0.255	0.254	0.253	0.255	0.257	0.237	0.212	0.198	0.185	0.178	0.175	0.181	0.192	0.208	0.228	0.252	0.278	0.302
77	0.257	0.257	0.256	0.255	0.256	0.258	0.263	0.266	0.251	0.233	0.218	0.201	0.184	0.167	0.155	0.146	0.142	0.143	0.148	0.158
78	0.254	0.254	0.253	0.253	0.253	0.257	0.265	0.271	0.261	0.251	0.244	0.236	0.225	0.212	0.197	0.180	0.162	0.148	0.137	0.131
79	0.243	0.243	0.243	0.243	0.243	0.246	0.252	0.260	0.255	0.249	0.247	0.245	0.240	0.235	0.230	0.223	0.213	0.201	0.185	0.168
80	0.215	0.216	0.218	0.218	0.219	0.222	0.229	0.238	0.240	0.233	0.235	0.235	0.234	0.234	0.234	0.232	0.231	0.228	0.222	0.214
81	0.190	0.188	0.188	0.187	0.187	0.188	0.191	0.195	0.196	0.192	0.191	0.192	0.195	0.197	0.200	0.203	0.207	0.210	0.212	0.212
82	0.182	0.179	0.178	0.176	0.174	0.173	0.173	0.175	0.176	0.168	0.165	0.162	0.161	0.159	0.159	0.157	0.158	0.158	0.160	0.161
83	0.183	0.181	0.180	0.177	0.175	0.173	0.173	0.174	0.175	0.168	0.164	0.160	0.157	0.153	0.151	0.148	0.146	0.144	0.142	0.139
84	0.186	0.185	0.184	0.183	0.181	0.180	0.177	0.178	0.178	0.172	0.166	0.163	0.159	0.156	0.152	0.149	0.146	0.144	0.141	0.139
85	0.152	0.157	0.161	0.163	0.166	0.169	0.172	0.175	0.177	0.170	0.164	0.161	0.159	0.154	0.150	0.147	0.145	0.143	0.141	0.139
86	0.029	0.032	0.032	0.035	0.036	0.041	0.044	0.049	0.056	0.059	0.057	0.058	0.060	0.060	0.060	0.063	0.066	0.069	0.071	0.075
87	0.016	0.016	0.018	0.016	0.019	0.017	0.019	0.019	0.020	0.018	0.019	0.017	0.018	0.016	0.018	0.017	0.017	0.016	0.018	0.018
88	0.013	0.013	0.013	0.014	0.013	0.014	0.013	0.013	0.013	0.015	0.013	0.013	0.013	0.013	0.013	0.013	0.012	0.013	0.012	0.013
89	0.014	0.012	0.012	0.010	0.013	0.010	0.012	0.012	0.009	0.013	0.013	0.012	0.011	0.011	0.010	0.011	0.011	0.011	0.013	0.009
90	0.012	0.013	0.011	0.012	0.011	0.013	0.011	0.013	0.013	0.013	0.013	0.014	0.013	0.012	0.011	0.012	0.010	0.011	0.010	0.010
91	0.011	0.011	0.011	0.011	0.011	0.012	0.013	0.013	0.016	0.031	0.049	0.046	0.029	0.018	0.013	0.011	0.011	0.010	0.010	0.010
92	0.013	0.011	0.012	0.011	0.012	0.011	0.013	0.013	0.013	0.016	0.034	0.061	0.059	0.039	0.021	0.014	0.011	0.012	0.010	0.012	0.011
93	0.011	0.012	0.011	0.012	0.011	0.013	0.011	0.013	0.011	0.013	0.013	0.016	0.013	0.013	0.011	0.012	0.011	0.012	0.011	0.013
94	0.010	0.008	0.011	0.010	0.011	0.011	0.013	0.011	0.013	0.011	0.013	0.011	0.013	0.012	0.013	0.011	0.013	0.011	0.013	0.013
95	0.010	0.010	0.010	0.011	0.011	0.012	0.012	0.012	0.011	0.013	0.012	0.012	0.012	0.012	0.011	0.012	0.010	0.013	0.011	0.014
96	0.010	0.010	0.011	0.010	0.012	0.011	0.013	0.013	0.013	0.012	0.013	0.013	0.013	0.012	0.013	0.012	0.013	0.013	0.015	0.014
97	0.010	0.009	0.010	0.009	0.009	0.011	0.013	0.011	0.013	0.013	0.014	0.013	0.013	0.013	0.014	0.012	0.015	0.013	0.016	0.016
98	0.026	0.017	0.013	0.009	0.011	0.011	0.012	0.011	0.013	0.013	0.014	0.013	0.016	0.014	0.015	0.015	0.016	0.016	0.018	0.017

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 9.26 SEC
GROUP 45 HRFR = 0.253E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.018	0.015	0.014	0.012	0.013	0.010	0.010	0.008	0.010	0.006	0.008	0.006	0.007	0.006	0.006	0.004	0.005	0.004	0.006	0.003
65	0.024	0.019	0.015	0.012	0.010	0.010	0.008	0.008	0.006	0.006	0.005	0.006	0.004	0.005	0.003	0.004	0.003	0.003	0.003	0.003
66	0.050	0.030	0.018	0.013	0.010	0.009	0.006	0.006	0.005	0.004	0.003	0.004	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001
67	0.136	0.070	0.036	0.020	0.009	0.008	0.003	0.004	0.004	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
68	0.264	0.149	0.077	0.039	0.021	0.010	0.005	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
69	0.271	0.226	0.139	0.075	0.038	0.021	0.009	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
70	0.214	0.196	0.161	0.099	0.054	0.030	0.018	0.008	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
71	0.363	0.298	0.237	0.184	0.119	0.065	0.035	0.021	0.010	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
72	0.426	0.419	0.394	0.337	0.257	0.167	0.094	0.048	0.027	0.013	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
73	0.322	0.342	0.366	0.386	0.389	0.347	0.260	0.158	0.084	0.041	0.021	0.006	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
74	0.320	0.280	0.253	0.252	0.275	0.306	0.323	0.282	0.190	0.105	0.055	0.023	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
75	0.368	0.364	0.345	0.305	0.256	0.215	0.199	0.206	0.203	0.149	0.083	0.041	0.021	0.008	0.008	0.008	0.008	0.008	0.008	0.008
76	0.324	0.342	0.356	0.363	0.359	0.336	0.292	0.237	0.191	0.156	0.112	0.063	0.033	0.017	0.008	0.001	0.001	0.001	0.001	0.001
77	0.173	0.194	0.222	0.256	0.291	0.318	0.337	0.340	0.317	0.267	0.207	0.142	0.083	0.042	0.021	0.010	0.003	0.003	0.003	0.003
78	0.128	0.129	0.132	0.137	0.146	0.164	0.192	0.230	0.272	0.303	0.302	0.263	0.195	0.120	0.061	0.029	0.012	0.006	0.006	0.006
79	0.151	0.138	0.130	0.128	0.127	0.128	0.128	0.131	0.138	0.155	0.182	0.208	0.212	0.178	0.116	0.062	0.030	0.013	0.006	0.003
80	0.205	0.191	0.173	0.154	0.142	0.133	0.129	0.127	0.126	0.126	0.128	0.130	0.135	0.139	0.134	0.106	0.064	0.031	0.014	0.006
81	0.213	0.213	0.210	0.203	0.192	0.177	0.163	0.148	0.138	0.130	0.128	0.126	0.126	0.125	0.125	0.120	0.098	0.061	0.032	0.013
82	0.164	0.169	0.175	0.183	0.189	0.192	0.194	0.190	0.181	0.167	0.151	0.138	0.130	0.125	0.123	0.123	0.121	0.102	0.068	0.034
83	0.137	0.135	0.135	0.136	0.140	0.143	0.149	0.155	0.163	0.168	0.171	0.169	0.160	0.147	0.137	0.130	0.127	0.121	0.104	0.071
84	0.137	0.134	0.132	0.130	0.129	0.128	0.128	0.129	0.129	0.131	0.133	0.137	0.141	0.145	0.147	0.147	0.144	0.139	0.131	0.113
85	0.137	0.135	0.133	0.130	0.129	0.126	0.126	0.124	0.124	0.124	0.125	0.124	0.125	0.127	0.130	0.134	0.140	0.144	0.147	0.143
86	0.078	0.080	0.081	0.083	0.084	0.087	0.087	0.087	0.088	0.092	0.095	0.098	0.097	0.099	0.101	0.104	0.105	0.109	0.113	0.116
87	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.018	0.021	0.021	0.025	0.026	0.029	0.029	0.031	0.031	0.032	0.031	0.034	0.035
88	0.011	0.013	0.011	0.013	0.010	0.012	0.010	0.010	0.010	0.012	0.010	0.013	0.013	0.015	0.014	0.014	0.013	0.013	0.013	0.014
89	0.009	0.010	0.010	0.011	0.010	0.011	0.011	0.010	0.010	0.010	0.010	0.011	0.015	0.013	0.013	0.013	0.012	0.013	0.012	0.013
90	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.009	0.009	0.010	0.012	0.015	0.014	0.015	0.015	0.017	0.016	0.016	0.013	0.013
91	0.010	0.010	0.010	0.011	0.011	0.014	0.019	0.021	0.016	0.013	0.011	0.013	0.013	0.015	0.015	0.017	0.016	0.016	0.014	0.014
92	0.012	0.011	0.012	0.011	0.013	0.022	0.042	0.045	0.034	0.021	0.016	0.015	0.016	0.016	0.017	0.017	0.017	0.016	0.016	0.015
93	0.012	0.013	0.011	0.013	0.013	0.014	0.017	0.019	0.018	0.017	0.015	0.016	0.017	0.019	0.020	0.021	0.019	0.019	0.018	0.019
94	0.014	0.013	0.014	0.013	0.015	0.015	0.016	0.015	0.016	0.016	0.018	0.019	0.021	0.022	0.025	0.025	0.026	0.024	0.025	0.024
95	0.013	0.015	0.013	0.016	0.015	0.016	0.015	0.018	0.016	0.018	0.018	0.021	0.024	0.027	0.028	0.031	0.030	0.031	0.029	0.031
96	0.016	0.016	0.017	0.016	0.018	0.018	0.021	0.021	0.020	0.020	0.021	0.024	0.027	0.028	0.033	0.034	0.035	0.031	0.033	0.030
97	0.017	0.018	0.019	0.019	0.020	0.021	0.022	0.023	0.025	0.023	0.024	0.026	0.031	0.033	0.037	0.037	0.039	0.036	0.035	0.035
98	0.019	0.019	0.021	0.020	0.023	0.022	0.024	0.022	0.023	0.022	0.026	0.029	0.034	0.036	0.041	0.040	0.041	0.038	0.037	0.035

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 9.26 SEC
GROUP 45 HREF = 0.253E-01

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.006	0.003	0.005	0.003	0.004	0.002	0.003	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
65	0.002	0.003	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
66	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
67	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
68	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
69	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
70	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
71	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
72	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
73	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
74	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
75	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
76	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
77	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
78	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
79	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
80	0.006	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
81	0.008	0.004	0.005	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
82	0.016	0.006	0.007	0.002	0.004	0.001	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
83	0.038	0.018	0.010	0.006	0.006	0.002	0.004	0.002	0.003	0.002	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
84	0.079	0.045	0.021	0.010	0.006	0.006	0.003	0.004	0.002	0.003	0.002	0.003	0.002	0.004	0.003	0.004	0.002	0.003	0.001	0.001
85	0.126	0.092	0.055	0.027	0.014	0.007	0.007	0.004	0.006	0.003	0.004	0.003	0.005	0.004	0.006	0.004	0.006	0.003	0.005	0.004
86	0.114	0.103	0.075	0.043	0.022	0.012	0.009	0.008	0.006	0.006	0.005	0.006	0.004	0.006	0.004	0.006	0.004	0.005	0.003	0.004
87	0.039	0.039	0.035	0.024	0.016	0.011	0.010	0.007	0.008	0.006	0.007	0.006	0.006	0.004	0.006	0.005	0.006	0.004	0.006	0.003
88	0.013	0.015	0.013	0.013	0.010	0.009	0.007	0.007	0.006	0.006	0.005	0.006	0.005	0.006	0.005	0.006	0.004	0.005	0.004	0.004
89	0.013	0.012	0.012	0.010	0.010	0.009	0.009	0.009	0.008	0.009	0.009	0.006	0.005	0.006	0.006	0.006	0.006	0.005	0.004	0.004
90	0.011	0.012	0.011	0.011	0.008	0.009	0.008	0.009	0.009	0.009	0.007	0.008	0.006	0.007	0.006	0.008	0.005	0.006	0.003	0.005
91	0.013	0.012	0.011	0.011	0.010	0.010	0.009	0.010	0.010	0.011	0.010	0.010	0.010	0.010	0.009	0.010	0.008	0.008	0.006	0.006
92	0.015	0.013	0.013	0.012	0.013	0.012	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.012	0.013	0.012	0.012	0.011	0.011	0.009
93	0.018	0.018	0.017	0.019	0.018	0.019	0.018	0.019	0.018	0.019	0.018	0.018	0.018	0.018	0.017	0.017	0.016	0.016	0.015	0.014
94	0.025	0.024	0.026	0.025	0.027	0.025	0.026	0.025	0.026	0.024	0.026	0.024	0.025	0.024	0.025	0.023	0.023	0.021	0.021	0.021
95	0.029	0.032	0.031	0.034	0.033	0.034	0.032	0.033	0.032	0.033	0.033	0.034	0.034	0.034	0.033	0.034	0.033	0.034	0.033	0.035
96	0.034	0.034	0.036	0.036	0.039	0.038	0.041	0.041	0.042	0.044	0.047	0.047	0.049	0.049	0.051	0.050	0.051	0.050	0.052	0.051
97	0.035	0.037	0.040	0.040	0.043	0.045	0.048	0.049	0.052	0.054	0.057	0.058	0.061	0.061	0.063	0.061	0.063	0.062	0.063	0.061
98	0.037	0.037	0.040	0.042	0.045	0.046	0.049	0.051	0.054	0.055	0.057	0.058	0.059	0.060	0.062	0.061	0.062	0.062	0.064	0.063

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 9.26 SEC
GROUP 45 HREF = 0.253E-01

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
65	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
66	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
67	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
68	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
69	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
70	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
71	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
72	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
73	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
74	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
75	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
76	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
77	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
78	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
79	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
80	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
81	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
82	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
83	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
84	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
85	0.005	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
86	0.003	0.005	0.001	0.004	0.002	0.001	0.001	0.001	0.001	0.001
87	0.003	0.002	0.004	0.004	0.004	0.002	0.002	0.002	0.001	0.001
88	0.002	0.003	0.003	0.004	0.003	0.003	0.001	0.001	0.001	0.001
89	0.006	0.004	0.003	0.006	0.005	0.005	0.003	0.004	0.002	0.003
90	0.002	0.005	0.003	0.006	0.005	0.007	0.004	0.006	0.003	0.006
91	0.006	0.006	0.006	0.006	0.006	0.008	0.008	0.009	0.008	0.009
92	0.010	0.009	0.010	0.010	0.011	0.010	0.012	0.011	0.013	0.013
93	0.013	0.013	0.013	0.014	0.013	0.015	0.015	0.017	0.016	0.017
94	0.021	0.021	0.021	0.021	0.023	0.022	0.024	0.024	0.026	0.025
95	0.034	0.035	0.035	0.036	0.035	0.037	0.037	0.037	0.037	0.038
96	0.052	0.051	0.052	0.051	0.052	0.051	0.052	0.051	0.053	0.052
97	0.063	0.061	0.063	0.061	0.062	0.062	0.064	0.064	0.067	0.067
98	0.064	0.065	0.066	0.066	0.067	0.068	0.076	0.090	0.111	0.129

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

GROUP 46

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
501 55	594.023	594.066	594.066	594.066	0.000	591.671
501 56	594.066	594.197	594.066	594.110	0.000	591.671
501 57	594.371	594.371	594.066	594.371	0.000	591.671
501 58	594.545	594.545	594.066	594.545	0.000	591.671
501 59	594.676	594.632	594.066	594.719	0.000	591.671
502 0	594.763	594.719	594.066	594.806	0.000	591.671
502 0	594.763	594.719	594.066	594.806	0.000	591.671
502 1	594.850	594.850	594.066	594.937	0.000	591.671
502 2	594.981	594.937	594.066	594.981	0.000	591.671
502 3	595.068	594.981	594.066	595.068	0.000	591.671
502 4	595.068	595.024	594.066	595.111	0.000	591.671
502 5	595.155	595.111	594.066	595.198	0.000	591.671
502 6	595.198	595.155	594.066	595.242	0.000	591.671
502 7	595.242	595.198	594.066	595.285	0.000	591.671
502 8	595.285	595.242	594.066	595.285	0.000	591.671
502 9	595.329	595.285	594.066	595.329	0.000	591.671
502 10	595.372	595.329	594.066	595.329	0.000	591.671
502 11	595.416	595.372	594.066	595.372	0.000	591.671
502 12	595.459	595.372	594.066	595.416	0.000	591.671
502 13	595.503	595.416	594.066	595.416	0.000	591.671
502 13	595.503	595.416	594.066	595.416	0.000	591.671
502 14	595.503	595.416	594.066	595.416	0.000	591.671
502 15	595.547	595.459	594.066	595.459	0.000	591.671
502 16	595.547	595.503	594.066	595.459	0.000	591.671
502 17	595.590	595.503	594.066	595.503	0.000	591.671

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

GROUP	* * * * MODEL DESCRIPTION * * * * TITLE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
46	RSI FORWARD	0.01	0.010	-0.03	30.03	0.053	5	1	44

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/F FT-1	HRFR BTU/FT2-SEC-R	INITIAL TEMP DEG R
7.98	427.66	1301.67	94.76	0.0445	3808.	0.394E-04	0.763E-07	0.197E+07	0.291E-01	544.7

IR CAMERA INFORMATION

MOUNTING LOCATION	260
F STOP	2.5
LENS-DEG	15
SENSITIVITY	1000.
BLACK LEVEL VOLTAGE	2.3783
LINE SCAN PHI	90
MODEL EMISSIVITY	0.96
REF EMISSIVITY	0.94
WINDOW FACTOR	0.840

TIME RECORDS

LIFT OFF	0.00
CENTER LINE	1.99
IR SCAN TIME	18.33
DELTA TIME,SEC	17.22
PHOTO 1 TIME	502
PHOTO 2 TIME	0
PHOTO 3 TIME	0
PHOTO 4 TIME	0

REFERENCE TARGET INFORMATION

TCR5	591.98
TCR6	591.28

DIGITAL DATA AREA PRINTOUT LOCATION

LINE 29 THROUGH 98
POINT 1 THROUGH 110

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 46

IR SCAN TIME 17.22 SEC
INITIAL TEMP 544.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	1.052	1.066	1.066	1.064	1.068	1.066	1.050	1.064	1.062	1.064	1.062	1.054	1.062	1.066	1.066	1.064	1.069	1.068	1.073	1.068
30	1.066	1.068	1.068	1.068	1.060	1.060	1.054	1.060	1.062	1.064	1.064	1.066	1.066	1.068	1.068	1.069	1.069	1.071	1.071	1.073
31	1.066	1.060	1.060	1.056	1.056	1.056	1.064	1.066	1.068	1.068	1.068	1.068	1.069	1.068	1.071	1.069	1.073	1.069	1.068	1.062
32	1.060	1.054	1.062	1.062	1.069	1.069	1.073	1.068	1.068	1.066	1.068	1.068	1.073	1.071	1.071	1.064	1.062	1.060	1.060	1.056
33	1.058	1.064	1.071	1.078	1.068	1.069	1.068	1.068	1.069	1.068	1.071	1.068	1.060	1.060	1.056	1.054	1.060	1.064	1.066	1.069
34	1.069	1.068	1.069	1.064	1.064	1.064	1.068	1.064	1.064	1.060	1.058	1.052	1.058	1.056	1.062	1.060	1.069	1.069	1.071	1.073
35	1.068	1.066	1.058	1.062	1.054	1.058	1.050	1.054	1.048	1.054	1.052	1.058	1.056	1.062	1.060	1.068	1.069	1.073	1.075	1.075
36	1.060	1.058	1.060	1.054	1.052	1.050	1.052	1.052	1.058	1.058	1.062	1.062	1.068	1.066	1.069	1.068	1.073	1.064	1.062	1.044
37	1.054	1.052	1.050	1.050	1.052	1.054	1.054	1.060	1.058	1.064	1.064	1.068	1.068	1.069	1.064	1.056	1.044	1.032	1.017	1.011
38	1.050	1.048	1.052	1.054	1.054	1.058	1.058	1.066	1.064	1.068	1.068	1.068	1.058	1.052	1.032	1.020	1.011	1.009	1.006	1.009
39	1.050	1.052	1.056	1.056	1.060	1.062	1.064	1.064	1.066	1.060	1.054	1.037	1.025	1.011	1.011	1.011	1.011	1.009	1.009	1.006
40	1.056	1.056	1.062	1.060	1.064	1.064	1.064	1.054	1.044	1.025	1.017	1.009	1.011	1.009	1.011	1.006	1.011	1.009	1.011	1.009
41	1.060	1.064	1.066	1.068	1.060	1.052	1.032	1.022	1.011	1.009	1.014	1.011	1.009	1.014	1.009	1.014	1.011	1.014	1.011	1.014
42	1.068	1.073	1.066	1.044	1.032	1.011	1.011	1.003	1.011	1.003	1.011	1.003	1.014	1.011	1.017	1.011	1.017	1.011	1.014	1.014
43	1.066	1.048	1.030	1.014	1.009	1.011	1.009	1.011	1.009	1.011	1.011	1.014	1.011	1.014	1.011	1.017	1.011	1.017	1.009	1.020
44	1.032	1.020	1.014	1.011	1.011	1.009	1.014	1.011	1.017	1.011	1.017	1.014	1.017	1.017	1.020	1.017	1.025	1.020	1.025	1.020
45	1.020	1.017	1.014	1.020	1.014	1.020	1.017	1.017	1.020	1.025	1.020	1.025	1.017	1.025	1.022	1.027	1.027	1.032	1.044	1.054
46	1.022	1.022	1.022	1.025	1.025	1.025	1.025	1.027	1.025	1.027	1.027	1.032	1.030	1.034	1.032	1.037	1.039	1.068	1.176	1.273
47	1.030	1.025	1.027	1.030	1.030	1.030	1.030	1.030	1.030	1.034	1.032	1.034	1.034	1.037	1.037	1.044	1.046	1.099	1.235	1.331
48	1.030	1.030	1.032	1.034	1.034	1.037	1.032	1.034	1.034	1.034	1.037	1.041	1.039	1.044	1.044	1.048	1.056	1.149	1.288	1.363
49	1.030	1.030	1.032	1.030	1.034	1.032	1.039	1.032	1.039	1.034	1.039	1.039	1.046	1.041	1.048	1.050	1.075	1.195	1.321	1.378
50	1.032	1.032	1.032	1.034	1.034	1.037	1.037	1.039	1.039	1.041	1.039	1.044	1.044	1.048	1.046	1.058	1.098	1.243	1.348	1.391
51	1.032	1.034	1.037	1.032	1.039	1.039	1.044	1.039	1.044	1.039	1.048	1.044	1.050	1.050	1.058	1.060	1.131	1.274	1.360	1.393
52	1.030	1.027	1.027	1.027	1.030	1.032	1.032	1.034	1.034	1.039	1.039	1.039	1.044	1.046	1.048	1.062	1.149	1.292	1.366	1.394
53	1.014	1.014	1.017	1.014	1.017	1.020	1.020	1.020	1.022	1.027	1.027	1.032	1.030	1.037	1.039	1.060	1.176	1.312	1.372	1.397
54	1.006	1.006	1.011	1.011	1.011	1.014	1.011	1.014	1.017	1.020	1.022	1.027	1.025	1.030	1.034	1.066	1.195	1.321	1.370	1.393
55	1.006	1.006	1.006	1.011	1.011	1.017	1.014	1.020	1.020	1.022	1.025	1.027	1.030	1.032	1.039	1.091	1.237	1.339	1.377	1.396
56	1.006	1.011	1.000	1.011	1.006	1.014	1.011	1.020	1.014	1.025	1.025	1.030	1.032	1.039	1.048	1.140	1.285	1.359	1.387	1.403
57	1.006	1.009	1.009	1.011	1.011	1.014	1.020	1.017	1.022	1.022	1.025	1.020	1.032	1.032	1.058	1.177	1.307	1.359	1.384	1.398
58	1.006	1.006	1.006	1.011	1.011	1.017	1.014	1.017	1.020	1.025	1.022	1.027	1.030	1.039	1.073	1.219	1.328	1.371	1.391	1.405
59	1.009	1.009	1.014	1.011	1.014	1.017	1.020	1.017	1.025	1.025	1.027	1.030	1.039	1.044	1.106	1.252	1.342	1.375	1.394	1.406
60	1.011	1.011	1.017	1.014	1.011	1.022	1.022	1.025	1.027	1.027	1.032	1.039	1.037	1.048	1.124	1.268	1.344	1.374	1.392	1.405
61	1.014	1.011	1.020	1.017	1.022	1.020	1.025	1.025	1.030	1.027	1.037	1.034	1.041	1.048	1.142	1.279	1.346	1.374	1.393	1.405
62	1.014	1.014	1.017	1.017	1.020	1.027	1.022	1.027	1.032	1.034	1.037	1.039	1.044	1.058	1.162	1.288	1.345	1.371	1.387	1.399
63	1.017	1.020	1.025	1.017	1.022	1.022	1.030	1.030	1.032	1.030	1.041	1.039	1.048	1.069	1.199	1.304	1.347	1.367	1.381	1.391

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 46

IR SCAN TIME 17.22 SEC
INITIAL TEMP 544.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	1.071	1.071	1.075	1.069	1.073	1.066	1.068	1.060	1.064	1.060	1.064	1.056	1.064	1.060	1.066	1.068	1.073	1.073	1.075	1.075
30	1.069	1.071	1.064	1.064	1.060	1.062	1.058	1.060	1.060	1.068	1.069	1.073	1.075	1.077	1.075	1.080	1.080	1.083	1.077	1.082
31	1.062	1.058	1.058	1.060	1.068	1.068	1.069	1.068	1.075	1.075	1.080	1.080	1.085	1.083	1.083	1.080	1.078	1.071	1.066	1.058
32	1.062	1.062	1.069	1.069	1.077	1.075	1.078	1.077	1.080	1.082	1.085	1.080	1.078	1.066	1.060	1.046	1.039	1.025	1.017	1.006
33	1.064	1.068	1.075	1.077	1.079	1.078	1.077	1.073	1.066	1.064	1.050	1.046	1.030	1.014	1.009	1.003	1.003	1.000	1.000	1.000
34	1.077	1.075	1.078	1.073	1.068	1.056	1.046	1.030	1.025	1.006	1.006	1.000	1.003	1.000	1.006	1.000	1.003	1.000	1.003	1.000
35	1.068	1.062	1.048	1.037	1.022	1.011	1.003	1.003	1.000	1.003	1.000	1.000	1.000	1.003	1.000	1.006	1.003	1.006	1.000	1.006
36	1.030	1.011	1.009	0.997	1.006	0.997	1.003	0.997	1.006	0.997	1.006	0.997	1.006	1.003	1.006	1.000	1.006	1.000	1.006	1.003
37	1.003	1.006	1.003	1.006	1.003	1.006	1.000	1.009	1.003	1.009	1.000	1.006	1.003	1.009	1.003	1.011	0.997	1.009	0.997	1.011
38	1.006	1.009	1.009	1.009	1.006	1.011	1.006	1.009	1.009	1.009	1.009	1.011	1.006	1.011	1.011	1.009	1.011	1.009	1.009	1.011
39	1.011	1.009	1.017	1.009	1.011	1.009	1.014	1.011	1.014	1.011	1.014	1.011	1.011	1.011	1.014	1.011	1.014	1.009	1.014	1.011
40	1.014	1.011	1.017	1.014	1.014	1.011	1.017	1.014	1.017	1.014	1.017	1.014	1.020	1.011	1.017	1.011	1.022	1.014	1.017	1.011
41	1.011	1.014	1.014	1.017	1.017	1.020	1.020	1.022	1.017	1.020	1.017	1.022	1.014	1.020	1.017	1.022	1.017	1.020	1.014	1.022
42	1.020	1.020	1.022	1.017	1.022	1.020	1.022	1.022	1.025	1.022	1.025	1.022	1.027	1.022	1.025	1.022	1.025	1.022	1.025	1.020
43	1.009	1.022	1.017	1.025	1.020	1.025	1.020	1.025	1.022	1.027	1.025	1.030	1.027	1.030	1.027	1.030	1.025	1.027	1.025	1.025
44	1.027	1.027	1.030	1.027	1.032	1.032	1.034	1.034	1.032	1.032	1.037	1.032	1.034	1.027	1.034	1.027	1.034	1.025	1.032	1.025
45	1.056	1.060	1.056	1.056	1.052	1.052	1.048	1.052	1.048	1.050	1.046	1.048	1.044	1.046	1.044	1.044	1.041	1.044	1.039	1.037
46	1.311	1.328	1.336	1.341	1.340	1.334	1.317	1.289	1.249	1.199	1.146	1.109	1.080	1.071	1.060	1.060	1.054	1.054	1.050	1.050
47	1.367	1.385	1.400	1.418	1.435	1.455	1.478	1.498	1.511	1.516	1.509	1.477	1.422	1.348	1.254	1.165	1.105	1.078	1.064	1.062
48	1.392	1.410	1.423	1.439	1.452	1.466	1.479	1.495	1.510	1.521	1.531	1.536	1.533	1.530	1.525	1.485	1.378	1.233	1.136	1.091
49	1.405	1.425	1.443	1.460	1.477	1.494	1.508	1.515	1.516	1.515	1.519	1.522	1.526	1.533	1.543	1.547	1.533	1.449	1.296	1.173
50	1.415	1.435	1.451	1.468	1.485	1.506	1.526	1.543	1.549	1.554	1.553	1.548	1.544	1.545	1.549	1.556	1.563	1.567	1.516	1.377
51	1.413	1.428	1.446	1.467	1.487	1.506	1.525	1.546	1.566	1.580	1.582	1.577	1.567	1.553	1.546	1.541	1.542	1.550	1.571	1.564
52	1.412	1.428	1.440	1.458	1.478	1.498	1.518	1.541	1.561	1.573	1.577	1.585	1.593	1.595	1.591	1.577	1.560	1.545	1.534	1.533
53	1.413	1.426	1.439	1.454	1.471	1.490	1.511	1.533	1.555	1.575	1.585	1.590	1.593	1.599	1.609	1.621	1.622	1.606	1.594	1.572
54	1.409	1.421	1.433	1.448	1.466	1.486	1.505	1.524	1.542	1.560	1.574	1.586	1.592	1.597	1.602	1.603	1.607	1.617	1.627	1.625
55	1.410	1.421	1.432	1.446	1.464	1.484	1.502	1.522	1.541	1.558	1.569	1.578	1.583	1.591	1.599	1.606	1.614	1.620	1.620	1.628
56	1.415	1.426	1.437	1.451	1.467	1.486	1.505	1.525	1.543	1.557	1.564	1.573	1.577	1.580	1.585	1.592	1.603	1.617	1.630	1.638
57	1.410	1.420	1.432	1.446	1.464	1.480	1.499	1.515	1.530	1.544	1.554	1.560	1.568	1.576	1.582	1.583	1.585	1.591	1.601	1.613
58	1.415	1.423	1.436	1.452	1.468	1.486	1.505	1.526	1.541	1.554	1.558	1.564	1.574	1.583	1.584	1.584	1.589	1.593	1.595	1.602
59	1.417	1.426	1.439	1.456	1.472	1.488	1.506	1.524	1.542	1.551	1.558	1.566	1.576	1.584	1.583	1.580	1.585	1.592	1.592	1.589
60	1.415	1.424	1.437	1.448	1.464	1.484	1.503	1.523	1.541	1.552	1.558	1.567	1.579	1.586	1.586	1.584	1.587	1.590	1.588	1.587
61	1.413	1.421	1.433	1.446	1.459	1.476	1.495	1.514	1.534	1.546	1.556	1.568	1.584	1.590	1.591	1.593	1.592	1.589	1.588	1.593
62	1.408	1.414	1.425	1.436	1.448	1.462	1.479	1.497	1.514	1.524	1.533	1.546	1.563	1.575	1.585	1.592	1.595	1.596	1.591	1.588
63	1.400	1.409	1.421	1.432	1.445	1.457	1.473	1.492	1.509	1.519	1.528	1.542	1.558	1.568	1.574	1.581	1.588	1.600	1.609	1.610

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 46

IR SCAN TIME 17.22 SEC
INITIAL TEMP 544.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	1.082	1.080	1.078	1.075	1.080	1.077	1.078	1.075	1.071	1.062	1.060	1.054	1.048	1.044	1.044	1.034	1.034	1.027	1.025	1.020
30	1.078	1.080	1.071	1.068	1.058	1.056	1.044	1.044	1.030	1.025	1.011	1.011	1.003	1.009	1.000	1.003	1.000	1.003	1.000	1.003
31	1.054	1.041	1.034	1.020	1.014	1.003	1.006	1.000	1.000	0.993	1.000	0.993	0.997	0.993	1.000	0.990	1.000	0.990	0.997	0.990
32	1.003	1.000	1.003	0.997	1.003	0.997	1.000	0.997	1.000	0.993	1.000	0.993	1.000	0.993	1.000	0.993	0.997	0.990	0.997	0.990
33	1.003	1.000	1.000	1.003	0.997	1.000	1.000	1.000	0.997	1.000	0.997	1.000	0.997	0.997	0.993	0.997	0.993	0.997	0.993	0.993
34	1.003	1.000	1.003	1.000	1.003	1.000	1.006	0.997	1.000	0.997	1.003	0.997	1.000	0.997	1.000	0.997	0.997	0.993	0.997	0.993
35	1.003	1.003	1.000	1.003	1.000	1.003	1.000	1.003	1.000	1.000	1.000	1.003	0.997	1.003	0.997	1.000	0.997	1.000	0.993	0.997
36	1.006	1.003	1.006	1.003	1.006	1.000	1.006	1.000	1.003	1.003	1.006	1.003	1.006	1.000	1.003	1.000	1.006	1.000	1.003	1.000
37	0.997	1.011	0.997	1.011	1.000	1.009	0.997	1.009	0.997	1.006	0.993	1.009	1.003	1.006	1.003	1.006	0.997	1.006	1.000	1.006
38	1.009	1.011	1.006	1.011	1.006	1.011	1.009	1.009	1.006	1.009	1.006	1.006	1.006	1.006	0.997	1.006	1.000	1.006	0.997	1.006
39	1.014	1.011	1.011	1.009	1.014	1.011	1.011	1.009	1.011	1.009	1.011	1.006	1.006	1.003	1.011	1.006	1.009	1.003	1.006	1.003
40	1.017	1.014	1.017	1.011	1.014	1.011	1.017	1.009	1.014	1.009	1.014	1.009	1.011	1.006	1.011	1.006	1.011	1.006	1.006	1.000
41	1.017	1.017	1.014	1.017	1.017	1.017	1.014	1.014	1.011	1.014	1.011	1.014	1.011	1.014	1.011	1.011	1.006	1.009	1.006	1.011
42	1.022	1.020	1.022	1.020	1.022	1.017	1.020	1.014	1.020	1.017	1.017	1.011	1.014	1.011	1.014	1.009	1.011	1.009	1.006	1.006
43	1.020	1.025	1.022	1.025	1.022	1.025	1.017	1.020	1.020	1.022	1.011	1.017	1.014	1.014	1.014	1.014	1.011	1.011	1.011	1.011
44	1.030	1.025	1.030	1.025	1.027	1.020	1.025	1.020	1.025	1.020	1.022	1.020	1.020	1.017	1.020	1.014	1.020	1.014	1.020	1.011
45	1.037	1.037	1.034	1.037	1.032	1.030	1.030	1.030	1.027	1.027	1.027	1.027	1.020	1.025	1.017	1.022	1.014	1.020	1.014	1.020
46	1.048	1.048	1.044	1.046	1.039	1.044	1.039	1.039	1.034	1.037	1.032	1.034	1.030	1.034	1.030	1.030	1.030	1.030	1.025	1.027
47	1.058	1.060	1.054	1.056	1.050	1.050	1.046	1.044	1.044	1.044	1.039	1.039	1.037	1.039	1.034	1.037	1.034	1.034	1.030	1.034
48	1.071	1.068	1.062	1.062	1.056	1.056	1.054	1.050	1.048	1.048	1.046	1.046	1.044	1.044	1.039	1.041	1.039	1.039	1.037	1.037
49	1.120	1.088	1.077	1.066	1.066	1.058	1.060	1.054	1.056	1.052	1.052	1.048	1.048	1.046	1.046	1.044	1.044	1.039	1.044	1.039
50	1.217	1.137	1.101	1.090	1.078	1.073	1.064	1.062	1.058	1.058	1.056	1.056	1.052	1.052	1.048	1.048	1.046	1.044	1.044	1.046
51	1.459	1.279	1.162	1.106	1.091	1.085	1.082	1.068	1.068	1.062	1.064	1.058	1.058	1.056	1.056	1.052	1.052	1.048	1.048	1.046
52	1.550	1.517	1.383	1.225	1.140	1.098	1.083	1.080	1.071	1.066	1.056	1.058	1.052	1.056	1.048	1.050	1.044	1.048	1.044	1.048
53	1.548	1.539	1.529	1.434	1.262	1.153	1.105	1.088	1.078	1.069	1.054	1.052	1.048	1.044	1.039	1.041	1.037	1.034	1.032	1.039
54	1.613	1.591	1.567	1.551	1.477	1.318	1.181	1.123	1.095	1.085	1.075	1.060	1.050	1.048	1.044	1.041	1.039	1.039	1.037	1.044
55	1.639	1.645	1.635	1.615	1.598	1.560	1.443	1.268	1.157	1.113	1.090	1.083	1.069	1.058	1.050	1.048	1.044	1.046	1.044	1.050
56	1.642	1.643	1.646	1.649	1.646	1.643	1.626	1.518	1.320	1.188	1.124	1.098	1.085	1.075	1.058	1.056	1.050	1.054	1.052	1.060
57	1.626	1.636	1.637	1.634	1.635	1.642	1.656	1.656	1.583	1.405	1.231	1.149	1.109	1.090	1.080	1.064	1.058	1.054	1.058	1.054
58	1.611	1.619	1.628	1.638	1.643	1.642	1.641	1.649	1.658	1.618	1.484	1.317	1.189	1.126	1.098	1.087	1.071	1.064	1.058	1.060
59	1.594	1.600	1.605	1.610	1.620	1.634	1.647	1.655	1.663	1.669	1.644	1.514	1.311	1.185	1.126	1.098	1.088	1.075	1.066	1.054
60	1.588	1.592	1.597	1.601	1.602	1.607	1.620	1.641	1.668	1.690	1.702	1.681	1.567	1.383	1.223	1.144	1.102	1.088	1.078	1.068
61	1.598	1.596	1.597	1.602	1.607	1.609	1.612	1.621	1.643	1.673	1.697	1.678	1.651	1.622	1.496	1.299	1.179	1.120	1.096	1.083
62	1.593	1.594	1.595	1.594	1.594	1.598	1.607	1.619	1.635	1.649	1.641	1.619	1.625	1.641	1.649	1.581	1.398	1.223	1.145	1.102
63	1.614	1.614	1.614	1.612	1.613	1.614	1.622	1.636	1.656	1.665	1.631	1.609	1.606	1.595	1.573	1.565	1.555	1.452	1.272	1.164

380

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 46

IR SCAN TIME 17.22 SEC
INITIAL TEMP 544.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	1.014	1.006	1.011	1.003	1.006	1.003	1.006	1.000	1.003	1.000	1.000	1.000	1.003	1.000	1.003	1.000	1.006	1.003	1.006	1.000
30	0.997	1.000	0.997	1.000	0.997	1.000	0.993	0.997	0.993	0.997	0.997	0.997	0.993	0.997	0.993	0.997	0.997	0.997	0.997	1.000
31	0.997	0.990	0.997	0.990	0.993	0.990	0.997	0.987	0.993	0.987	0.993	0.993	0.997	0.993	0.997	0.993	0.997	0.990	0.993	0.993
32	0.997	0.990	0.997	0.990	0.997	0.990	0.993	0.987	0.993	0.990	0.997	0.990	0.997	0.980	0.997	0.983	0.990	0.976	0.990	0.980
33	0.987	0.993	0.990	0.993	0.990	0.990	0.990	0.993	0.987	0.990	0.990	0.993	0.990	0.993	0.987	0.983	0.983	0.990	0.987	0.990
34	1.000	0.997	0.997	0.993	0.997	0.993	0.997	0.993	0.997	0.990	0.993	0.987	0.993	0.987	0.993	0.987	0.993	0.987	0.990	0.987
35	0.997	0.997	0.997	0.997	0.993	0.993	0.990	0.993	0.990	0.997	0.990	0.993	0.990	0.993	0.990	0.993	0.987	0.990	0.983	0.990
36	1.000	1.000	1.000	0.997	1.000	0.997	0.997	0.993	0.997	0.997	0.997	0.993	0.997	0.993	0.997	0.990	0.997	0.990	0.993	0.987
37	1.000	1.003	1.000	1.000	0.997	1.000	0.997	1.000	0.997	0.997	0.997	1.000	0.993	1.000	0.997	0.997	0.990	0.997	0.993	0.997
38	0.997	1.006	1.000	1.006	0.997	1.000	0.993	1.000	0.993	1.000	0.997	1.003	1.000	1.000	0.997	1.000	0.997	1.000	0.997	0.997
39	1.006	1.000	1.006	1.000	1.006	1.003	1.006	1.000	1.000	0.997	1.003	0.993	1.003	0.993	1.003	0.990	1.000	0.990	1.000	0.990
40	1.006	1.003	1.006	1.000	1.006	1.000	1.006	1.000	1.006	1.000	1.006	1.000	1.003	1.000	1.003	0.997	1.003	0.997	1.003	0.997
41	1.003	1.006	1.000	1.009	1.003	1.009	1.000	1.006	1.000	1.006	1.000	1.006	1.000	1.003	1.000	1.003	1.000	1.003	1.000	1.003
42	1.011	1.009	1.011	1.006	1.011	1.003	1.009	1.003	1.009	1.003	1.006	1.000	1.006	1.003	1.006	1.003	1.006	1.000	1.006	0.997
43	1.006	1.011	1.011	1.011	1.009	1.009	1.006	1.011	1.006	1.006	1.006	1.006	1.003	1.006	1.000	1.006	1.000	1.003	1.000	1.006
44	1.017	1.011	1.014	1.011	1.011	1.011	1.011	1.006	1.011	1.006	1.009	1.003	1.011	1.006	1.009	1.003	1.009	1.003	1.006	1.003
45	1.014	1.017	1.020	1.014	1.011	1.014	1.006	1.017	1.011	1.017	1.014	1.017	1.011	1.011	1.009	1.014	1.011	1.014	1.011	1.011
46	1.025	1.027	1.025	1.025	1.017	1.022	1.020	1.020	1.017	1.025	1.009	1.022	1.011	1.022	1.009	1.020	1.009	1.022	1.009	1.020
47	1.030	1.032	1.027	1.030	1.027	1.027	1.022	1.025	1.022	1.025	1.022	1.025	1.020	1.022	1.020	1.022	1.022	1.025	1.020	1.022
48	1.034	1.039	1.032	1.034	1.030	1.032	1.025	1.030	1.027	1.030	1.027	1.030	1.025	1.027	1.025	1.025	1.025	1.025	1.022	1.025
49	1.041	1.037	1.039	1.034	1.039	1.032	1.037	1.032	1.032	1.030	1.032	1.030	1.032	1.027	1.030	1.027	1.027	1.025	1.025	1.022
50	1.044	1.044	1.039	1.039	1.039	1.039	1.034	1.037	1.034	1.034	1.030	1.034	1.030	1.032	1.030	1.030	1.027	1.032	1.027	1.030
51	1.048	1.044	1.048	1.044	1.044	1.041	1.041	1.039	1.041	1.039	1.039	1.037	1.037	1.034	1.037	1.034	1.037	1.034	1.034	1.030
52	1.039	1.046	1.041	1.044	1.039	1.046	1.044	1.044	1.039	1.041	1.039	1.041	1.039	1.039	1.037	1.037	1.034	1.037	1.032	1.034
53	1.039	1.044	1.044	1.046	1.044	1.044	1.044	1.044	1.039	1.044	1.039	1.046	1.037	1.041	1.034	1.041	1.034	1.039	1.032	1.037
54	1.044	1.048	1.048	1.050	1.046	1.050	1.048	1.048	1.046	1.050	1.048	1.046	1.046	1.046	1.044	1.044	1.037	1.044	1.039	1.039
55	1.050	1.054	1.054	1.054	1.054	1.056	1.052	1.056	1.052	1.054	1.052	1.052	1.050	1.052	1.048	1.050	1.046	1.046	1.044	1.044
56	1.052	1.060	1.056	1.060	1.056	1.060	1.056	1.058	1.056	1.058	1.054	1.054	1.050	1.052	1.050	1.052	1.048	1.048	1.044	1.044
57	1.060	1.056	1.060	1.054	1.058	1.048	1.054	1.050	1.054	1.048	1.048	1.044	1.046	1.044	1.046	1.044	1.044	1.039	1.039	1.034
58	1.056	1.058	1.056	1.058	1.054	1.056	1.052	1.052	1.050	1.052	1.050	1.050	1.046	1.050	1.048	1.048	1.046	1.046	1.044	1.044
59	1.056	1.048	1.054	1.048	1.050	1.046	1.046	1.041	1.044	1.039	1.041	1.034	1.037	1.032	1.034	1.030	1.032	1.027	1.030	1.025
60	1.058	1.058	1.052	1.052	1.050	1.050	1.041	1.046	1.037	1.044	1.034	1.044	1.032	1.037	1.027	1.032	1.027	1.030	1.025	1.027
61	1.073	1.062	1.060	1.056	1.056	1.052	1.054	1.046	1.048	1.044	1.046	1.039	1.041	1.037	1.039	1.032	1.034	1.030	1.032	1.030
62	1.088	1.075	1.068	1.058	1.060	1.052	1.056	1.050	1.050	1.046	1.048	1.044	1.044	1.039	1.041	1.034	1.039	1.032	1.037	1.032
63	1.115	1.087	1.082	1.068	1.064	1.058	1.058	1.052	1.052	1.046	1.048	1.044	1.046	1.039	1.044	1.034	1.041	1.034	1.039	1.032

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERORUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 46

IR SCAN TIME 17.22 SEC
INITIAL TEMP 344.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	1.003	0.997	1.003	1.000	1.003	0.993	1.000	0.997	1.000	0.997	1.000	0.993	1.000	0.993	1.000	0.993	0.993	0.993	0.997	0.990
30	0.997	1.000	0.997	0.997	0.993	0.997	0.997	0.997	0.990	0.997	0.993	0.997	0.990	0.993	0.990	0.993	0.987	0.993	0.987	0.990
31	0.997	0.993	0.997	0.997	0.997	0.993	0.997	0.997	0.997	0.990	0.997	0.993	0.993	0.987	0.993	0.990	0.993	0.990	0.990	0.987
32	0.993	0.980	0.993	0.983	0.997	0.983	0.993	0.983	0.993	0.990	0.993	0.990	0.993	0.990	0.990	0.987	0.990	0.983	0.987	0.983
33	0.987	0.990	0.987	0.987	0.987	0.990	0.987	0.990	0.987	0.990	0.987	0.987	0.980	0.987	0.976	0.987	0.976	0.983	0.976	0.983
34	0.990	0.987	0.990	0.987	0.990	0.983	0.987	0.983	0.987	0.983	0.990	0.983	0.987	0.983	0.990	0.987	0.987	0.983	0.987	0.980
35	0.987	0.990	0.983	0.990	0.983	0.990	0.987	0.987	0.983	0.987	0.983	0.987	0.980	0.987	0.983	0.987	0.980	0.987	0.980	0.983
36	0.997	0.987	0.993	0.987	0.990	0.987	0.990	0.987	0.990	0.987	0.990	0.987	0.990	0.983	0.990	0.983	0.990	0.987	0.990	0.983
37	0.990	0.993	0.993	0.993	0.990	0.993	0.990	0.993	0.990	0.993	0.987	0.990	0.987	0.990	0.990	0.993	0.990	0.990	0.983	0.990
38	0.993	0.997	0.997	0.997	0.990	0.997	0.993	0.993	0.990	0.997	0.990	0.997	0.990	0.993	0.990	0.997	0.990	0.993	0.990	0.993
39	1.000	0.993	0.997	0.990	0.997	0.990	0.997	0.993	1.000	0.993	0.997	0.993	0.997	0.990	0.997	0.990	0.997	0.990	0.997	0.990
40	1.000	0.993	1.000	0.997	1.000	0.997	1.000	0.993	1.000	0.990	0.997	0.987	0.997	0.987	0.997	0.987	0.997	0.990	0.997	0.987
41	0.997	1.000	0.997	1.000	0.993	1.000	0.993	1.000	0.997	1.000	0.997	0.997	0.993	0.997	0.993	0.997	0.990	0.997	0.990	0.997
42	1.003	1.000	1.006	0.997	1.006	0.993	1.000	0.997	1.000	0.997	1.000	0.993	1.000	0.997	1.000	0.993	1.000	0.990	1.000	0.993
43	1.000	1.006	1.000	1.003	1.000	1.003	1.000	1.003	1.000	1.000	0.997	1.000	0.997	0.997	0.997	1.000	0.997	1.000	0.997	1.000
44	1.011	1.003	1.006	1.003	1.006	1.000	1.009	1.003	1.006	1.003	1.003	0.997	1.003	1.000	1.003	0.997	1.006	0.997	1.003	1.000
45	1.006	1.011	1.006	1.011	1.006	1.011	1.006	1.009	1.006	1.011	1.009	1.011	1.006	1.009	1.006	1.009	1.006	1.009	1.006	1.009
46	1.009	1.020	1.011	1.020	1.006	1.020	1.017	1.017	1.011	1.017	1.014	1.017	1.014	1.017	1.011	1.017	1.011	1.017	1.011	1.014
47	1.022	1.022	1.022	1.022	1.022	1.022	1.020	1.025	1.014	1.020	1.011	1.020	1.014	1.020	1.014	1.017	1.014	1.020	1.011	1.017
48	1.025	1.025	1.025	1.027	1.025	1.025	1.022	1.025	1.020	1.022	1.020	1.020	1.020	1.020	1.017	1.020	1.020	1.020	1.020	1.020
49	1.027	1.025	1.030	1.027	1.030	1.022	1.025	1.022	1.025	1.020	1.025	1.020	1.022	1.020	1.025	1.020	1.022	1.020	1.022	1.020
50	1.027	1.027	1.025	1.027	1.027	1.027	1.025	1.027	1.025	1.025	1.025	1.022	1.025	1.025	1.022	1.025	1.020	1.022	1.022	1.022
51	1.032	1.030	1.032	1.030	1.030	1.030	1.032	1.027	1.027	1.025	1.030	1.025	1.030	1.025	1.025	1.025	1.025	1.022	1.027	1.022
52	1.032	1.034	1.032	1.032	1.030	1.027	1.025	1.025	1.022	1.025	1.022	1.022	1.020	1.022	1.020	1.020	1.020	1.017	1.017	1.020
53	1.030	1.034	1.025	1.032	1.025	1.022	1.017	1.017	1.011	1.014	1.009	1.011	1.006	1.011	1.006	1.009	1.006	1.011	1.003	1.009
54	1.034	1.034	1.032	1.032	1.027	1.025	1.014	1.017	1.006	1.009	1.000	1.009	1.000	1.006	1.000	1.006	0.997	1.003	0.997	1.000
55	1.039	1.041	1.034	1.034	1.032	1.030	1.020	1.020	1.009	1.011	1.011	1.011	1.006	1.011	1.003	1.009	1.000	1.006	1.000	1.003
56	1.039	1.041	1.034	1.037	1.034	1.030	1.022	1.020	1.011	1.014	1.006	1.011	1.006	1.009	1.003	1.006	1.000	1.003	1.003	1.000
57	1.037	1.032	1.034	1.027	1.030	1.025	1.025	1.017	1.017	1.011	1.014	1.014	1.009	1.006	1.009	1.006	1.006	1.003	1.006	1.003
58	1.041	1.044	1.039	1.041	1.039	1.041	1.037	1.034	1.032	1.034	1.032	1.030	1.027	1.030	1.025	1.025	1.025	1.027	1.025	1.025
59	1.027	1.025	1.025	1.020	1.022	1.020	1.020	1.017	1.017	1.017	1.017	1.014	1.014	1.011	1.014	1.009	1.011	1.009	1.011	1.006
60	1.022	1.027	1.022	1.022	1.020	1.022	1.020	1.020	1.014	1.020	1.014	1.017	1.014	1.014	1.011	1.017	1.011	1.011	1.011	1.011
61	1.030	1.027	1.032	1.025	1.027	1.020	1.025	1.020	1.022	1.014	1.020	1.014	1.020	1.014	1.017	1.009	1.014	1.006	1.014	1.009
62	1.032	1.030	1.032	1.027	1.032	1.027	1.027	1.022	1.025	1.020	1.025	1.017	1.022	1.017	1.020	1.014	1.017	1.014	1.011	1.011
63	1.039	1.032	1.034	1.030	1.032	1.027	1.032	1.027	1.025	1.022	1.025	1.022	1.025	1.020	1.020	1.017	1.020	1.014	1.017	1.014

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 46

IR SCAN TIME 17.22 SEC
INITIAL TEMP 544.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.993	0.983	0.990	0.983	0.987	0.987	0.990	0.987	0.990	0.983
30	0.987	0.990	0.987	0.990	0.987	0.987	0.983	0.987	0.983	0.987
31	0.990	0.987	0.993	0.987	0.987	0.983	0.987	0.980	0.990	0.980
32	0.990	0.983	0.987	0.980	0.983	0.983	0.983	0.980	0.987	0.983
33	0.976	0.983	0.976	0.983	0.976	0.983	0.976	0.987	0.980	0.983
34	0.983	0.983	0.987	0.976	0.983	0.976	0.983	0.976	0.983	0.968
35	0.980	0.983	0.980	0.983	0.980	0.983	0.976	0.983	0.976	0.983
36	0.990	0.983	0.987	0.983	0.987	0.983	0.987	0.983	0.983	0.980
37	0.987	0.990	0.987	0.990	0.987	0.987	0.983	0.990	0.983	0.990
38	0.990	0.993	0.993	0.990	0.990	0.993	0.990	0.993	0.987	0.990
39	0.997	0.987	0.993	0.993	0.993	0.990	0.997	0.990	0.997	0.990
40	0.997	0.987	0.997	0.987	0.993	0.990	0.997	0.990	0.997	0.990
41	0.990	0.997	0.990	0.997	0.993	0.997	0.990	0.997	0.983	0.997
42	1.000	0.993	0.997	0.993	0.997	0.993	0.997	0.997	0.997	0.993
43	0.997	0.997	0.990	1.000	1.000	1.000	0.997	0.997	0.993	0.997
44	1.003	0.997	1.003	1.000	1.003	1.000	1.003	1.000	1.003	0.997
45	1.003	1.006	1.003	1.006	1.006	1.009	1.000	1.006	1.003	1.006
46	1.011	1.014	1.011	1.014	1.011	1.014	1.011	1.011	1.014	1.011
47	1.011	1.017	1.011	1.020	1.014	1.017	1.014	1.017	1.011	1.017
48	1.017	1.017	1.020	1.017	1.017	1.020	1.009	1.017	1.011	1.017
49	1.022	1.020	1.022	1.020	1.020	1.017	1.022	1.017	1.020	1.017
50	1.020	1.022	1.020	1.022	1.020	1.022	1.017	1.022	1.017	1.020
51	1.025	1.022	1.022	1.020	1.022	1.020	1.022	1.022	1.022	1.020
52	1.014	1.017	1.014	1.014	1.011	1.014	1.011	1.014	1.011	1.014
53	1.003	1.006	1.003	1.006	1.003	1.006	1.003	1.006	1.003	1.003
54	0.993	1.003	0.997	0.997	0.997	0.997	0.993	1.000	0.993	0.993
55	1.000	1.003	0.997	1.000	0.987	1.000	0.983	0.997	0.983	0.993
56	1.000	1.000	0.997	1.000	0.997	1.000	0.993	0.993	0.990	0.993
57	1.006	1.000	1.006	1.000	1.006	0.997	1.000	1.000	1.000	0.993
58	1.025	1.020	1.020	1.014	1.009	1.009	1.006	1.014	1.014	1.017
59	1.009	1.000	1.009	1.006	1.014	1.006	1.006	1.006	1.003	1.006
60	1.006	1.009	1.003	1.006	1.006	1.009	1.003	1.006	1.000	1.006
61	1.014	1.006	1.011	1.006	1.011	1.003	1.006	1.003	1.006	1.000
62	1.014	1.006	1.011	1.000	1.011	1.000	1.009	0.997	1.009	1.000
63	1.014	1.011	1.011	1.009	1.011	1.009	1.011	1.006	1.006	1.003

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 46

IR SCAN TIME 17.22 SEC
INITIAL TEMP 544.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	1.017	1.014	1.020	1.020	1.025	1.020	1.025	1.027	1.032	1.030	1.037	1.034	1.048	1.102	1.242	1.319	1.351	1.369	1.385	1.395
65	1.009	1.014	1.011	1.017	1.014	1.020	1.020	1.025	1.025	1.027	1.030	1.037	1.048	1.144	1.271	1.328	1.355	1.373	1.385	1.394
66	1.003	1.003	1.009	1.006	1.009	1.011	1.017	1.014	1.020	1.020	1.025	1.030	1.060	1.183	1.293	1.334	1.357	1.373	1.386	1.396
67	0.997	0.997	1.000	1.003	1.000	1.009	1.003	1.009	1.011	1.017	1.020	1.027	1.078	1.218	1.303	1.337	1.358	1.371	1.381	1.391
68	0.993	0.993	0.990	0.993	1.000	1.000	1.006	1.003	1.009	1.009	1.014	1.025	1.091	1.225	1.298	1.326	1.345	1.357	1.367	1.376
69	0.987	0.987	0.990	0.993	0.990	0.997	1.000	1.003	1.009	1.009	1.017	1.025	1.113	1.239	1.297	1.322	1.341	1.353	1.365	1.374
70	0.990	0.983	0.993	0.983	1.000	1.000	1.000	1.003	1.006	1.006	1.017	1.030	1.129	1.247	1.299	1.322	1.339	1.350	1.361	1.369
71	0.990	0.990	0.997	0.993	0.997	0.997	1.006	1.000	1.009	1.003	1.017	1.034	1.158	1.264	1.307	1.326	1.343	1.353	1.365	1.373
72	0.990	0.990	0.993	0.993	1.000	1.000	1.006	1.003	1.009	1.009	1.017	1.066	1.204	1.284	1.316	1.334	1.348	1.359	1.368	1.377
73	0.990	0.990	0.993	0.993	1.000	1.003	1.000	1.009	1.006	1.006	1.017	1.105	1.233	1.296	1.321	1.338	1.351	1.361	1.370	1.380
74	0.987	0.990	0.990	0.990	1.000	0.997	1.006	1.003	1.009	1.006	1.034	1.149	1.259	1.304	1.326	1.341	1.352	1.361	1.372	1.382
75	0.990	0.990	0.990	0.993	0.993	0.997	1.000	1.003	1.003	1.006	1.048	1.178	1.265	1.300	1.318	1.331	1.341	1.351	1.359	1.367
76	0.990	0.990	0.987	0.990	0.990	0.993	0.993	1.000	1.003	1.006	1.060	1.186	1.260	1.287	1.303	1.313	1.324	1.331	1.338	1.346
77	0.987	0.990	0.983	0.993	0.990	1.000	1.000	1.000	1.000	1.006	1.071	1.197	1.255	1.278	1.291	1.302	1.308	1.317	1.322	1.329
78	0.990	1.003	1.020	1.022	1.014	1.014	1.009	1.020	1.006	1.009	1.078	1.200	1.250	1.273	1.284	1.294	1.300	1.307	1.312	1.320
79	1.006	1.037	1.056	1.034	1.025	1.027	1.011	1.009	1.014	1.032	1.115	1.217	1.254	1.273	1.284	1.292	1.298	1.304	1.309	1.316
80	1.027	1.069	1.083	1.041	1.030	1.032	1.030	1.025	1.014	1.046	1.156	1.235	1.262	1.277	1.286	1.293	1.298	1.304	1.309	1.315
81	1.050	1.095	1.129	1.080	1.048	1.032	1.034	1.034	1.039	1.077	1.188	1.247	1.268	1.279	1.287	1.291	1.297	1.301	1.308	1.312
82	1.109	1.145	1.178	1.146	1.080	1.052	1.022	1.028	1.039	1.112	1.213	1.256	1.272	1.282	1.286	1.290	1.294	1.298	1.300	1.306
83	1.117	1.130	1.177	1.167	1.099	1.064	1.028	1.006	1.032	1.142	1.235	1.264	1.277	1.282	1.287	1.288	1.291	1.292	1.296	1.298
84	1.083	1.077	1.103	1.113	1.075	1.054	1.025	1.022	1.050	1.153	1.241	1.272	1.281	1.289	1.294	1.297	1.297	1.296	1.296	1.298
85	1.068	1.066	1.066	1.066	1.068	1.050	1.048	1.054	1.075	1.075	1.082	1.088	1.093	1.101	1.120	1.137	1.161	1.181	1.204	1.229
86	1.046	1.041	1.044	1.048	1.050	1.044	1.048	1.048	1.066	1.068	1.073	1.068	1.071	1.069	1.075	1.068	1.066	1.062	1.064	1.062
87	1.011	1.014	1.017	1.022	1.025	1.022	1.030	1.048	1.062	1.060	1.058	1.064	1.068	1.062	1.060	1.060	1.064	1.060	1.062	1.060
88	1.000	0.997	0.997	1.003	1.003	1.011	1.020	1.044	1.056	1.058	1.060	1.064	1.058	1.062	1.056	1.056	1.052	1.056	1.056	1.058
89	0.987	0.987	0.990	0.993	1.006	1.011	1.022	1.039	1.060	1.058	1.064	1.060	1.060	1.054	1.052	1.050	1.050	1.046	1.048	1.048
90	0.972	0.976	0.976	0.990	1.000	1.006	1.009	1.030	1.048	1.056	1.054	1.054	1.050	1.052	1.046	1.046	1.044	1.044	1.044	1.044
91	0.972	0.972	0.983	0.987	0.997	0.997	1.011	1.022	1.046	1.050	1.054	1.048	1.052	1.046	1.048	1.048	1.046	1.044	1.046	1.041
92	0.968	0.968	0.964	0.987	0.987	1.000	1.000	1.017	1.037	1.052	1.050	1.054	1.046	1.050	1.044	1.046	1.041	1.048	1.044	1.044
93	0.983	0.980	0.987	0.987	1.000	1.003	1.011	1.014	1.044	1.048	1.052	1.050	1.052	1.048	1.050	1.046	1.046	1.044	1.044	1.032
94	1.014	1.011	1.011	1.009	1.017	1.014	1.020	1.025	1.044	1.046	1.050	1.048	1.054	1.048	1.052	1.050	1.048	1.044	1.044	1.037
95	1.025	1.025	1.030	1.025	1.030	1.025	1.030	1.032	1.050	1.054	1.052	1.050	1.054	1.052	1.058	1.052	1.054	1.046	1.044	1.034
96	1.034	1.034	1.039	1.037	1.044	1.034	1.034	1.039	1.056	1.056	1.060	1.058	1.064	1.058	1.064	1.064	1.064	1.054	1.048	1.039
97	1.037	1.039	1.041	1.044	1.041	1.039	1.032	1.044	1.052	1.056	1.054	1.062	1.064	1.068	1.066	1.068	1.062	1.058	1.044	1.044
98	1.041	1.039	1.041	1.041	1.037	1.039	1.034	1.039	1.056	1.050	1.050	1.056	1.066	1.068	1.069	1.066	1.060	1.054	1.054	1.050

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
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50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 46

IR SCAN TIME 17.22 SEC
INITIAL TEMP 544.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	1.403	1.411	1.422	1.431	1.446	1.461	1.477	1.494	1.512	1.523	1.534	1.550	1.568	1.571	1.572	1.577	1.580	1.586	1.591	1.596
65	1.401	1.413	1.425	1.436	1.449	1.463	1.477	1.493	1.510	1.524	1.530	1.546	1.562	1.565	1.565	1.573	1.576	1.581	1.583	1.589
66	1.404	1.414	1.426	1.438	1.452	1.465	1.480	1.494	1.511	1.529	1.540	1.543	1.552	1.559	1.563	1.568	1.575	1.579	1.578	1.583
67	1.399	1.410	1.421	1.432	1.445	1.458	1.472	1.489	1.503	1.519	1.532	1.539	1.542	1.547	1.555	1.561	1.563	1.562	1.564	1.568
68	1.385	1.393	1.406	1.417	1.430	1.443	1.458	1.474	1.491	1.506	1.523	1.535	1.541	1.543	1.548	1.556	1.562	1.565	1.569	1.572
69	1.383	1.391	1.403	1.412	1.427	1.439	1.449	1.463	1.480	1.496	1.514	1.529	1.538	1.545	1.552	1.553	1.555	1.558	1.564	1.567
70	1.380	1.389	1.401	1.411	1.423	1.437	1.449	1.458	1.470	1.485	1.500	1.513	1.523	1.529	1.535	1.540	1.547	1.554	1.562	1.567
71	1.381	1.389	1.401	1.411	1.420	1.434	1.447	1.457	1.468	1.482	1.495	1.504	1.512	1.516	1.518	1.520	1.525	1.531	1.536	1.541
72	1.385	1.394	1.403	1.413	1.423	1.434	1.449	1.458	1.471	1.484	1.496	1.504	1.512	1.514	1.516	1.516	1.520	1.524	1.527	1.528
73	1.389	1.399	1.408	1.419	1.433	1.446	1.458	1.472	1.481	1.491	1.500	1.509	1.518	1.524	1.522	1.521	1.520	1.521	1.524	1.527
74	1.391	1.400	1.410	1.420	1.433	1.447	1.459	1.471	1.485	1.495	1.505	1.516	1.529	1.535	1.530	1.527	1.525	1.525	1.528	1.533
75	1.375	1.384	1.396	1.406	1.416	1.428	1.441	1.453	1.465	1.477	1.487	1.496	1.501	1.508	1.513	1.518	1.523	1.527	1.529	1.532
76	1.353	1.360	1.369	1.378	1.389	1.399	1.410	1.419	1.427	1.437	1.446	1.452	1.457	1.461	1.464	1.465	1.468	1.471	1.476	1.480
77	1.336	1.344	1.351	1.359	1.366	1.376	1.385	1.394	1.402	1.408	1.412	1.419	1.422	1.425	1.425	1.425	1.424	1.421	1.419	1.416
78	1.326	1.334	1.341	1.349	1.356	1.366	1.376	1.385	1.393	1.400	1.404	1.408	1.409	1.411	1.412	1.413	1.414	1.414	1.411	1.408
79	1.324	1.331	1.339	1.347	1.353	1.364	1.372	1.382	1.389	1.399	1.404	1.410	1.412	1.416	1.417	1.419	1.419	1.421	1.419	1.419
80	1.322	1.329	1.337	1.346	1.353	1.361	1.370	1.382	1.392	1.401	1.409	1.416	1.420	1.422	1.423	1.424	1.423	1.423	1.424	1.425
81	1.319	1.324	1.333	1.341	1.351	1.359	1.369	1.377	1.387	1.396	1.404	1.411	1.416	1.419	1.421	1.421	1.423	1.423	1.423	1.423
82	1.311	1.318	1.326	1.336	1.344	1.353	1.361	1.369	1.378	1.386	1.391	1.397	1.400	1.404	1.404	1.406	1.408	1.410	1.410	1.412
83	1.304	1.308	1.317	1.324	1.334	1.342	1.351	1.358	1.365	1.371	1.378	1.380	1.383	1.386	1.387	1.385	1.385	1.384	1.385	1.385
84	1.299	1.303	1.307	1.315	1.322	1.331	1.339	1.347	1.353	1.359	1.364	1.367	1.367	1.367	1.367	1.366	1.366	1.364	1.363	1.361
85	1.240	1.250	1.268	1.286	1.299	1.305	1.310	1.318	1.326	1.339	1.372	1.390	1.365	1.341	1.337	1.336	1.337	1.338	1.338	1.337
86	1.066	1.064	1.069	1.066	1.075	1.071	1.077	1.071	1.078	1.075	1.088	1.093	1.095	1.087	1.087	1.088	1.095	1.098	1.103	1.105
87	1.060	1.062	1.064	1.062	1.062	1.060	1.060	1.062	1.058	1.058	1.056	1.060	1.058	1.060	1.056	1.060	1.058	1.060	1.058	1.062
88	1.058	1.060	1.056	1.058	1.056	1.060	1.059	1.058	1.056	1.056	1.052	1.056	1.052	1.056	1.054	1.056	1.052	1.054	1.052	1.052
89	1.050	1.048	1.054	1.052	1.060	1.054	1.058	1.054	1.058	1.054	1.056	1.052	1.056	1.052	1.052	1.050	1.052	1.048	1.052	1.048
90	1.039	1.044	1.044	1.046	1.044	1.048	1.046	1.052	1.048	1.052	1.050	1.052	1.054	1.054	1.050	1.050	1.048	1.050	1.046	1.048
91	1.044	1.041	1.046	1.044	1.046	1.044	1.046	1.044	1.048	1.052	1.075	1.146	1.193	1.147	1.080	1.056	1.052	1.048	1.050	1.048
92	1.039	1.044	1.039	1.044	1.037	1.044	1.044	1.044	1.044	1.052	1.066	1.152	1.215	1.184	1.103	1.064	1.048	1.044	1.044	1.046
93	1.039	1.027	1.039	1.027	1.039	1.030	1.044	1.034	1.046	1.037	1.048	1.039	1.052	1.044	1.048	1.044	1.046	1.044	1.046	1.044
94	1.034	1.032	1.034	1.034	1.044	1.039	1.044	1.039	1.046	1.044	1.046	1.044	1.044	1.039	1.044	1.039	1.044	1.039	1.041	1.034
95	1.037	1.032	1.039	1.039	1.041	1.039	1.046	1.044	1.048	1.048	1.050	1.046	1.048	1.044	1.046	1.044	1.044	1.039	1.044	1.039
96	1.039	1.032	1.039	1.039	1.046	1.044	1.048	1.046	1.050	1.048	1.054	1.050	1.052	1.046	1.046	1.044	1.044	1.039	1.044	1.039
97	1.039	1.046	1.039	1.044	1.039	1.046	1.046	1.052	1.048	1.052	1.048	1.052	1.048	1.048	1.044	1.044	1.041	1.044	1.039	1.041
98	1.054	1.048	1.048	1.048	1.054	1.050	1.054	1.050	1.050	1.046	1.054	1.048	1.050	1.046	1.048	1.044	1.044	1.044	1.046	1.044

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 46

IR SCAN TIME 17.22 SEC
INITIAL TEMP 544.7 DEG, R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	1.603	1.605	1.608	1.613	1.620	1.628	1.638	1.654	1.671	1.654	1.633	1.630	1.627	1.623	1.608	1.570	1.498	1.418	1.331	1.216
65	1.595	1.600	1.601	1.596	1.589	1.588	1.598	1.626	1.649	1.637	1.635	1.638	1.636	1.636	1.636	1.632	1.618	1.581	1.497	1.369
66	1.587	1.590	1.592	1.594	1.596	1.593	1.584	1.564	1.521	1.490	1.510	1.543	1.576	1.596	1.609	1.620	1.626	1.629	1.623	1.592
67	1.571	1.575	1.576	1.579	1.588	1.598	1.607	1.620	1.602	1.562	1.519	1.462	1.417	1.416	1.451	1.504	1.555	1.593	1.616	1.622
68	1.575	1.580	1.584	1.583	1.584	1.596	1.611	1.623	1.618	1.603	1.598	1.587	1.564	1.516	1.457	1.404	1.380	1.398	1.446	1.503
69	1.570	1.574	1.582	1.589	1.595	1.603	1.617	1.633	1.621	1.601	1.602	1.602	1.601	1.594	1.581	1.558	1.519	1.465	1.413	1.378
70	1.571	1.575	1.580	1.584	1.590	1.600	1.613	1.627	1.623	1.606	1.603	1.597	1.595	1.595	1.593	1.589	1.587	1.578	1.556	1.519
71	1.548	1.556	1.567	1.579	1.588	1.596	1.609	1.632	1.622	1.600	1.599	1.594	1.592	1.593	1.592	1.588	1.587	1.588	1.590	1.591
72	1.531	1.531	1.534	1.536	1.540	1.549	1.571	1.604	1.588	1.578	1.596	1.600	1.601	1.601	1.601	1.600	1.601	1.601	1.606	1.612
73	1.530	1.532	1.528	1.524	1.525	1.532	1.545	1.565	1.567	1.555	1.554	1.555	1.558	1.562	1.567	1.577	1.581	1.585	1.592	1.599
74	1.540	1.545	1.544	1.543	1.541	1.547	1.566	1.590	1.595	1.570	1.558	1.548	1.541	1.531	1.519	1.508	1.492	1.478	1.470	1.466
75	1.536	1.543	1.552	1.556	1.557	1.565	1.581	1.604	1.603	1.574	1.569	1.565	1.560	1.555	1.549	1.544	1.536	1.527	1.512	1.488
76	1.484	1.492	1.500	1.509	1.521	1.534	1.552	1.577	1.564	1.522	1.550	1.561	1.563	1.563	1.564	1.564	1.563	1.561	1.555	1.547
77	1.413	1.410	1.407	1.403	1.401	1.401	1.403	1.410	1.416	1.410	1.410	1.419	1.430	1.443	1.453	1.467	1.483	1.497	1.510	1.523
78	1.403	1.398	1.390	1.382	1.372	1.362	1.351	1.342	1.333	1.318	1.296	1.287	1.281	1.277	1.276	1.277	1.278	1.283	1.290	1.298
79	1.418	1.416	1.414	1.411	1.406	1.400	1.395	1.390	1.384	1.371	1.341	1.320	1.303	1.286	1.270	1.258	1.249	1.241	1.237	1.237
80	1.425	1.427	1.427	1.426	1.424	1.424	1.423	1.427	1.431	1.429	1.406	1.394	1.383	1.369	1.351	1.332	1.311	1.293	1.275	1.261
81	1.424	1.426	1.427	1.427	1.428	1.429	1.432	1.436	1.444	1.449	1.435	1.428	1.425	1.421	1.415	1.407	1.397	1.384	1.369	1.351
82	1.413	1.414	1.414	1.416	1.416	1.417	1.418	1.423	1.432	1.440	1.426	1.421	1.421	1.422	1.420	1.419	1.418	1.415	1.411	1.407
83	1.386	1.386	1.388	1.388	1.389	1.389	1.390	1.392	1.398	1.405	1.396	1.384	1.386	1.383	1.382	1.380	1.380	1.379	1.380	1.381
84	1.360	1.359	1.357	1.356	1.353	1.353	1.351	1.351	1.351	1.357	1.352	1.337	1.333	1.331	1.327	1.324	1.320	1.318	1.315	1.314
85	1.338	1.339	1.341	1.341	1.340	1.339	1.339	1.337	1.336	1.337	1.335	1.316	1.308	1.305	1.301	1.295	1.290	1.284	1.281	1.277
86	1.112	1.115	1.128	1.129	1.134	1.138	1.144	1.146	1.153	1.164	1.178	1.169	1.164	1.163	1.168	1.162	1.158	1.158	1.160	1.162
87	1.056	1.062	1.058	1.064	1.058	1.062	1.056	1.062	1.058	1.058	1.054	1.058	1.052	1.052	1.048	1.052	1.046	1.046	1.044	1.046
88	1.050	1.054	1.052	1.056	1.052	1.056	1.052	1.054	1.050	1.050	1.048	1.048	1.044	1.044	1.044	1.041	1.039	1.037	1.030	1.032
89	1.052	1.048	1.052	1.048	1.052	1.048	1.050	1.046	1.048	1.044	1.046	1.044	1.041	1.039	1.039	1.032	1.034	1.030	1.030	1.027
90	1.048	1.050	1.048	1.050	1.048	1.048	1.044	1.044	1.044	1.044	1.039	1.044	1.037	1.039	1.034	1.034	1.030	1.030	1.025	1.025
91	1.048	1.046	1.048	1.044	1.048	1.046	1.048	1.048	1.048	1.044	1.056	1.090	1.103	1.068	1.046	1.037	1.032	1.027	1.027	1.025
92	1.044	1.046	1.044	1.046	1.044	1.046	1.044	1.044	1.039	1.044	1.071	1.155	1.189	1.142	1.071	1.044	1.032	1.030	1.027	1.025
93	1.048	1.044	1.046	1.048	1.048	1.044	1.048	1.044	1.044	1.039	1.041	1.050	1.069	1.054	1.041	1.034	1.032	1.027	1.025	1.022
94	1.044	1.037	1.044	1.039	1.044	1.039	1.044	1.039	1.044	1.034	1.037	1.030	1.037	1.030	1.032	1.025	1.027	1.022	1.025	1.020
95	1.041	1.039	1.044	1.039	1.044	1.037	1.044	1.044	1.044	1.039	1.039	1.034	1.034	1.030	1.030	1.025	1.030	1.020	1.025	1.020
96	1.044	1.039	1.041	1.039	1.044	1.041	1.044	1.039	1.044	1.039	1.039	1.032	1.037	1.030	1.032	1.027	1.030	1.022	1.025	1.020
97	1.039	1.039	1.037	1.037	1.037	1.044	1.039	1.044	1.044	1.044	1.039	1.039	1.032	1.032	1.027	1.027	1.020	1.020	1.022	1.022
98	1.044	1.037	1.039	1.034	1.039	1.037	1.041	1.039	1.044	1.039	1.039	1.034	1.034	1.030	1.030	1.025	1.025	1.022	1.025	1.022

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 46

IR SCAN TIME 17.22 SEC
INITIAL TEMP 544.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	1.136	1.098	1.085	1.077	1.071	1.060	1.060	1.054	1.054	1.048	1.046	1.044	1.044	1.044	1.046	1.039	1.044	1.037	1.039	1.034
65	1.233	1.145	1.103	1.088	1.080	1.071	1.060	1.056	1.052	1.052	1.048	1.048	1.044	1.046	1.041	1.044	1.039	1.039	1.034	1.037
66	1.508	1.362	1.210	1.131	1.098	1.082	1.075	1.058	1.054	1.048	1.048	1.044	1.046	1.041	1.041	1.039	1.041	1.034	1.034	1.032
67	1.614	1.579	1.459	1.291	1.161	1.112	1.078	1.075	1.054	1.050	1.039	1.044	1.032	1.039	1.030	1.034	1.027	1.030	1.022	1.027
68	1.551	1.577	1.576	1.514	1.358	1.199	1.128	1.088	1.078	1.062	1.048	1.039	1.039	1.032	1.032	1.027	1.027	1.025	1.022	1.020
69	1.367	1.384	1.419	1.448	1.444	1.361	1.236	1.144	1.098	1.077	1.068	1.048	1.039	1.034	1.034	1.027	1.027	1.022	1.022	1.020
70	1.472	1.421	1.386	1.369	1.359	1.344	1.303	1.204	1.124	1.087	1.077	1.068	1.058	1.041	1.034	1.034	1.030	1.025	1.025	1.017
71	1.588	1.577	1.550	1.498	1.437	1.384	1.350	1.309	1.228	1.136	1.096	1.075	1.071	1.058	1.046	1.034	1.030	1.025	1.025	1.020
72	1.611	1.612	1.618	1.617	1.608	1.584	1.541	1.477	1.397	1.295	1.183	1.112	1.082	1.069	1.064	1.044	1.039	1.027	1.027	1.022
73	1.605	1.611	1.616	1.616	1.614	1.615	1.619	1.623	1.611	1.566	1.475	1.324	1.176	1.109	1.075	1.064	1.048	1.037	1.027	1.025
74	1.473	1.487	1.510	1.528	1.547	1.569	1.585	1.592	1.598	1.599	1.579	1.510	1.371	1.221	1.141	1.082	1.060	1.052	1.037	1.025
75	1.457	1.418	1.378	1.346	1.329	1.331	1.344	1.366	1.391	1.420	1.450	1.473	1.470	1.402	1.257	1.134	1.082	1.060	1.048	1.039
76	1.542	1.533	1.522	1.504	1.479	1.443	1.398	1.348	1.306	1.278	1.265	1.256	1.252	1.247	1.226	1.164	1.099	1.066	1.058	1.050
77	1.534	1.542	1.547	1.548	1.544	1.541	1.536	1.526	1.509	1.477	1.429	1.373	1.319	1.284	1.263	1.243	1.192	1.120	1.071	1.056
78	1.310	1.326	1.344	1.368	1.393	1.418	1.442	1.465	1.485	1.506	1.524	1.531	1.524	1.496	1.449	1.387	1.319	1.251	1.165	1.091
79	1.235	1.235	1.233	1.235	1.233	1.234	1.239	1.246	1.255	1.266	1.282	1.307	1.339	1.373	1.403	1.417	1.408	1.377	1.322	1.239
80	1.249	1.241	1.235	1.234	1.231	1.228	1.226	1.228	1.229	1.233	1.233	1.233	1.232	1.234	1.237	1.240	1.245	1.254	1.268	1.277
81	1.331	1.307	1.286	1.266	1.253	1.240	1.235	1.228	1.228	1.226	1.231	1.233	1.233	1.230	1.231	1.231	1.233	1.228	1.226	1.223
82	1.398	1.387	1.371	1.354	1.335	1.317	1.296	1.277	1.257	1.242	1.233	1.228	1.226	1.226	1.223	1.226	1.231	1.227	1.221	1.223
83	1.379	1.375	1.375	1.372	1.368	1.365	1.363	1.356	1.347	1.332	1.315	1.294	1.273	1.252	1.238	1.227	1.223	1.218	1.218	1.216
84	1.312	1.311	1.309	1.308	1.306	1.305	1.305	1.307	1.308	1.311	1.312	1.314	1.312	1.310	1.305	1.296	1.284	1.270	1.256	1.244
85	1.275	1.272	1.270	1.268	1.266	1.264	1.263	1.262	1.262	1.260	1.262	1.263	1.267	1.269	1.272	1.274	1.277	1.276	1.278	1.278
86	1.166	1.166	1.171	1.173	1.176	1.174	1.175	1.175	1.178	1.178	1.181	1.179	1.181	1.181	1.191	1.195	1.202	1.205	1.215	1.223
87	1.044	1.044	1.039	1.044	1.039	1.039	1.039	1.039	1.034	1.037	1.032	1.034	1.034	1.034	1.034	1.034	1.034	1.034	1.037	1.034
88	1.027	1.032	1.025	1.034	1.027	1.030	1.022	1.025	1.020	1.025	1.017	1.022	1.014	1.025	1.022	1.025	1.022	1.027	1.022	1.022
89	1.030	1.027	1.030	1.022	1.022	1.022	1.025	1.017	1.020	1.017	1.020	1.014	1.017	1.014	1.017	1.011	1.020	1.014	1.020	1.011
90	1.022	1.025	1.022	1.022	1.020	1.020	1.017	1.020	1.017	1.017	1.014	1.014	1.011	1.014	1.017	1.030	1.025	1.020	1.014	1.020
91	1.030	1.025	1.025	1.025	1.022	1.020	1.022	1.017	1.022	1.025	1.039	1.032	1.020	1.009	1.014	1.014	1.020	1.014	1.017	1.014
92	1.025	1.025	1.020	1.020	1.020	1.020	1.017	1.022	1.025	1.058	1.109	1.108	1.056	1.025	1.011	1.011	1.011	1.014	1.011	1.014
93	1.025	1.020	1.022	1.020	1.022	1.017	1.020	1.014	1.020	1.020	1.041	1.044	1.030	1.014	1.014	1.009	1.011	1.011	1.014	1.011
94	1.025	1.020	1.022	1.017	1.022	1.014	1.017	1.011	1.017	1.014	1.014	1.011	1.011	1.009	1.011	1.009	1.014	1.014	1.014	1.014
95	1.022	1.014	1.020	1.014	1.020	1.009	1.017	1.009	1.014	1.006	1.014	1.006	1.011	1.006	1.011	1.009	1.017	1.011	1.017	1.014
96	1.020	1.017	1.017	1.014	1.017	1.014	1.014	1.011	1.011	1.011	1.011	1.009	1.011	1.006	1.011	1.009	1.017	1.011	1.020	1.014
97	1.020	1.020	1.017	1.017	1.014	1.017	1.014	1.014	1.011	1.014	1.006	1.009	1.006	1.009	1.009	1.017	1.020	1.022	1.020	1.025
98	1.022	1.017	1.020	1.017	1.020	1.014	1.017	1.011	1.014	1.011	1.014	1.009	1.011	1.009	1.020	1.039	1.048	1.039	1.037	1.032

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 46

IR SCAN TIME 17.22 SEC
INITIAL TEMP 544.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	1.039	1.034	1.037	1.032	1.034	1.030	1.032	1.027	1.030	1.025	1.027	1.020	1.025	1.017	1.022	1.014	1.020	1.011	1.017	1.011
65	1.034	1.037	1.032	1.032	1.030	1.030	1.025	1.025	1.022	1.025	1.020	1.022	1.020	1.017	1.014	1.017	1.014	1.011	1.011	1.009
66	1.032	1.030	1.032	1.027	1.027	1.025	1.025	1.020	1.020	1.017	1.020	1.014	1.017	1.011	1.014	1.009	1.011	1.006	1.009	1.003
67	1.025	1.025	1.022	1.020	1.020	1.020	1.014	1.017	1.014	1.014	1.009	1.011	1.006	1.006	1.000	1.006	1.000	1.006	1.000	1.000
68	1.020	1.011	1.020	1.009	1.014	1.003	1.011	1.003	1.011	1.003	1.006	0.997	1.006	0.997	1.000	0.993	1.000	0.993	0.997	0.990
69	1.020	1.014	1.017	1.011	1.014	1.009	1.011	1.003	1.009	1.003	1.006	1.000	1.000	0.997	1.003	0.993	0.997	0.990	0.997	0.976
70	1.020	1.014	1.020	1.011	1.014	1.011	1.014	1.006	1.009	1.003	1.006	1.000	1.006	1.000	1.000	0.993	0.997	0.990	0.993	0.990
71	1.022	1.020	1.020	1.020	1.014	1.011	1.014	1.009	1.011	1.003	1.009	1.003	1.003	1.000	1.000	0.997	1.000	0.993	0.993	0.987
72	1.022	1.017	1.017	1.014	1.020	1.011	1.011	1.009	1.011	1.006	1.006	1.000	1.006	1.000	1.003	0.997	1.000	0.997	1.000	0.990
73	1.020	1.020	1.017	1.017	1.011	1.011	1.011	1.011	1.006	1.009	1.003	1.006	1.003	1.003	0.997	1.000	0.997	1.000	0.993	0.997
74	1.025	1.020	1.020	1.017	1.017	1.011	1.014	1.009	1.011	1.003	1.006	1.000	1.006	1.003	1.006	0.997	1.000	0.993	1.000	0.990
75	1.020	1.020	1.011	1.014	1.006	1.014	1.003	1.009	1.000	1.006	0.997	1.006	0.993	1.000	0.990	1.000	0.997	1.000	0.990	0.993
76	1.044	1.030	1.022	1.011	1.011	1.009	1.011	1.006	1.006	1.003	1.006	1.000	1.003	0.997	1.000	0.993	1.000	0.987	0.997	0.983
77	1.046	1.044	1.039	1.027	1.014	1.011	1.003	1.006	1.003	1.006	1.000	1.000	0.997	0.997	0.997	0.997	0.990	0.993	0.990	0.990
78	1.056	1.046	1.037	1.037	1.034	1.022	1.011	1.009	1.000	1.000	0.997	1.000	0.990	0.997	0.987	0.990	0.983	0.990	0.983	0.987
79	1.141	1.078	1.050	1.037	1.030	1.030	1.027	1.025	1.014	1.006	0.993	0.993	0.990	0.990	0.987	0.987	0.983	0.987	0.980	0.983
80	1.253	1.178	1.088	1.054	1.039	1.039	1.032	1.030	1.030	1.032	1.030	1.022	1.014	1.009	1.003	1.006	1.000	1.003	1.000	1.000
81	1.219	1.195	1.137	1.068	1.041	1.030	1.027	1.022	1.022	1.020	1.020	1.017	1.017	1.014	1.017	1.009	1.006	0.997	1.000	0.987
82	1.221	1.221	1.203	1.156	1.083	1.041	1.020	1.020	1.014	1.017	1.011	1.014	1.006	1.017	1.011	1.014	1.011	1.014	1.014	1.011
83	1.221	1.220	1.220	1.208	1.172	1.105	1.050	1.025	1.020	1.014	1.014	1.009	1.011	1.009	1.011	0.997	1.014	0.997	1.011	1.000
84	1.233	1.227	1.222	1.218	1.208	1.183	1.126	1.066	1.025	1.017	1.009	1.009	1.003	1.009	1.006	1.006	1.006	1.006	1.003	1.006
85	1.281	1.282	1.284	1.290	1.274	1.257	1.226	1.168	1.099	1.039	1.020	1.006	1.006	1.003	1.006	1.003	1.009	1.003	1.009	1.003
86	1.233	1.238	1.239	1.239	1.239	1.239	1.233	1.213	1.170	1.101	1.041	1.011	1.006	1.003	1.000	1.003	1.009	1.003	1.003	1.003
87	1.034	1.034	1.030	1.032	1.030	1.030	1.030	1.032	1.027	1.022	1.006	1.006	1.000	1.003	1.000	1.000	1.000	1.000	1.000	1.003
88	1.020	1.017	1.011	1.014	1.009	1.011	1.006	1.009	1.000	1.006	1.003	1.006	1.000	1.003	0.997	1.000	0.997	1.000	0.997	0.997
89	1.014	1.006	1.006	1.000	1.006	1.000	1.006	0.997	1.006	0.997	1.003	1.000	1.000	0.997	1.000	0.997	1.000	0.993	1.000	0.997
90	1.025	1.027	1.011	1.006	1.000	1.003	1.000	1.000	1.000	1.003	0.997	1.000	0.990	0.997	0.987	0.997	0.990	0.997	0.987	0.993
91	1.020	1.014	1.011	1.003	1.006	1.000	1.006	0.993	1.000	0.993	1.000	0.993	1.000	0.993	0.997	0.997	0.997	0.990	0.997	0.990
92	1.011	1.011	1.006	1.003	1.000	1.006	0.997	1.000	0.993	0.997	0.997	1.000	0.997	0.997	0.993	0.993	0.990	0.997	0.990	0.993
93	1.014	1.009	1.006	1.000	1.003	0.997	1.000	0.993	1.000	0.997	1.000	0.993	0.997	0.990	1.000	0.990	0.997	0.990	0.997	0.990
94	1.017	1.011	1.011	1.003	1.003	0.997	1.000	0.993	1.000	0.993	0.997	0.993	1.000	0.993	0.993	0.990	0.997	0.990	0.997	0.987
95	1.014	1.011	1.011	1.000	1.003	0.997	1.000	0.997	1.000	0.993	1.000	0.990	0.997	0.993	0.997	0.993	0.997	0.993	0.997	0.993
96	1.020	1.011	1.011	0.997	1.000	0.990	1.003	0.990	1.000	0.990	1.000	0.990	1.000	0.990	1.000	0.990	0.997	0.990	0.993	0.990
97	1.020	1.017	1.011	1.003	1.000	1.000	0.997	0.997	0.993	0.987	0.990	0.993	0.987	0.993	0.987	0.993	0.987	0.993	0.983	0.990
98	1.034	1.039	1.030	1.006	1.003	0.997	1.000	0.993	1.000	0.993	0.997	0.990	1.000	0.990	0.997	0.990	0.993	0.993	0.997	0.990

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP COPP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 46

IR SCAN TIME 17.22 SEC
INITIAL TEMP 544.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	1.014	1.011	1.011	1.006	1.011	1.009	1.011	1.003	1.009	1.003
65	1.006	1.006	1.006	1.006	1.003	1.006	1.000	1.006	1.000	1.003
66	1.006	1.003	1.003	1.000	1.000	0.997	1.000	0.997	1.000	0.993
67	0.997	0.997	0.993	0.997	0.990	0.990	0.987	0.990	0.983	0.987
68	0.997	0.990	0.990	0.987	0.987	0.983	0.987	0.980	0.983	0.976
69	0.990	0.972	0.990	0.972	0.983	0.968	0.983	0.960	0.980	0.964
70	0.993	0.987	0.987	0.980	0.983	0.980	0.983	0.976	0.976	0.972
71	0.993	0.987	0.990	0.983	0.983	0.983	0.983	0.976	0.976	0.976
72	0.993	0.987	0.990	0.983	0.987	0.980	0.983	0.976	0.980	0.972
73	0.987	0.990	0.983	0.987	0.980	0.983	0.983	0.980	0.976	0.980
74	0.993	0.987	0.990	0.983	0.987	0.980	0.983	0.983	0.983	0.976
75	0.990	0.993	0.983	0.987	0.983	0.983	0.976	0.980	0.976	0.980
76	0.993	0.980	0.987	0.976	0.987	0.972	0.983	0.976	0.980	0.968
77	0.987	0.987	0.983	0.987	0.976	0.983	0.976	0.976	0.968	0.972
78	0.980	0.983	0.980	0.983	0.976	0.980	0.968	0.976	0.972	0.972
79	0.976	0.980	0.976	0.980	0.976	0.980	0.972	0.976	0.968	0.976
80	0.997	1.000	0.997	1.000	0.993	0.997	0.993	0.993	0.990	0.993
81	0.987	0.976	0.983	0.976	0.976	0.968	0.976	0.968	0.968	0.960
82	1.006	1.006	1.000	1.000	0.990	0.990	0.980	0.980	0.968	0.972
83	1.011	1.000	1.011	0.997	1.011	0.993	1.009	0.990	1.000	0.983
84	1.006	1.006	1.003	1.006	1.000	1.006	1.011	1.006	1.003	1.003
85	1.006	1.003	1.009	1.000	1.006	1.000	1.003	1.000	1.006	0.997
86	1.000	0.987	1.000	1.003	0.997	1.003	0.997	0.990	0.976	0.997
87	1.000	1.000	0.997	1.003	1.000	1.000	0.993	1.000	0.993	0.997
88	0.997	0.997	0.997	0.997	0.997	1.000	0.993	0.997	0.993	0.997
89	0.997	0.993	1.000	0.993	1.000	0.990	1.000	0.997	0.997	0.993
90	0.987	0.997	0.987	0.997	0.990	0.993	0.987	0.993	0.987	0.997
91	1.000	0.990	0.997	0.990	0.993	0.990	0.997	0.990	0.993	0.990
92	0.990	0.993	0.990	0.993	0.990	0.993	0.987	0.993	0.990	0.993
93	0.993	0.990	0.997	0.990	0.997	0.990	0.997	0.987	0.993	0.987
94	0.997	0.990	0.997	0.990	0.993	0.987	0.993	0.990	0.993	0.987
95	0.993	0.990	0.997	0.990	0.993	0.987	0.993	0.987	0.993	0.987
96	0.997	0.990	1.000	0.983	0.993	0.997	0.997	0.993	0.993	0.990
97	0.983	0.990	0.983	0.990	0.983	0.990	0.983	0.997	0.993	0.993
98	0.987	0.983	0.990	0.990	0.993	0.987	0.997	0.990	0.997	0.990

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 17.22 SEC
GROUP 46 HRFR = 0.291E-01

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	0.018	0.023	0.023	0.023	0.024	0.023	0.021	0.023	0.022	0.023	0.022	0.019	0.022	0.023	0.023	0.023	0.025	0.024	0.026	0.024
30	0.023	0.024	0.024	0.024	0.021	0.021	0.019	0.021	0.022	0.023	0.023	0.023	0.023	0.024	0.024	0.025	0.025	0.025	0.025	0.026
31	0.023	0.021	0.021	0.020	0.020	0.020	0.023	0.023	0.024	0.024	0.024	0.024	0.025	0.024	0.025	0.025	0.026	0.025	0.024	0.022
32	0.021	0.019	0.022	0.022	0.025	0.025	0.026	0.024	0.024	0.023	0.024	0.024	0.026	0.025	0.025	0.023	0.022	0.021	0.021	0.020
33	0.021	0.023	0.025	0.028	0.024	0.025	0.024	0.024	0.025	0.024	0.025	0.024	0.021	0.021	0.020	0.019	0.021	0.023	0.023	0.025
34	0.025	0.024	0.025	0.023	0.023	0.023	0.024	0.023	0.023	0.021	0.021	0.018	0.021	0.020	0.022	0.021	0.025	0.025	0.025	0.026
35	0.024	0.023	0.021	0.022	0.019	0.021	0.018	0.019	0.017	0.019	0.018	0.021	0.020	0.022	0.021	0.024	0.025	0.026	0.027	0.027
36	0.021	0.021	0.021	0.019	0.018	0.018	0.018	0.018	0.021	0.021	0.022	0.022	0.024	0.023	0.025	0.024	0.026	0.023	0.022	0.015
37	0.019	0.018	0.018	0.018	0.018	0.019	0.019	0.021	0.021	0.023	0.023	0.024	0.024	0.025	0.023	0.020	0.015	0.011	0.006	0.004
38	0.018	0.017	0.018	0.019	0.019	0.021	0.021	0.023	0.023	0.024	0.024	0.024	0.021	0.018	0.011	0.007	0.004	0.003	0.002	0.003
39	0.018	0.018	0.020	0.020	0.021	0.022	0.023	0.023	0.023	0.021	0.019	0.013	0.009	0.004	0.004	0.004	0.004	0.003	0.003	0.002
40	0.020	0.020	0.022	0.021	0.023	0.023	0.023	0.019	0.015	0.009	0.006	0.003	0.004	0.003	0.004	0.002	0.004	0.003	0.004	0.003
41	0.021	0.023	0.023	0.024	0.021	0.018	0.011	0.008	0.004	0.003	0.005	0.004	0.003	0.005	0.003	0.005	0.004	0.005	0.004	0.005
42	0.024	0.026	0.023	0.015	0.011	0.004	0.004	0.001	0.004	0.001	0.004	0.001	0.005	0.004	0.006	0.004	0.006	0.004	0.005	0.005
43	0.023	0.017	0.010	0.005	0.003	0.004	0.003	0.004	0.003	0.004	0.004	0.005	0.004	0.005	0.004	0.006	0.004	0.006	0.003	0.007
44	0.011	0.007	0.005	0.004	0.004	0.003	0.005	0.004	0.006	0.004	0.006	0.005	0.006	0.006	0.007	0.006	0.009	0.007	0.009	0.007
45	0.007	0.006	0.005	0.007	0.005	0.007	0.006	0.006	0.007	0.009	0.007	0.009	0.006	0.009	0.008	0.009	0.009	0.011	0.015	0.019
46	0.008	0.008	0.008	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.011	0.010	0.012	0.011	0.013	0.014	0.024	0.068	0.115
47	0.010	0.009	0.009	0.010	0.010	0.010	0.010	0.010	0.010	0.012	0.011	0.012	0.012	0.013	0.013	0.015	0.016	0.036	0.096	0.147
48	0.010	0.010	0.011	0.012	0.012	0.013	0.011	0.012	0.012	0.012	0.013	0.014	0.014	0.015	0.015	0.017	0.020	0.056	0.122	0.166
49	0.010	0.010	0.011	0.010	0.012	0.011	0.014	0.011	0.014	0.012	0.014	0.014	0.016	0.014	0.017	0.018	0.027	0.076	0.141	0.175
50	0.011	0.011	0.011	0.012	0.012	0.013	0.013	0.014	0.014	0.014	0.014	0.015	0.015	0.017	0.016	0.021	0.035	0.099	0.157	0.184
51	0.011	0.012	0.013	0.011	0.014	0.014	0.015	0.014	0.015	0.014	0.017	0.015	0.018	0.018	0.021	0.021	0.049	0.115	0.164	0.186
52	0.010	0.009	0.009	0.009	0.010	0.011	0.011	0.012	0.012	0.014	0.014	0.014	0.015	0.016	0.017	0.022	0.056	0.125	0.168	0.186
53	0.005	0.005	0.006	0.005	0.006	0.007	0.007	0.007	0.008	0.009	0.009	0.011	0.010	0.013	0.014	0.021	0.068	0.136	0.172	0.188
54	0.002	0.002	0.004	0.004	0.004	0.005	0.004	0.005	0.006	0.007	0.008	0.009	0.009	0.010	0.012	0.023	0.077	0.141	0.171	0.186
55	0.002	0.002	0.002	0.004	0.004	0.006	0.005	0.007	0.007	0.008	0.009	0.009	0.010	0.011	0.014	0.033	0.096	0.152	0.175	0.188
56	0.002	0.004	0.004	0.004	0.002	0.005	0.004	0.007	0.005	0.009	0.009	0.010	0.011	0.014	0.017	0.052	0.121	0.164	0.181	0.192
57	0.002	0.003	0.003	0.004	0.004	0.005	0.007	0.006	0.008	0.008	0.009	0.007	0.011	0.011	0.021	0.068	0.133	0.164	0.180	0.189
58	0.002	0.002	0.002	0.004	0.004	0.006	0.005	0.006	0.007	0.009	0.008	0.009	0.010	0.014	0.026	0.088	0.145	0.171	0.184	0.194
59	0.003	0.003	0.005	0.004	0.005	0.006	0.007	0.006	0.009	0.009	0.009	0.010	0.014	0.015	0.039	0.104	0.153	0.174	0.186	0.194
60	0.004	0.004	0.006	0.005	0.004	0.008	0.008	0.009	0.009	0.009	0.011	0.014	0.013	0.017	0.046	0.112	0.155	0.173	0.185	0.193
61	0.005	0.004	0.007	0.006	0.008	0.007	0.009	0.009	0.010	0.009	0.013	0.012	0.014	0.017	0.053	0.118	0.156	0.173	0.186	0.194
62	0.005	0.005	0.006	0.006	0.007	0.009	0.008	0.009	0.011	0.012	0.013	0.014	0.015	0.021	0.062	0.123	0.155	0.171	0.182	0.189
63	0.006	0.007	0.009	0.006	0.008	0.008	0.010	0.010	0.011	0.010	0.014	0.014	0.017	0.025	0.078	0.131	0.156	0.169	0.177	0.184

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1970

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 17.22 SEC
HRFR = 0.291E-01

GROUP 46

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	0.025	0.025	0.027	0.025	0.026	0.023	0.024	0.021	0.023	0.021	0.023	0.020	0.023	0.021	0.023	0.024	0.026	0.026	0.027	0.027
30	0.025	0.025	0.023	0.023	0.021	0.022	0.021	0.021	0.021	0.024	0.025	0.026	0.027	0.027	0.027	0.029	0.029	0.030	0.027	0.029
31	0.022	0.021	0.021	0.021	0.024	0.024	0.025	0.024	0.027	0.027	0.029	0.029	0.031	0.030	0.030	0.029	0.028	0.025	0.023	0.021
32	0.022	0.022	0.025	0.025	0.027	0.027	0.028	0.027	0.029	0.029	0.031	0.029	0.028	0.023	0.021	0.016	0.014	0.009	0.006	0.002
33	0.023	0.024	0.027	0.027	0.028	0.028	0.027	0.026	0.023	0.023	0.018	0.016	0.010	0.005	0.003	0.001	0.001	0.001	0.001	0.001
34	0.027	0.027	0.028	0.026	0.024	0.020	0.016	0.010	0.009	0.002	0.002	0.002	0.001	0.001	0.002	0.002	0.001	0.001	0.001	0.001
35	0.024	0.022	0.017	0.013	0.008	0.004	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.002	0.002	0.002
36	0.010	0.004	0.003	0.003	0.002	0.002	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.001	0.002	0.002	0.002	0.002	0.002	0.001
37	0.001	0.002	0.001	0.002	0.001	0.002	0.002	0.003	0.001	0.003	0.003	0.002	0.001	0.003	0.001	0.004	0.004	0.003	0.003	0.004
38	0.002	0.003	0.003	0.003	0.002	0.004	0.002	0.003	0.003	0.003	0.003	0.004	0.002	0.004	0.004	0.003	0.004	0.003	0.003	0.004
39	0.004	0.003	0.006	0.003	0.004	0.003	0.005	0.004	0.005	0.004	0.005	0.004	0.004	0.004	0.005	0.004	0.005	0.003	0.005	0.004
40	0.005	0.004	0.006	0.005	0.005	0.004	0.006	0.005	0.006	0.005	0.006	0.005	0.007	0.004	0.006	0.004	0.008	0.005	0.006	0.004
41	0.004	0.005	0.005	0.006	0.006	0.007	0.007	0.008	0.006	0.007	0.006	0.008	0.005	0.007	0.006	0.008	0.006	0.007	0.005	0.008
42	0.007	0.007	0.008	0.006	0.008	0.007	0.008	0.008	0.009	0.008	0.009	0.008	0.009	0.008	0.009	0.008	0.009	0.008	0.009	0.007
43	0.003	0.008	0.006	0.009	0.007	0.009	0.007	0.009	0.008	0.009	0.009	0.010	0.009	0.010	0.009	0.010	0.009	0.009	0.009	0.009
44	0.009	0.009	0.010	0.009	0.011	0.011	0.012	0.012	0.011	0.011	0.013	0.011	0.012	0.009	0.012	0.009	0.012	0.009	0.011	0.009
45	0.020	0.021	0.020	0.020	0.018	0.018	0.017	0.018	0.017	0.018	0.016	0.017	0.015	0.016	0.015	0.015	0.014	0.015	0.014	0.013
46	0.135	0.145	0.150	0.153	0.152	0.148	0.139	0.123	0.102	0.078	0.055	0.040	0.029	0.025	0.021	0.021	0.019	0.019	0.018	0.018
47	0.168	0.180	0.190	0.203	0.215	0.230	0.248	0.265	0.276	0.281	0.274	0.248	0.205	0.157	0.105	0.063	0.038	0.028	0.023	0.022
48	0.185	0.197	0.206	0.218	0.227	0.238	0.249	0.263	0.275	0.285	0.294	0.299	0.296	0.294	0.289	0.254	0.176	0.094	0.051	0.033
49	0.194	0.208	0.221	0.234	0.247	0.261	0.273	0.280	0.280	0.280	0.283	0.287	0.289	0.296	0.306	0.310	0.296	0.225	0.127	0.067
50	0.200	0.215	0.227	0.240	0.254	0.272	0.290	0.306	0.312	0.317	0.316	0.311	0.307	0.308	0.311	0.318	0.326	0.330	0.281	0.175
51	0.199	0.210	0.223	0.239	0.255	0.271	0.289	0.308	0.329	0.343	0.346	0.340	0.330	0.316	0.309	0.304	0.305	0.313	0.334	0.327
52	0.198	0.209	0.219	0.232	0.248	0.265	0.283	0.304	0.324	0.336	0.341	0.349	0.358	0.361	0.355	0.341	0.322	0.308	0.297	0.296
53	0.199	0.209	0.218	0.229	0.242	0.258	0.276	0.297	0.318	0.338	0.349	0.355	0.358	0.365	0.377	0.391	0.393	0.372	0.360	0.335
54	0.196	0.205	0.213	0.225	0.239	0.255	0.271	0.288	0.305	0.323	0.338	0.350	0.356	0.362	0.368	0.369	0.374	0.386	0.399	0.397
55	0.197	0.204	0.212	0.223	0.237	0.253	0.269	0.286	0.304	0.320	0.332	0.341	0.347	0.355	0.365	0.373	0.382	0.390	0.391	0.400
56	0.200	0.209	0.216	0.227	0.239	0.255	0.271	0.289	0.306	0.319	0.327	0.336	0.340	0.344	0.349	0.357	0.370	0.386	0.403	0.414
57	0.197	0.204	0.213	0.223	0.237	0.250	0.266	0.280	0.293	0.307	0.317	0.322	0.331	0.340	0.346	0.347	0.349	0.355	0.367	0.381
58	0.200	0.206	0.216	0.227	0.240	0.255	0.271	0.290	0.304	0.317	0.321	0.327	0.337	0.347	0.348	0.348	0.353	0.358	0.361	0.368
59	0.202	0.208	0.218	0.230	0.243	0.256	0.272	0.288	0.305	0.314	0.320	0.329	0.340	0.348	0.347	0.343	0.349	0.356	0.357	0.354
60	0.200	0.207	0.217	0.225	0.237	0.253	0.269	0.287	0.304	0.314	0.321	0.330	0.342	0.351	0.350	0.348	0.351	0.355	0.353	0.352
61	0.199	0.204	0.214	0.223	0.233	0.247	0.262	0.279	0.297	0.309	0.318	0.331	0.348	0.355	0.356	0.358	0.357	0.353	0.352	0.357
62	0.196	0.200	0.208	0.216	0.225	0.235	0.249	0.264	0.279	0.288	0.297	0.308	0.326	0.339	0.349	0.356	0.360	0.361	0.356	0.352
63	0.190	0.196	0.205	0.213	0.222	0.231	0.244	0.260	0.274	0.284	0.292	0.305	0.321	0.331	0.337	0.345	0.352	0.366	0.377	0.378

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
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50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR HEAT TRANSFER COEFFICIENT - H(,9TO)/HRFR
IR SCAN TIME 17.22 SEC
HRFR = 0.291E-01

GROUP 46

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	0.029	0.029	0.028	0.027	0.029	0.027	0.028	0.027	0.025	0.022	0.021	0.019	0.017	0.015	0.015	0.012	0.012	0.009	0.009	0.007
30	0.028	0.029	0.025	0.024	0.021	0.020	0.015	0.015	0.010	0.009	0.004	0.004	0.001	0.003	0.003	0.001	0.001	0.001	0.001	0.001
31	0.019	0.014	0.012	0.007	0.005	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
32	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.002	0.001	0.002	0.001	0.002	0.002	0.002	0.002	0.001	0.001	0.002	0.001	0.002	0.002	0.001	0.001	0.002	0.002	0.001	0.001
37	0.004	0.004	0.004	0.004	0.004	0.003	0.003	0.003	0.003	0.002	0.002	0.003	0.001	0.002	0.001	0.002	0.002	0.002	0.002	0.002
38	0.003	0.004	0.002	0.004	0.002	0.004	0.003	0.003	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
39	0.005	0.004	0.004	0.003	0.005	0.004	0.004	0.003	0.004	0.003	0.004	0.002	0.002	0.001	0.004	0.002	0.003	0.001	0.002	0.001
40	0.006	0.005	0.006	0.004	0.005	0.004	0.006	0.003	0.005	0.003	0.005	0.003	0.004	0.002	0.004	0.002	0.004	0.002	0.002	0.002
41	0.006	0.006	0.005	0.006	0.006	0.006	0.005	0.005	0.004	0.005	0.004	0.005	0.004	0.005	0.004	0.004	0.002	0.003	0.002	0.004
42	0.008	0.007	0.008	0.007	0.008	0.006	0.007	0.005	0.007	0.006	0.006	0.004	0.005	0.004	0.005	0.003	0.004	0.003	0.002	0.002
43	0.007	0.009	0.008	0.009	0.008	0.009	0.006	0.007	0.007	0.008	0.004	0.006	0.005	0.005	0.005	0.005	0.004	0.004	0.004	0.004
44	0.010	0.009	0.010	0.009	0.009	0.007	0.009	0.007	0.009	0.007	0.008	0.007	0.007	0.006	0.007	0.005	0.007	0.005	0.007	0.004
45	0.013	0.013	0.012	0.013	0.011	0.010	0.010	0.010	0.009	0.009	0.009	0.009	0.007	0.009	0.006	0.008	0.005	0.007	0.005	0.007
46	0.017	0.017	0.015	0.016	0.014	0.015	0.014	0.014	0.012	0.013	0.011	0.012	0.010	0.012	0.010	0.010	0.010	0.010	0.009	0.009
47	0.021	0.021	0.019	0.020	0.018	0.018	0.016	0.015	0.015	0.015	0.014	0.014	0.013	0.014	0.012	0.013	0.012	0.012	0.010	0.012
48	0.025	0.024	0.022	0.022	0.020	0.020	0.019	0.018	0.017	0.017	0.016	0.016	0.015	0.015	0.014	0.014	0.014	0.014	0.013	0.013
49	0.044	0.032	0.027	0.023	0.023	0.021	0.021	0.019	0.020	0.018	0.018	0.017	0.017	0.016	0.016	0.015	0.015	0.014	0.015	0.014
50	0.087	0.051	0.037	0.032	0.028	0.026	0.023	0.022	0.021	0.021	0.020	0.020	0.018	0.018	0.017	0.017	0.016	0.015	0.015	0.016
51	0.233	0.118	0.062	0.039	0.033	0.031	0.029	0.024	0.024	0.022	0.023	0.021	0.021	0.020	0.020	0.018	0.018	0.017	0.017	0.016
52	0.313	0.281	0.179	0.091	0.052	0.035	0.030	0.029	0.025	0.023	0.020	0.021	0.018	0.020	0.017	0.018	0.015	0.017	0.015	0.017
53	0.311	0.302	0.292	0.214	0.109	0.058	0.038	0.032	0.028	0.025	0.019	0.018	0.017	0.015	0.014	0.014	0.013	0.012	0.011	0.014
54	0.381	0.355	0.330	0.314	0.248	0.139	0.070	0.045	0.034	0.031	0.027	0.021	0.018	0.017	0.015	0.014	0.014	0.014	0.013	0.015
55	0.415	0.422	0.410	0.384	0.364	0.323	0.221	0.112	0.060	0.042	0.032	0.030	0.025	0.021	0.018	0.017	0.015	0.016	0.015	0.018
56	0.418	0.420	0.424	0.428	0.424	0.419	0.398	0.283	0.141	0.073	0.046	0.035	0.031	0.027	0.021	0.020	0.018	0.019	0.018	0.021
57	0.398	0.410	0.412	0.408	0.410	0.419	0.437	0.437	0.347	0.194	0.094	0.056	0.040	0.032	0.029	0.023	0.021	0.019	0.021	0.019
58	0.380	0.389	0.400	0.413	0.420	0.419	0.416	0.427	0.441	0.388	0.253	0.139	0.074	0.047	0.035	0.031	0.025	0.023	0.021	0.021
59	0.359	0.366	0.371	0.378	0.391	0.407	0.424	0.436	0.446	0.456	0.421	0.279	0.135	0.072	0.047	0.035	0.032	0.027	0.023	0.019
60	0.353	0.357	0.362	0.367	0.368	0.374	0.391	0.418	0.454	0.487	0.506	0.473	0.330	0.179	0.090	0.054	0.037	0.032	0.028	0.024
61	0.364	0.361	0.362	0.368	0.374	0.376	0.380	0.392	0.420	0.461	0.498	0.468	0.430	0.393	0.263	0.128	0.069	0.044	0.035	0.030
62	0.358	0.359	0.360	0.359	0.360	0.363	0.374	0.389	0.410	0.428	0.417	0.389	0.397	0.417	0.428	0.345	0.189	0.090	0.055	0.037
63	0.383	0.383	0.383	0.381	0.381	0.383	0.392	0.411	0.437	0.449	0.404	0.377	0.373	0.360	0.336	0.327	0.318	0.228	0.114	0.063

IR HEAT TRANSFER COEFFICIENT - H(,9TO)/HRFR
IR SCAN TIME 17.22 SEC
HRFR = 0.291E-01

GROUP 46

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.005	0.002	0.004	0.001	0.002	0.001	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.002	0.002
30	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
31	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
32	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
37	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.002	0.002	0.002	0.002	0.002	0.001	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
40	0.002	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
41	0.001	0.002	0.002	0.003	0.001	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001
42	0.004	0.003	0.004	0.002	0.004	0.001	0.003	0.001	0.003	0.001	0.002	0.002	0.002	0.001	0.002	0.001	0.002	0.002	0.002	0.002
43	0.002	0.004	0.004	0.004	0.003	0.003	0.002	0.004	0.002	0.002	0.002	0.002	0.001	0.002	0.002	0.002	0.002	0.001	0.001	0.002
44	0.006	0.004	0.005	0.004	0.004	0.004	0.004	0.002	0.004	0.002	0.003	0.001	0.004	0.002	0.003	0.001	0.003	0.001	0.002	0.001
45	0.005	0.006	0.007	0.005	0.004	0.005	0.002	0.006	0.004	0.006	0.005	0.006	0.004	0.004	0.003	0.005	0.004	0.005	0.004	0.004
46	0.009	0.009	0.009	0.009	0.006	0.008	0.007	0.007	0.006	0.009	0.003	0.008	0.004	0.008	0.003	0.007	0.003	0.008	0.003	0.007
47	0.010	0.011	0.009	0.010	0.009	0.009	0.008	0.009	0.008	0.009	0.008	0.009	0.007	0.008	0.007	0.008	0.008	0.009	0.007	0.008
48	0.012	0.014	0.011	0.012	0.010	0.011	0.009	0.010	0.009	0.010	0.009	0.010	0.009	0.009	0.009	0.009	0.009	0.009	0.008	0.009
49	0.014	0.013	0.014	0.012	0.014	0.011	0.013	0.011	0.011	0.010	0.011	0.010	0.011	0.009	0.010	0.009	0.009	0.009	0.009	0.008
50	0.015	0.015	0.014	0.014	0.014	0.014	0.012	0.013	0.012	0.012	0.010	0.012	0.010	0.011	0.010	0.010	0.009	0.011	0.009	0.010
51	0.017	0.015	0.017	0.015	0.015	0.014	0.014	0.014	0.014	0.014	0.014	0.013	0.013	0.012	0.013	0.012	0.013	0.012	0.012	0.010
52	0.014	0.016	0.014	0.015	0.014	0.016	0.015	0.015	0.014	0.014	0.014	0.014	0.014	0.014	0.013	0.013	0.012	0.013	0.011	0.012
53	0.014	0.015	0.015	0.016	0.015	0.015	0.015	0.015	0.014	0.015	0.014	0.016	0.013	0.014	0.012	0.014	0.012	0.014	0.011	0.013
54	0.015	0.017	0.017	0.018	0.016	0.018	0.017	0.017	0.016	0.018	0.017	0.016	0.016	0.016	0.015	0.015	0.013	0.015	0.014	0.014
55	0.018	0.019	0.019	0.019	0.019	0.020	0.018	0.020	0.018	0.019	0.018	0.018	0.018	0.017	0.018	0.016	0.016	0.015	0.015	0.015
56	0.018	0.021	0.020	0.021	0.020	0.021	0.020	0.021	0.020	0.021	0.019	0.019	0.018	0.018	0.018	0.018	0.017	0.017	0.015	0.015
57	0.021	0.020	0.021	0.019	0.021	0.017	0.019	0.018	0.019	0.017	0.017	0.015	0.016	0.015	0.016	0.015	0.015	0.014	0.014	0.012
58	0.020	0.021	0.020	0.021	0.019	0.020	0.018	0.018	0.018	0.018	0.018	0.018	0.016	0.018	0.017	0.017	0.016	0.016	0.015	0.015
59	0.020	0.017	0.019	0.017	0.018	0.016	0.016	0.014	0.015	0.014	0.014	0.012	0.013	0.011	0.012	0.010	0.011	0.009	0.010	0.009
60	0.021	0.021	0.018	0.018	0.018	0.018	0.014	0.016	0.013	0.015	0.012	0.015	0.011	0.013	0.009	0.011	0.009	0.010	0.009	0.009
61	0.026	0.022	0.021	0.020	0.020	0.018	0.019	0.016	0.017	0.015	0.016	0.014	0.014	0.013	0.014	0.011	0.012	0.010	0.011	0.010
62	0.032	0.027	0.024	0.021	0.021	0.018	0.020	0.018	0.018	0.016	0.017	0.015	0.015	0.014	0.014	0.012	0.014	0.011	0.013	0.011
63	0.042	0.031	0.029	0.024	0.023	0.021	0.021	0.018	0.018	0.016	0.017	0.015	0.016	0.014	0.015	0.012	0.014	0.012	0.014	0.011

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 17.22 SEC
HRFR = 0.291E-01

GROUP 46

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
30	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
31	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
32	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
40	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
41	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
42	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
43	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
44	0.004	0.001	0.002	0.001	0.002	0.002	0.003	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.001	0.001
45	0.002	0.004	0.002	0.004	0.002	0.004	0.002	0.003	0.002	0.004	0.003	0.004	0.002	0.003	0.002	0.003	0.002	0.003	0.002	0.003
46	0.003	0.007	0.004	0.007	0.002	0.007	0.006	0.006	0.004	0.006	0.005	0.006	0.005	0.006	0.004	0.006	0.004	0.006	0.004	0.005
47	0.008	0.008	0.008	0.008	0.008	0.008	0.007	0.009	0.005	0.007	0.004	0.007	0.005	0.007	0.005	0.006	0.005	0.007	0.004	0.006
48	0.009	0.009	0.009	0.009	0.009	0.009	0.008	0.009	0.007	0.008	0.007	0.007	0.007	0.007	0.006	0.007	0.007	0.007	0.007	0.007
49	0.009	0.009	0.010	0.009	0.010	0.008	0.009	0.008	0.009	0.007	0.009	0.007	0.008	0.007	0.009	0.007	0.008	0.007	0.008	0.007
50	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.008	0.009	0.009	0.008	0.009	0.007	0.008	0.008	0.008
51	0.011	0.010	0.011	0.010	0.010	0.010	0.011	0.009	0.009	0.009	0.010	0.009	0.010	0.009	0.009	0.009	0.009	0.008	0.009	0.008
52	0.011	0.012	0.011	0.011	0.010	0.009	0.009	0.009	0.008	0.009	0.008	0.008	0.007	0.008	0.007	0.007	0.007	0.006	0.006	0.007
53	0.010	0.012	0.009	0.011	0.009	0.008	0.006	0.006	0.004	0.005	0.003	0.004	0.002	0.004	0.002	0.003	0.002	0.004	0.001	0.003
54	0.012	0.012	0.011	0.011	0.009	0.009	0.005	0.006	0.002	0.003	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.001	0.001	0.001
55	0.014	0.014	0.012	0.012	0.011	0.010	0.007	0.007	0.003	0.004	0.004	0.004	0.002	0.004	0.001	0.003	0.003	0.002	0.002	0.001
56	0.014	0.014	0.012	0.013	0.012	0.010	0.008	0.007	0.004	0.005	0.002	0.004	0.002	0.003	0.001	0.002	0.002	0.001	0.001	0.001
57	0.013	0.011	0.012	0.009	0.010	0.009	0.009	0.006	0.006	0.004	0.005	0.005	0.003	0.002	0.003	0.002	0.002	0.001	0.002	0.001
58	0.014	0.015	0.014	0.014	0.014	0.014	0.013	0.012	0.011	0.012	0.011	0.010	0.009	0.010	0.009	0.009	0.009	0.009	0.009	0.009
59	0.009	0.009	0.009	0.007	0.008	0.007	0.007	0.006	0.006	0.006	0.006	0.005	0.005	0.004	0.005	0.003	0.004	0.003	0.004	0.002
60	0.008	0.009	0.008	0.008	0.007	0.008	0.007	0.007	0.005	0.007	0.005	0.006	0.005	0.005	0.004	0.006	0.004	0.004	0.004	0.004
61	0.010	0.009	0.011	0.009	0.009	0.007	0.009	0.007	0.008	0.005	0.007	0.005	0.007	0.005	0.006	0.003	0.005	0.002	0.005	0.003
62	0.011	0.010	0.011	0.009	0.011	0.009	0.009	0.008	0.009	0.007	0.009	0.006	0.008	0.006	0.007	0.005	0.006	0.005	0.004	0.004
63	0.014	0.011	0.012	0.010	0.011	0.009	0.011	0.009	0.009	0.008	0.009	0.008	0.009	0.007	0.007	0.006	0.007	0.005	0.006	0.005

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 17.22 SEC
HRFR = 0.291E-01

GROUP 46

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
30	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
31	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
32	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
40	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
41	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
42	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
43	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
44	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
45	0.001	0.002	0.001	0.002	0.002	0.003	0.003	0.002	0.001	0.002
46	0.004	0.005	0.004	0.005	0.004	0.005	0.004	0.004	0.005	0.004
47	0.004	0.006	0.004	0.007	0.005	0.006	0.005	0.006	0.004	0.006
48	0.006	0.006	0.007	0.006	0.006	0.007	0.003	0.006	0.004	0.006
49	0.008	0.007	0.008	0.007	0.007	0.006	0.008	0.006	0.007	0.006
50	0.007	0.008	0.007	0.008	0.007	0.008	0.006	0.008	0.006	0.007
51	0.009	0.008	0.008	0.007	0.008	0.007	0.008	0.008	0.008	0.007
52	0.005	0.006	0.005	0.005	0.004	0.005	0.004	0.005	0.004	0.005
53	0.001	0.002	0.001	0.002	0.001	0.002	0.001	0.002	0.001	0.001
54	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
55	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
56	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
57	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
58	0.009	0.007	0.007	0.005	0.003	0.003	0.002	0.005	0.005	0.006
59	0.003	0.003	0.003	0.002	0.005	0.002	0.002	0.002	0.001	0.002
60	0.002	0.003	0.001	0.002	0.002	0.003	0.001	0.002	0.002	0.002
61	0.005	0.002	0.004	0.002	0.004	0.001	0.002	0.001	0.002	0.002
62	0.005	0.002	0.004	0.004	0.004	0.004	0.003	0.003	0.003	0.003
63	0.005	0.004	0.004	0.003	0.004	0.003	0.004	0.002	0.002	0.001

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
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50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 17.22 SEC
GROUP 46 HRFR = 0.291E-01

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.006	0.005	0.007	0.007	0.009	0.007	0.009	0.009	0.011	0.010	0.013	0.012	0.017	0.037	0.099	0.140	0.159	0.170	0.180	0.187
65	0.003	0.005	0.004	0.006	0.005	0.007	0.007	0.009	0.009	0.009	0.010	0.013	0.017	0.054	0.114	0.145	0.161	0.172	0.180	0.186
66	0.001	0.001	0.003	0.002	0.003	0.004	0.006	0.005	0.007	0.007	0.009	0.010	0.021	0.071	0.125	0.148	0.162	0.172	0.181	0.187
67	0.001	0.001	0.001	0.001	0.001	0.003	0.001	0.003	0.004	0.006	0.007	0.009	0.028	0.087	0.131	0.150	0.163	0.171	0.178	0.184
68	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.003	0.003	0.005	0.009	0.033	0.091	0.128	0.144	0.155	0.163	0.168	0.174
69	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.003	0.003	0.006	0.009	0.042	0.097	0.127	0.142	0.153	0.160	0.167	0.173
70	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.006	0.010	0.048	0.102	0.128	0.141	0.151	0.158	0.165	0.170
71	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.001	0.006	0.012	0.060	0.110	0.133	0.144	0.154	0.160	0.167	0.172
72	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.003	0.003	0.006	0.023	0.081	0.121	0.138	0.149	0.157	0.163	0.169	0.175
73	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.002	0.002	0.006	0.038	0.095	0.127	0.141	0.151	0.158	0.165	0.171	0.177
74	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.003	0.002	0.012	0.056	0.107	0.131	0.144	0.152	0.159	0.165	0.172	0.178
75	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.002	0.017	0.069	0.111	0.129	0.139	0.147	0.153	0.159	0.164	0.169
76	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.002	0.021	0.072	0.108	0.122	0.131	0.137	0.142	0.147	0.151	0.155
77	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.025	0.078	0.105	0.117	0.124	0.130	0.134	0.138	0.142	0.146
78	0.002	0.001	0.007	0.008	0.005	0.005	0.003	0.007	0.002	0.003	0.028	0.079	0.103	0.115	0.121	0.126	0.129	0.133	0.136	0.141
79	0.002	0.013	0.020	0.012	0.009	0.009	0.004	0.003	0.005	0.011	0.042	0.087	0.105	0.115	0.120	0.125	0.128	0.131	0.134	0.138
80	0.009	0.025	0.030	0.014	0.010	0.011	0.010	0.009	0.005	0.016	0.059	0.096	0.109	0.117	0.122	0.125	0.128	0.131	0.134	0.138
81	0.018	0.034	0.048	0.029	0.017	0.011	0.012	0.012	0.014	0.027	0.073	0.102	0.112	0.118	0.122	0.124	0.127	0.130	0.133	0.136
82	0.040	0.055	0.069	0.055	0.029	0.018	0.008	0.009	0.014	0.041	0.085	0.106	0.114	0.119	0.122	0.124	0.126	0.128	0.129	0.132
83	0.043	0.048	0.068	0.064	0.036	0.023	0.009	0.002	0.011	0.053	0.095	0.110	0.117	0.120	0.122	0.123	0.124	0.125	0.127	0.128
84	0.030	0.027	0.038	0.042	0.027	0.019	0.009	0.008	0.018	0.058	0.098	0.114	0.119	0.123	0.126	0.127	0.127	0.127	0.127	0.128
85	0.024	0.023	0.023	0.023	0.024	0.018	0.017	0.019	0.027	0.027	0.029	0.032	0.034	0.037	0.044	0.051	0.062	0.070	0.081	0.093
86	0.016	0.014	0.015	0.017	0.018	0.015	0.017	0.017	0.023	0.024	0.026	0.024	0.025	0.025	0.027	0.024	0.023	0.022	0.023	0.022
87	0.004	0.005	0.006	0.008	0.009	0.008	0.010	0.017	0.022	0.021	0.021	0.023	0.024	0.022	0.021	0.021	0.023	0.021	0.022	0.021
88	0.001	0.001	0.001	0.001	0.001	0.004	0.007	0.015	0.020	0.021	0.021	0.023	0.021	0.022	0.020	0.020	0.018	0.020	0.020	0.021
89	0.001	0.001	0.001	0.001	0.002	0.004	0.008	0.014	0.021	0.021	0.023	0.021	0.021	0.019	0.018	0.018	0.018	0.016	0.017	0.017
90	0.001	0.001	0.001	0.001	0.001	0.002	0.003	0.010	0.017	0.020	0.019	0.019	0.018	0.018	0.016	0.016	0.015	0.015	0.015	0.015
91	0.001	0.001	0.001	0.001	0.001	0.001	0.004	0.008	0.016	0.018	0.019	0.017	0.018	0.016	0.017	0.017	0.016	0.015	0.016	0.014
92	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.006	0.013	0.018	0.018	0.019	0.016	0.018	0.015	0.016	0.014	0.017	0.015	0.015
93	0.002	0.002	0.002	0.002	0.002	0.001	0.004	0.005	0.015	0.017	0.018	0.018	0.018	0.017	0.018	0.016	0.016	0.015	0.015	0.011
94	0.005	0.004	0.004	0.003	0.006	0.005	0.007	0.009	0.015	0.016	0.018	0.017	0.019	0.017	0.018	0.018	0.017	0.015	0.015	0.013
95	0.009	0.009	0.010	0.009	0.010	0.009	0.010	0.011	0.018	0.019	0.018	0.018	0.019	0.018	0.021	0.018	0.019	0.016	0.015	0.012
96	0.012	0.012	0.014	0.013	0.015	0.012	0.012	0.014	0.020	0.020	0.021	0.021	0.023	0.021	0.023	0.023	0.023	0.019	0.017	0.014
97	0.013	0.014	0.014	0.015	0.014	0.014	0.011	0.015	0.018	0.020	0.019	0.022	0.023	0.024	0.023	0.024	0.022	0.021	0.015	0.015
98	0.014	0.014	0.014	0.014	0.013	0.014	0.012	0.014	0.020	0.018	0.018	0.020	0.023	0.024	0.025	0.023	0.021	0.019	0.019	0.018

IP HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 17.22 SEC
HRFR = 0.291E-01

GROUP 46

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	0.192	0.198	0.206	0.212	0.223	0.235	0.247	0.261	0.277	0.287	0.297	0.312	0.331	0.335	0.336	0.340	0.344	0.350	0.356	0.362
65	0.191	0.199	0.208	0.215	0.225	0.236	0.247	0.260	0.275	0.288	0.294	0.308	0.325	0.328	0.328	0.336	0.339	0.345	0.347	0.353
66	0.193	0.200	0.208	0.217	0.227	0.238	0.250	0.262	0.276	0.293	0.303	0.306	0.315	0.322	0.326	0.331	0.339	0.342	0.342	0.347
67	0.190	0.197	0.204	0.213	0.222	0.232	0.243	0.257	0.269	0.283	0.295	0.302	0.305	0.309	0.318	0.324	0.325	0.325	0.326	0.331
68	0.180	0.186	0.194	0.202	0.211	0.221	0.232	0.245	0.259	0.272	0.287	0.298	0.304	0.306	0.311	0.319	0.325	0.328	0.332	0.335
69	0.179	0.184	0.192	0.199	0.209	0.218	0.226	0.236	0.249	0.263	0.279	0.293	0.301	0.308	0.314	0.316	0.318	0.321	0.327	0.330
70	0.177	0.183	0.191	0.198	0.206	0.217	0.225	0.232	0.241	0.254	0.267	0.278	0.287	0.292	0.298	0.303	0.310	0.317	0.324	0.330
71	0.177	0.183	0.191	0.198	0.204	0.214	0.224	0.231	0.240	0.251	0.262	0.270	0.277	0.280	0.283	0.284	0.289	0.294	0.299	0.304
72	0.180	0.186	0.192	0.199	0.206	0.214	0.225	0.232	0.243	0.253	0.263	0.270	0.277	0.279	0.281	0.281	0.284	0.288	0.291	0.292
73	0.183	0.189	0.196	0.204	0.213	0.223	0.232	0.243	0.251	0.259	0.267	0.275	0.283	0.288	0.287	0.285	0.284	0.285	0.288	0.291
74	0.184	0.190	0.197	0.204	0.213	0.224	0.233	0.242	0.254	0.262	0.271	0.280	0.292	0.298	0.294	0.290	0.289	0.289	0.292	0.296
75	0.174	0.180	0.187	0.194	0.202	0.210	0.219	0.229	0.238	0.248	0.256	0.263	0.268	0.274	0.278	0.282	0.287	0.291	0.292	0.296
76	0.160	0.164	0.170	0.176	0.183	0.190	0.197	0.203	0.209	0.216	0.223	0.227	0.231	0.234	0.237	0.238	0.240	0.242	0.246	0.249
77	0.150	0.154	0.158	0.163	0.168	0.174	0.180	0.186	0.191	0.196	0.199	0.203	0.206	0.208	0.208	0.208	0.207	0.205	0.203	0.201
78	0.144	0.149	0.153	0.158	0.162	0.168	0.174	0.180	0.185	0.190	0.193	0.196	0.197	0.198	0.198	0.199	0.200	0.200	0.198	0.196
79	0.142	0.147	0.151	0.156	0.160	0.167	0.172	0.178	0.183	0.189	0.193	0.197	0.199	0.201	0.202	0.203	0.204	0.204	0.204	0.203
80	0.142	0.146	0.150	0.155	0.160	0.165	0.171	0.178	0.185	0.191	0.196	0.201	0.204	0.205	0.206	0.207	0.206	0.206	0.207	0.208
81	0.140	0.143	0.148	0.152	0.158	0.164	0.170	0.175	0.182	0.188	0.193	0.198	0.201	0.203	0.204	0.205	0.206	0.206	0.206	0.206
82	0.135	0.139	0.144	0.150	0.154	0.160	0.165	0.170	0.176	0.181	0.184	0.188	0.190	0.193	0.193	0.194	0.195	0.197	0.197	0.199
83	0.131	0.134	0.138	0.143	0.149	0.153	0.159	0.163	0.167	0.171	0.175	0.177	0.179	0.181	0.181	0.180	0.180	0.180	0.180	0.180
84	0.129	0.131	0.133	0.137	0.141	0.147	0.152	0.156	0.160	0.163	0.167	0.169	0.169	0.169	0.169	0.168	0.168	0.167	0.166	0.165
85	0.098	0.103	0.112	0.122	0.129	0.132	0.135	0.139	0.144	0.151	0.172	0.183	0.167	0.153	0.150	0.150	0.150	0.151	0.151	0.150
86	0.023	0.023	0.025	0.023	0.027	0.025	0.027	0.025	0.028	0.027	0.032	0.034	0.034	0.031	0.031	0.032	0.034	0.035	0.038	0.038
87	0.021	0.022	0.023	0.022	0.022	0.021	0.021	0.022	0.021	0.021	0.020	0.021	0.021	0.021	0.020	0.021	0.021	0.021	0.021	0.022
88	0.021	0.021	0.020	0.021	0.020	0.021	0.021	0.021	0.020	0.020	0.018	0.020	0.018	0.020	0.019	0.020	0.018	0.019	0.018	0.018
89	0.018	0.017	0.019	0.018	0.021	0.019	0.021	0.019	0.021	0.019	0.020	0.018	0.020	0.018	0.018	0.018	0.018	0.017	0.018	0.017
90	0.014	0.015	0.015	0.016	0.015	0.017	0.016	0.018	0.017	0.018	0.018	0.018	0.019	0.019	0.018	0.018	0.017	0.018	0.016	0.017
91	0.015	0.014	0.016	0.015	0.016	0.015	0.016	0.015	0.017	0.018	0.027	0.055	0.076	0.056	0.029	0.020	0.018	0.017	0.018	0.017
92	0.014	0.015	0.014	0.015	0.013	0.015	0.015	0.015	0.015	0.018	0.023	0.058	0.086	0.072	0.038	0.023	0.017	0.015	0.015	0.016
93	0.014	0.009	0.014	0.009	0.014	0.010	0.015	0.012	0.016	0.013	0.017	0.014	0.018	0.015	0.017	0.015	0.016	0.015	0.016	0.015
94	0.012	0.011	0.012	0.012	0.015	0.014	0.015	0.014	0.016	0.015	0.016	0.015	0.015	0.014	0.015	0.014	0.015	0.014	0.014	0.012
95	0.013	0.011	0.014	0.014	0.014	0.014	0.016	0.015	0.017	0.017	0.018	0.016	0.017	0.015	0.016	0.015	0.015	0.014	0.015	0.014
96	0.014	0.011	0.014	0.014	0.016	0.015	0.017	0.016	0.018	0.017	0.019	0.018	0.018	0.016	0.016	0.015	0.015	0.014	0.015	0.014
97	0.014	0.016	0.014	0.015	0.014	0.016	0.016	0.018	0.017	0.019	0.017	0.018	0.017	0.017	0.015	0.015	0.014	0.015	0.014	0.014
98	0.019	0.017	0.017	0.017	0.019	0.018	0.019	0.018	0.018	0.016	0.019	0.017	0.018	0.016	0.017	0.015	0.015	0.015	0.016	0.015

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 17.22 SEC
GROUP 46 HRFR = 0.291E-01

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	0.369	0.372	0.375	0.381	0.390	0.400	0.413	0.435	0.458	0.434	0.406	0.402	0.399	0.394	0.375	0.333	0.265	0.203	0.147	0.086
65	0.360	0.366	0.368	0.362	0.354	0.353	0.364	0.398	0.428	0.411	0.410	0.413	0.411	0.411	0.410	0.405	0.388	0.345	0.264	0.170
66	0.351	0.355	0.356	0.359	0.361	0.358	0.348	0.326	0.285	0.258	0.275	0.306	0.340	0.361	0.377	0.390	0.398	0.401	0.394	0.356
67	0.334	0.338	0.340	0.343	0.352	0.364	0.374	0.390	0.388	0.325	0.283	0.236	0.202	0.201	0.227	0.270	0.317	0.357	0.385	0.392
68	0.338	0.343	0.348	0.347	0.348	0.362	0.380	0.394	0.388	0.369	0.364	0.351	0.327	0.281	0.232	0.193	0.177	0.189	0.223	0.269
69	0.333	0.337	0.345	0.353	0.360	0.369	0.387	0.406	0.391	0.367	0.368	0.369	0.367	0.359	0.345	0.321	0.283	0.237	0.199	0.176
70	0.334	0.338	0.344	0.348	0.354	0.366	0.382	0.399	0.395	0.373	0.369	0.363	0.360	0.360	0.358	0.354	0.351	0.341	0.318	0.284
71	0.311	0.319	0.330	0.342	0.352	0.361	0.377	0.405	0.392	0.366	0.364	0.360	0.357	0.357	0.357	0.352	0.351	0.352	0.355	0.356
72	0.294	0.295	0.297	0.299	0.302	0.312	0.334	0.370	0.352	0.342	0.361	0.366	0.367	0.367	0.367	0.366	0.367	0.367	0.373	0.380
73	0.294	0.295	0.291	0.288	0.289	0.295	0.308	0.328	0.330	0.318	0.317	0.318	0.321	0.325	0.330	0.341	0.345	0.349	0.357	0.364
74	0.303	0.307	0.307	0.306	0.304	0.310	0.329	0.354	0.360	0.333	0.320	0.311	0.304	0.294	0.283	0.274	0.260	0.248	0.242	0.239
75	0.299	0.306	0.314	0.319	0.320	0.328	0.345	0.370	0.369	0.337	0.332	0.328	0.322	0.318	0.312	0.307	0.299	0.290	0.277	0.256
76	0.253	0.259	0.267	0.274	0.285	0.297	0.315	0.341	0.327	0.286	0.312	0.323	0.326	0.326	0.327	0.326	0.326	0.323	0.318	0.310
77	0.199	0.197	0.195	0.192	0.191	0.191	0.192	0.197	0.201	0.197	0.197	0.203	0.211	0.221	0.229	0.240	0.252	0.264	0.275	0.287
78	0.192	0.189	0.184	0.178	0.172	0.165	0.159	0.153	0.148	0.139	0.127	0.122	0.119	0.117	0.116	0.117	0.117	0.120	0.124	0.128
79	0.203	0.202	0.200	0.196	0.194	0.190	0.187	0.183	0.180	0.171	0.152	0.141	0.131	0.122	0.113	0.107	0.102	0.099	0.097	0.096
80	0.208	0.209	0.209	0.208	0.207	0.207	0.206	0.209	0.212	0.210	0.194	0.186	0.179	0.170	0.158	0.148	0.135	0.126	0.116	0.108
81	0.207	0.208	0.209	0.209	0.210	0.211	0.213	0.216	0.222	0.225	0.215	0.209	0.208	0.205	0.201	0.195	0.188	0.179	0.170	0.158
82	0.199	0.200	0.200	0.201	0.201	0.202	0.203	0.206	0.213	0.219	0.209	0.205	0.205	0.205	0.204	0.203	0.203	0.200	0.198	0.195
83	0.181	0.181	0.182	0.182	0.183	0.183	0.183	0.185	0.189	0.194	0.188	0.180	0.181	0.179	0.178	0.177	0.177	0.177	0.177	0.177
84	0.164	0.164	0.162	0.162	0.160	0.160	0.159	0.158	0.159	0.162	0.159	0.150	0.148	0.147	0.144	0.142	0.141	0.139	0.137	0.137
85	0.151	0.151	0.153	0.152	0.152	0.151	0.151	0.150	0.150	0.150	0.149	0.138	0.134	0.132	0.129	0.126	0.124	0.121	0.119	0.117
86	0.041	0.042	0.047	0.048	0.050	0.052	0.054	0.055	0.058	0.063	0.069	0.065	0.063	0.062	0.065	0.062	0.060	0.060	0.061	0.062
87	0.020	0.022	0.021	0.023	0.021	0.022	0.020	0.022	0.021	0.021	0.019	0.021	0.018	0.018	0.017	0.018	0.016	0.016	0.015	0.016
88	0.018	0.019	0.018	0.020	0.018	0.020	0.018	0.019	0.018	0.018	0.017	0.017	0.015	0.015	0.015	0.014	0.014	0.013	0.010	0.011
89	0.018	0.017	0.018	0.017	0.018	0.017	0.018	0.016	0.017	0.015	0.016	0.015	0.014	0.014	0.014	0.011	0.012	0.010	0.010	0.009
90	0.017	0.018	0.017	0.018	0.017	0.017	0.015	0.015	0.015	0.015	0.014	0.015	0.013	0.014	0.012	0.012	0.010	0.010	0.009	0.009
91	0.017	0.016	0.017	0.015	0.017	0.016	0.017	0.017	0.017	0.015	0.020	0.032	0.038	0.024	0.016	0.013	0.011	0.009	0.009	0.009
92	0.015	0.016	0.015	0.016	0.015	0.016	0.015	0.015	0.014	0.015	0.025	0.059	0.074	0.053	0.025	0.015	0.011	0.010	0.009	0.009
93	0.017	0.015	0.016	0.017	0.017	0.015	0.017	0.015	0.015	0.014	0.014	0.018	0.025	0.019	0.014	0.012	0.011	0.009	0.009	0.008
94	0.015	0.013	0.015	0.014	0.015	0.014	0.015	0.014	0.015	0.012	0.013	0.010	0.013	0.010	0.011	0.009	0.009	0.008	0.009	0.007
95	0.014	0.014	0.015	0.014	0.015	0.013	0.015	0.015	0.015	0.014	0.014	0.012	0.012	0.010	0.010	0.009	0.010	0.007	0.009	0.007
96	0.015	0.014	0.014	0.014	0.015	0.014	0.015	0.014	0.015	0.014	0.014	0.011	0.013	0.010	0.011	0.009	0.010	0.008	0.009	0.007
97	0.014	0.014	0.013	0.013	0.013	0.015	0.014	0.015	0.015	0.015	0.014	0.014	0.011	0.011	0.009	0.009	0.007	0.007	0.008	0.008
98	0.015	0.013	0.014	0.012	0.014	0.013	0.014	0.014	0.015	0.014	0.014	0.012	0.012	0.010	0.010	0.009	0.009	0.008	0.009	0.008

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NASA/RI OH90 TRANSITION TEST
V41R-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR HEAT TRANSFER COEFFICIENT - H(,9TO)/HRFR
IR SCAN TIME 17.22 SEC
GROUP 46 HRFR = 0.291E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.051	0.035	0.031	0.027	0.025	0.021	0.021	0.019	0.019	0.017	0.016	0.015	0.015	0.015	0.016	0.014	0.015	0.013	0.014	0.012
65	0.094	0.055	0.038	0.032	0.029	0.025	0.021	0.020	0.018	0.018	0.017	0.017	0.015	0.016	0.014	0.015	0.014	0.014	0.012	0.013
66	0.273	0.166	0.083	0.049	0.035	0.029	0.027	0.021	0.019	0.017	0.017	0.015	0.016	0.014	0.014	0.014	0.014	0.012	0.012	0.011
67	0.383	0.342	0.241	0.124	0.062	0.041	0.028	0.027	0.019	0.018	0.014	0.015	0.011	0.014	0.010	0.012	0.009	0.010	0.008	0.009
68	0.314	0.341	0.340	0.279	0.163	0.078	0.047	0.032	0.028	0.022	0.017	0.014	0.014	0.011	0.011	0.009	0.009	0.009	0.008	0.007
69	0.169	0.179	0.204	0.224	0.221	0.165	0.096	0.054	0.035	0.027	0.024	0.017	0.014	0.012	0.012	0.009	0.009	0.008	0.008	0.007
70	0.243	0.205	0.181	0.170	0.164	0.155	0.131	0.081	0.046	0.031	0.027	0.024	0.021	0.014	0.012	0.012	0.010	0.009	0.009	0.006
71	0.353	0.341	0.312	0.265	0.216	0.179	0.158	0.134	0.092	0.051	0.035	0.027	0.025	0.021	0.016	0.012	0.010	0.009	0.009	0.007
72	0.380	0.381	0.387	0.387	0.376	0.348	0.304	0.247	0.188	0.126	0.071	0.041	0.029	0.025	0.023	0.015	0.014	0.009	0.009	0.008
73	0.372	0.379	0.385	0.385	0.383	0.384	0.389	0.394	0.379	0.329	0.245	0.143	0.068	0.040	0.027	0.023	0.017	0.013	0.009	0.009
74	0.244	0.255	0.276	0.291	0.310	0.332	0.349	0.357	0.364	0.364	0.342	0.275	0.171	0.088	0.053	0.029	0.024	0.018	0.013	0.009
75	0.231	0.203	0.176	0.156	0.146	0.147	0.154	0.168	0.184	0.204	0.226	0.244	0.241	0.191	0.106	0.050	0.029	0.021	0.017	0.014
76	0.305	0.296	0.286	0.270	0.249	0.221	0.189	0.157	0.132	0.117	0.110	0.106	0.104	0.101	0.091	0.063	0.036	0.023	0.021	0.018
77	0.297	0.305	0.310	0.310	0.307	0.304	0.299	0.290	0.274	0.248	0.210	0.172	0.140	0.120	0.110	0.100	0.075	0.044	0.025	0.020
78	0.135	0.144	0.155	0.169	0.186	0.203	0.220	0.238	0.254	0.272	0.288	0.295	0.288	0.263	0.225	0.182	0.140	0.103	0.063	0.033
79	0.096	0.096	0.095	0.095	0.095	0.095	0.098	0.101	0.105	0.111	0.120	0.133	0.152	0.173	0.192	0.202	0.196	0.175	0.141	0.098
80	0.102	0.098	0.096	0.095	0.094	0.092	0.091	0.092	0.093	0.094	0.095	0.095	0.094	0.095	0.097	0.098	0.100	0.105	0.112	0.117
81	0.147	0.133	0.121	0.111	0.104	0.098	0.095	0.092	0.092	0.091	0.094	0.094	0.095	0.093	0.093	0.093	0.095	0.092	0.091	0.090
82	0.189	0.181	0.171	0.160	0.149	0.138	0.127	0.117	0.107	0.099	0.095	0.092	0.091	0.091	0.090	0.091	0.094	0.092	0.089	0.090
83	0.176	0.174	0.174	0.172	0.169	0.167	0.166	0.162	0.156	0.147	0.138	0.126	0.115	0.104	0.097	0.092	0.090	0.087	0.087	0.086
84	0.136	0.135	0.134	0.134	0.132	0.132	0.132	0.133	0.134	0.135	0.136	0.137	0.136	0.135	0.132	0.127	0.120	0.113	0.106	0.100
85	0.116	0.114	0.113	0.112	0.111	0.110	0.110	0.109	0.109	0.108	0.109	0.110	0.112	0.112	0.114	0.115	0.117	0.116	0.117	0.117
86	0.064	0.064	0.066	0.067	0.068	0.067	0.068	0.068	0.069	0.069	0.070	0.069	0.070	0.070	0.075	0.077	0.080	0.081	0.086	0.090
87	0.015	0.015	0.014	0.015	0.014	0.014	0.014	0.014	0.012	0.013	0.011	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.013	0.012
88	0.009	0.011	0.009	0.012	0.009	0.010	0.008	0.009	0.007	0.009	0.006	0.008	0.005	0.009	0.008	0.009	0.008	0.009	0.008	0.008
89	0.010	0.009	0.010	0.008	0.008	0.008	0.009	0.006	0.007	0.006	0.007	0.005	0.006	0.005	0.006	0.004	0.007	0.005	0.007	0.004
90	0.008	0.009	0.008	0.008	0.007	0.007	0.006	0.007	0.006	0.006	0.005	0.005	0.004	0.005	0.006	0.010	0.009	0.007	0.005	0.007
91	0.010	0.009	0.009	0.009	0.008	0.007	0.008	0.006	0.008	0.009	0.014	0.011	0.007	0.003	0.005	0.005	0.007	0.005	0.006	0.005
92	0.009	0.009	0.007	0.007	0.007	0.007	0.006	0.008	0.009	0.021	0.040	0.039	0.020	0.009	0.004	0.004	0.004	0.005	0.004	0.005
93	0.009	0.007	0.008	0.007	0.008	0.006	0.007	0.005	0.007	0.007	0.014	0.015	0.010	0.005	0.005	0.003	0.004	0.004	0.005	0.004
94	0.009	0.007	0.008	0.006	0.008	0.005	0.006	0.004	0.006	0.005	0.005	0.004	0.004	0.003	0.004	0.003	0.005	0.005	0.005	0.005
95	0.008	0.005	0.007	0.005	0.007	0.003	0.006	0.003	0.005	0.002	0.005	0.002	0.004	0.002	0.004	0.003	0.006	0.004	0.006	0.005
96	0.007	0.006	0.006	0.005	0.006	0.005	0.005	0.004	0.004	0.004	0.004	0.003	0.004	0.002	0.004	0.003	0.006	0.004	0.007	0.005
97	0.007	0.007	0.006	0.006	0.005	0.006	0.005	0.005	0.004	0.005	0.002	0.003	0.002	0.003	0.003	0.006	0.007	0.008	0.007	0.009
98	0.008	0.006	0.007	0.006	0.007	0.005	0.006	0.004	0.005	0.004	0.005	0.003	0.004	0.003	0.007	0.014	0.017	0.014	0.013	0.011

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 17.22 SEC
GROUP 46 HREF = 0.291E-01

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.014	0.012	0.013	0.011	0.012	0.010	0.011	0.009	0.010	0.009	0.009	0.007	0.009	0.006	0.008	0.005	0.007	0.004	0.006	0.004
65	0.012	0.013	0.011	0.011	0.010	0.010	0.009	0.009	0.008	0.009	0.007	0.008	0.007	0.006	0.005	0.006	0.005	0.004	0.004	0.003
66	0.011	0.010	0.011	0.009	0.009	0.009	0.009	0.007	0.007	0.006	0.007	0.005	0.006	0.004	0.005	0.003	0.004	0.002	0.003	0.001
67	0.009	0.009	0.008	0.007	0.007	0.007	0.005	0.006	0.005	0.005	0.003	0.004	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
68	0.007	0.004	0.007	0.003	0.005	0.001	0.004	0.001	0.004	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
69	0.007	0.005	0.006	0.004	0.005	0.003	0.004	0.001	0.003	0.001	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001
70	0.007	0.005	0.007	0.004	0.005	0.004	0.005	0.002	0.003	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
71	0.008	0.007	0.007	0.007	0.005	0.004	0.005	0.003	0.004	0.001	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
72	0.008	0.006	0.006	0.005	0.007	0.004	0.004	0.003	0.004	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001
73	0.007	0.007	0.006	0.006	0.004	0.004	0.004	0.004	0.002	0.003	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
74	0.009	0.007	0.007	0.006	0.006	0.004	0.005	0.003	0.004	0.001	0.002	0.002	0.002	0.001	0.002	0.002	0.002	0.002	0.002	0.002
75	0.007	0.007	0.004	0.005	0.002	0.005	0.001	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
76	0.015	0.010	0.008	0.004	0.004	0.003	0.004	0.002	0.002	0.001	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
77	0.016	0.015	0.014	0.009	0.005	0.004	0.001	0.002	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
78	0.020	0.016	0.013	0.013	0.012	0.008	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
79	0.053	0.028	0.018	0.013	0.010	0.010	0.009	0.009	0.005	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
80	0.104	0.069	0.032	0.019	0.014	0.014	0.011	0.010	0.010	0.011	0.010	0.008	0.005	0.003	0.001	0.002	0.002	0.001	0.001	0.001
81	0.088	0.076	0.051	0.024	0.014	0.010	0.009	0.008	0.008	0.007	0.007	0.006	0.006	0.005	0.006	0.003	0.002	0.002	0.002	0.002
82	0.088	0.088	0.080	0.059	0.030	0.014	0.007	0.007	0.005	0.006	0.004	0.005	0.002	0.006	0.004	0.005	0.004	0.005	0.005	0.004
83	0.088	0.088	0.088	0.082	0.066	0.038	0.018	0.009	0.007	0.005	0.005	0.003	0.004	0.003	0.004	0.004	0.005	0.005	0.004	0.004
84	0.095	0.092	0.089	0.087	0.083	0.071	0.047	0.023	0.009	0.006	0.003	0.003	0.001	0.003	0.002	0.002	0.002	0.002	0.001	0.002
85	0.119	0.119	0.120	0.118	0.115	0.107	0.091	0.065	0.036	0.014	0.007	0.002	0.002	0.001	0.002	0.001	0.003	0.001	0.003	0.001
86	0.095	0.097	0.097	0.098	0.097	0.098	0.095	0.085	0.065	0.037	0.014	0.004	0.002	0.001	0.001	0.001	0.003	0.001	0.001	0.001
87	0.012	0.012	0.010	0.011	0.010	0.010	0.010	0.011	0.009	0.008	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001
88	0.007	0.006	0.004	0.005	0.003	0.004	0.002	0.003	0.003	0.002	0.001	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001
89	0.005	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
90	0.009	0.009	0.004	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
91	0.007	0.005	0.004	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
92	0.004	0.004	0.002	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
93	0.005	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
94	0.006	0.004	0.004	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
95	0.005	0.004	0.004	0.004	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
96	0.007	0.004	0.004	0.004	0.004	0.004	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
97	0.007	0.006	0.004	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
98	0.012	0.014	0.010	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001

IR HEAT TRANSFER COEFFICIENT = H(.9IO)/HREF
IR SCAN TIME 17.22 SEC
HREF = 0.291E-01

GROUP 46

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.005	0.004	0.004	0.002	0.004	0.003	0.004	0.001	0.003	0.001
65	0.002	0.002	0.002	0.002	0.001	0.002	0.002	0.002	0.002	0.001
66	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
67	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
68	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
69	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
70	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
71	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
72	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
73	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
74	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
75	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
76	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
77	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
78	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
79	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
80	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
81	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
82	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
83	0.004	0.004	0.004	0.004	0.004	0.004	0.003	0.003	0.003	0.003
84	0.002	0.002	0.001	0.002	0.002	0.002	0.004	0.002	0.001	0.001
85	0.002	0.001	0.003	0.003	0.002	0.002	0.001	0.001	0.002	0.002
86	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
87	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
88	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
89	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
90	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
91	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
92	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
93	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
94	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
95	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
96	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
97	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
98	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

GROUP 53

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
655 20	594.023	594.066	594.066	594.023	0.000	591.671
655 21	594.284	594.328	594.066	594.328	0.000	591.671
655 22	594.589	594.632	594.066	594.676	0.000	591.671
655 23	594.806	594.763	594.066	594.937	0.000	591.671
655 24	594.894	594.894	594.066	595.024	0.000	591.671
655 24	594.894	594.894	594.066	595.155	0.000	591.671
655 25	594.981	595.024	594.066	595.242	0.000	591.671
655 25	595.068	595.024	594.066	595.242	0.000	591.671
655 25	595.068	595.068	594.066	595.285	0.000	591.671
655 26	595.155	595.111	594.066	595.372	0.000	591.671
655 26	595.198	595.155	594.066	595.459	0.000	591.671
655 27	595.285	595.198	594.066	595.503	0.000	591.671
655 27	595.329	595.242	594.066	595.503	0.000	591.671
655 28	595.372	595.329	594.066	595.634	0.000	591.671
655 28	595.372	595.329	594.066	595.634	0.000	591.671
655 29	595.459	595.416	594.066	595.721	0.000	591.671
655 30	595.547	595.503	594.066	595.808	0.000	591.671
655 31	595.590	595.547	594.066	595.851	0.000	591.671
655 31	595.590	595.547	594.066	595.851	0.000	591.671
655 32	595.677	595.590	594.066	595.938	0.000	591.671
655 32	595.677	595.590	594.066	595.938	0.000	591.671
655 33	595.721	595.634	594.066	595.982	0.000	591.671
655 33	595.721	595.634	594.066	595.982	0.000	591.671
655 34	595.764	595.677	594.066	596.025	0.000	591.671
655 34	595.808	595.721	594.066	596.025	0.000	591.671
655 35	595.808	595.721	594.066	596.025	0.000	591.671
655 35	595.808	595.764	594.066	596.069	0.000	591.671
655 36	595.851	595.808	594.066	596.069	0.000	591.671
655 37	595.895	595.808	594.066	596.112	0.000	591.671

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

GROUP	* * * * TITLE TYPE	MODEL DESCRIPTION * * * * GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
53	RSI FORWARD	0.01	0.005	0.04	29.96	0.053	6	55	5

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/F FT-1	HRFR BTU/FT2-SEC-R	INITIAL TEMP DEG R
7.99	668.16	1326.67	96.36	0.0690	3845.	0.601E-04	0.776E-07	0.298E+07	0.364E-01	535.7

IR CAMERA INFORMATION

MOUNTING LOCATION	260
F STOP	2.5
LENS-DEG	15
SENSITIVITY	1000.
BLACK LEVEL VOLTAGE	2.3788
LINE SCAN PHI	90
MODEL EMISSIVITY	0.96
REF EMISSIVITY	0.94
WINDOW FACTOR	0.840

TIME RECORDS

LIFT OFF	0.00
CENTER LINE	1.99
IR SCAN TIME	11.94
DELTA TIME,SEC	10.82
PHOTO 1 TIME	655
PHOTO 2 TIME	0
PHOTO 3 TIME	0
PHOTO 4 TIME	0

REFERENCE TARGET INFORMATION

TCR5	591.98
TCR6	591.24

DIGITAL DATA AREA PRINTOUT LOCATION

LINE 29 THROUGH 98
POINT 1 THROUGH 110

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP COPP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 10.82 SEC
INITIAL TEMP 535.7 DEG. R

GROUP 53

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	1.114	1.122	1.128	1.129	1.128	1.119	1.119	1.120	1.126	1.125	1.125	1.125	1.122	1.129	1.129	1.131	1.132	1.136	1.135	1.136
30	1.128	1.128	1.126	1.123	1.119	1.119	1.117	1.125	1.126	1.131	1.131	1.135	1.131	1.133	1.131	1.133	1.133	1.136	1.132	1.132
31	1.126	1.120	1.122	1.119	1.123	1.123	1.131	1.131	1.133	1.132	1.133	1.132	1.135	1.133	1.137	1.133	1.131	1.123	1.119	1.111
32	1.122	1.120	1.122	1.128	1.129	1.135	1.133	1.133	1.129	1.132	1.132	1.133	1.131	1.128	1.122	1.117	1.110	1.108	1.106	1.111
33	1.125	1.128	1.129	1.132	1.129	1.131	1.129	1.131	1.128	1.129	1.123	1.120	1.110	1.105	1.103	1.108	1.111	1.117	1.116	1.120
34	1.136	1.133	1.129	1.125	1.125	1.125	1.122	1.117	1.114	1.110	1.100	1.103	1.102	1.105	1.110	1.117	1.119	1.122	1.122	1.126
35	1.129	1.126	1.126	1.117	1.116	1.106	1.105	1.096	1.102	1.102	1.105	1.103	1.110	1.108	1.119	1.119	1.122	1.123	1.125	1.120
36	1.119	1.113	1.106	1.102	1.096	1.098	1.100	1.102	1.108	1.108	1.110	1.113	1.116	1.119	1.117	1.120	1.116	1.108	1.091	1.076
37	1.103	1.098	1.098	1.098	1.102	1.105	1.106	1.110	1.110	1.114	1.117	1.117	1.122	1.116	1.108	1.091	1.078	1.059	1.054	1.047
38	1.096	1.100	1.105	1.105	1.108	1.108	1.111	1.113	1.119	1.117	1.117	1.110	1.098	1.080	1.065	1.052	1.052	1.052	1.052	1.049
39	1.102	1.103	1.106	1.110	1.110	1.111	1.114	1.119	1.111	1.102	1.086	1.070	1.057	1.052	1.049	1.052	1.052	1.052	1.052	1.054
40	1.108	1.111	1.113	1.113	1.116	1.116	1.106	1.093	1.078	1.059	1.054	1.052	1.052	1.052	1.054	1.052	1.057	1.052	1.052	1.052
41	1.116	1.117	1.122	1.117	1.106	1.086	1.072	1.057	1.054	1.052	1.054	1.052	1.054	1.052	1.057	1.054	1.057	1.057	1.057	1.057
42	1.131	1.122	1.110	1.080	1.065	1.049	1.052	1.044	1.054	1.047	1.057	1.047	1.057	1.057	1.059	1.057	1.059	1.057	1.061	1.059
43	1.111	1.094	1.063	1.057	1.052	1.054	1.052	1.054	1.052	1.054	1.054	1.057	1.057	1.057	1.057	1.061	1.057	1.063	1.059	1.063
44	1.065	1.061	1.059	1.057	1.059	1.054	1.059	1.057	1.061	1.059	1.061	1.061	1.063	1.061	1.065	1.065	1.070	1.068	1.074	1.072
45	1.061	1.063	1.063	1.065	1.061	1.065	1.063	1.068	1.065	1.070	1.068	1.072	1.070	1.076	1.074	1.078	1.078	1.089	1.122	1.159
46	1.068	1.068	1.072	1.070	1.074	1.070	1.076	1.072	1.076	1.072	1.080	1.076	1.082	1.080	1.084	1.086	1.091	1.145	1.285	1.381
47	1.072	1.076	1.072	1.076	1.080	1.078	1.082	1.078	1.080	1.078	1.084	1.082	1.086	1.086	1.089	1.089	1.102	1.183	1.333	1.423
48	1.076	1.074	1.078	1.080	1.080	1.084	1.080	1.082	1.082	1.086	1.086	1.087	1.089	1.089	1.093	1.095	1.108	1.202	1.355	1.443
49	1.078	1.076	1.078	1.084	1.080	1.084	1.080	1.086	1.082	1.087	1.086	1.091	1.089	1.093	1.095	1.100	1.116	1.229	1.377	1.452
50	1.080	1.080	1.080	1.084	1.086	1.086	1.086	1.087	1.086	1.087	1.089	1.091	1.093	1.098	1.096	1.105	1.137	1.284	1.413	1.467
51	1.080	1.078	1.082	1.082	1.084	1.084	1.086	1.086	1.087	1.089	1.091	1.093	1.096	1.098	1.102	1.108	1.169	1.320	1.428	1.470
52	1.070	1.072	1.072	1.074	1.076	1.078	1.078	1.082	1.080	1.086	1.084	1.087	1.089	1.093	1.095	1.110	1.203	1.362	1.444	1.476
53	1.057	1.061	1.061	1.061	1.061	1.065	1.065	1.070	1.070	1.074	1.074	1.076	1.078	1.084	1.087	1.111	1.248	1.392	1.453	1.478
54	1.049	1.052	1.054	1.057	1.057	1.057	1.061	1.061	1.068	1.065	1.074	1.072	1.078	1.078	1.086	1.123	1.282	1.405	1.453	1.476
55	1.049	1.052	1.057	1.052	1.059	1.057	1.063	1.065	1.065	1.068	1.074	1.074	1.080	1.082	1.089	1.139	1.302	1.414	1.457	1.476
56	1.052	1.054	1.042	1.059	1.049	1.061	1.054	1.065	1.059	1.074	1.070	1.076	1.076	1.084	1.089	1.158	1.318	1.421	1.460	1.479
57	1.047	1.049	1.052	1.052	1.052	1.057	1.057	1.061	1.063	1.065	1.068	1.074	1.072	1.082	1.089	1.185	1.345	1.431	1.462	1.481
58	1.042	1.047	1.049	1.049	1.052	1.054	1.054	1.059	1.059	1.063	1.065	1.072	1.070	1.082	1.100	1.234	1.382	1.445	1.472	1.489
59	1.047	1.044	1.049	1.047	1.052	1.052	1.057	1.057	1.061	1.061	1.070	1.065	1.076	1.078	1.128	1.285	1.404	1.449	1.471	1.487
60	1.047	1.044	1.047	1.049	1.049	1.054	1.057	1.059	1.059	1.065	1.063	1.072	1.074	1.086	1.162	1.327	1.417	1.453	1.472	1.487
61	1.047	1.049	1.052	1.052	1.054	1.057	1.063	1.061	1.065	1.068	1.074	1.072	1.082	1.095	1.213	1.357	1.423	1.452	1.472	1.485
62	1.047	1.052	1.054	1.052	1.059	1.057	1.063	1.063	1.068	1.070	1.074	1.074	1.084	1.108	1.242	1.367	1.421	1.448	1.466	1.478
63	1.049	1.052	1.047	1.054	1.049	1.057	1.057	1.065	1.065	1.072	1.072	1.078	1.084	1.116	1.262	1.378	1.421	1.445	1.459	1.472

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 53

IR SCAN TIME 10.82 SEC
INITIAL TEMP 535.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	1.133	1.136	1.131	1.132	1.122	1.119	1.111	1.111	1.106	1.113	1.110	1.114	1.111	1.117	1.114	1.123	1.123	1.129	1.128	1.133
30	1.123	1.122	1.116	1.116	1.111	1.110	1.110	1.113	1.116	1.122	1.123	1.129	1.129	1.131	1.132	1.136	1.137	1.139	1.129	1.133
31	1.110	1.105	1.111	1.116	1.120	1.120	1.123	1.122	1.128	1.129	1.136	1.137	1.140	1.136	1.136	1.126	1.120	1.108	1.102	1.089
32	1.113	1.117	1.117	1.122	1.126	1.131	1.129	1.131	1.133	1.136	1.129	1.128	1.116	1.103	1.089	1.078	1.063	1.052	1.047	1.042
33	1.120	1.125	1.123	1.129	1.131	1.132	1.123	1.116	1.108	1.100	1.082	1.070	1.054	1.047	1.039	1.042	1.037	1.042	1.039	1.042
34	1.128	1.129	1.122	1.117	1.105	1.093	1.076	1.063	1.047	1.042	1.037	1.039	1.037	1.039	1.042	1.039	1.042	1.042	1.039	1.042
35	1.114	1.098	1.086	1.065	1.052	1.047	1.044	1.039	1.042	1.039	1.039	1.039	1.042	1.042	1.042	1.039	1.044	1.042	1.044	1.042
36	1.057	1.049	1.042	1.044	1.037	1.044	1.039	1.044	1.037	1.042	1.037	1.042	1.037	1.047	1.044	1.044	1.044	1.047	1.044	1.047
37	1.049	1.047	1.049	1.047	1.049	1.047	1.049	1.047	1.052	1.047	1.052	1.047	1.047	1.047	1.052	1.037	1.052	1.037	1.052	1.039
38	1.052	1.047	1.052	1.049	1.049	1.049	1.052	1.049	1.052	1.049	1.052	1.049	1.052	1.052	1.052	1.049	1.052	1.052	1.059	1.052
39	1.052	1.052	1.052	1.054	1.052	1.054	1.052	1.057	1.052	1.057	1.054	1.057	1.052	1.054	1.054	1.057	1.054	1.057	1.052	1.057
40	1.057	1.052	1.057	1.054	1.059	1.057	1.059	1.057	1.061	1.057	1.063	1.059	1.063	1.059	1.061	1.059	1.061	1.059	1.061	1.059
41	1.059	1.057	1.063	1.061	1.063	1.061	1.065	1.061	1.065	1.063	1.065	1.063	1.068	1.063	1.065	1.063	1.065	1.063	1.068	1.061
42	1.063	1.061	1.068	1.063	1.068	1.065	1.070	1.065	1.072	1.070	1.070	1.068	1.070	1.070	1.070	1.068	1.070	1.068	1.070	1.065
43	1.061	1.068	1.061	1.072	1.065	1.072	1.068	1.074	1.068	1.074	1.070	1.076	1.074	1.074	1.072	1.074	1.072	1.074	1.070	1.074
44	1.076	1.074	1.082	1.078	1.082	1.082	1.082	1.080	1.084	1.082	1.084	1.082	1.087	1.076	1.082	1.076	1.082	1.074	1.078	1.074
45	1.168	1.164	1.155	1.148	1.136	1.126	1.116	1.111	1.105	1.103	1.098	1.098	1.096	1.096	1.093	1.095	1.091	1.091	1.087	1.089
46	1.417	1.434	1.447	1.458	1.466	1.467	1.462	1.443	1.409	1.360	1.294	1.221	1.168	1.133	1.120	1.108	1.106	1.102	1.102	1.098
47	1.459	1.475	1.486	1.499	1.514	1.534	1.558	1.580	1.596	1.605	1.608	1.590	1.547	1.482	1.394	1.288	1.198	1.145	1.125	1.114
48	1.479	1.500	1.514	1.529	1.542	1.553	1.563	1.576	1.589	1.600	1.612	1.619	1.618	1.615	1.610	1.598	1.544	1.408	1.255	1.177
49	1.485	1.509	1.527	1.545	1.561	1.580	1.598	1.611	1.610	1.606	1.606	1.609	1.613	1.618	1.622	1.619	1.518	1.609	1.513	1.335
50	1.493	1.514	1.530	1.547	1.566	1.587	1.608	1.629	1.644	1.655	1.657	1.649	1.636	1.631	1.635	1.638	1.631	1.623	1.625	1.559
51	1.492	1.507	1.523	1.542	1.562	1.582	1.604	1.627	1.652	1.669	1.676	1.677	1.674	1.661	1.648	1.636	1.632	1.627	1.619	1.628
52	1.495	1.511	1.524	1.541	1.560	1.580	1.599	1.622	1.644	1.660	1.668	1.678	1.688	1.696	1.698	1.692	1.675	1.653	1.635	1.620
53	1.494	1.507	1.520	1.536	1.554	1.575	1.598	1.620	1.641	1.658	1.666	1.673	1.679	1.689	1.704	1.719	1.724	1.715	1.710	1.687
54	1.493	1.503	1.515	1.530	1.551	1.572	1.594	1.616	1.638	1.657	1.671	1.680	1.682	1.684	1.691	1.696	1.706	1.718	1.729	1.734
55	1.492	1.502	1.513	1.527	1.546	1.567	1.588	1.609	1.631	1.651	1.665	1.676	1.683	1.688	1.694	1.695	1.700	1.706	1.711	1.723
56	1.492	1.503	1.513	1.526	1.542	1.561	1.582	1.604	1.624	1.640	1.650	1.660	1.667	1.673	1.681	1.689	1.698	1.707	1.713	1.719
57	1.492	1.502	1.513	1.527	1.542	1.561	1.579	1.599	1.616	1.633	1.645	1.652	1.660	1.671	1.678	1.681	1.684	1.693	1.705	1.716
58	1.500	1.507	1.518	1.533	1.549	1.566	1.586	1.608	1.624	1.638	1.645	1.651	1.661	1.671	1.673	1.673	1.678	1.686	1.690	1.698
59	1.498	1.507	1.519	1.535	1.552	1.570	1.590	1.609	1.630	1.642	1.648	1.655	1.665	1.674	1.675	1.671	1.677	1.684	1.685	1.684
60	1.497	1.507	1.520	1.534	1.547	1.568	1.589	1.611	1.631	1.644	1.652	1.664	1.677	1.685	1.682	1.679	1.681	1.684	1.682	1.682
61	1.493	1.501	1.515	1.528	1.542	1.560	1.579	1.600	1.620	1.632	1.643	1.657	1.674	1.683	1.688	1.693	1.692	1.686	1.682	1.685
62	1.486	1.494	1.506	1.518	1.531	1.546	1.566	1.588	1.607	1.617	1.628	1.641	1.657	1.666	1.674	1.680	1.685	1.691	1.691	1.692
63	1.480	1.490	1.502	1.514	1.526	1.541	1.558	1.580	1.599	1.611	1.621	1.638	1.656	1.665	1.670	1.674	1.673	1.679	1.684	1.684

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP COPP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 53

IR SCAN TIME 10.82 SEC
INITIAL TEMP 535.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	1.136	1.137	1.132	1.133	1.129	1.129	1.123	1.120	1.113	1.103	1.095	1.091	1.086	1.082	1.076	1.074	1.063	1.061	1.059	1.054
30	1.123	1.123	1.110	1.105	1.091	1.087	1.074	1.072	1.057	1.052	1.042	1.044	1.034	1.042	1.037	1.039	1.037	1.037	1.034	1.037
31	1.082	1.065	1.057	1.047	1.047	1.037	1.039	1.037	1.037	1.034	1.034	1.031	1.031	1.031	1.037	1.028	1.037	1.023	1.034	1.023
32	1.039	1.039	1.037	1.039	1.037	1.037	1.034	1.037	1.034	1.037	1.034	1.034	1.031	1.034	1.031	1.031	1.031	1.031	1.028	1.031
33	1.039	1.042	1.037	1.039	1.037	1.039	1.037	1.037	1.034	1.037	1.031	1.037	1.031	1.034	1.031	1.031	1.028	1.031	1.028	1.031
34	1.042	1.042	1.039	1.042	1.037	1.039	1.037	1.037	1.037	1.039	1.037	1.037	1.031	1.037	1.031	1.034	1.031	1.031	1.031	1.031
35	1.044	1.047	1.044	1.042	1.044	1.042	1.042	1.042	1.042	1.037	1.039	1.037	1.039	1.037	1.037	1.034	1.039	1.031	1.037	1.031
36	1.044	1.049	1.047	1.047	1.047	1.044	1.044	1.044	1.042	1.044	1.042	1.042	1.042	1.042	1.037	1.039	1.039	1.039	1.037	1.039
37	1.052	1.037	1.052	1.039	1.049	1.037	1.052	1.037	1.049	1.034	1.049	1.044	1.047	1.042	1.047	1.042	1.044	1.039	1.042	1.039
38	1.054	1.052	1.052	1.052	1.052	1.049	1.052	1.047	1.052	1.047	1.047	1.047	1.049	1.042	1.047	1.039	1.044	1.034	1.044	1.034
39	1.054	1.054	1.054	1.054	1.052	1.054	1.052	1.052	1.052	1.052	1.052	1.052	1.047	1.049	1.047	1.049	1.047	1.047	1.044	1.047
40	1.061	1.059	1.061	1.057	1.057	1.054	1.057	1.054	1.057	1.052	1.057	1.052	1.052	1.052	1.052	1.049	1.052	1.047	1.052	1.047
41	1.065	1.059	1.063	1.061	1.063	1.059	1.063	1.059	1.063	1.057	1.059	1.054	1.054	1.052	1.057	1.052	1.054	1.052	1.052	1.049
42	1.068	1.065	1.068	1.063	1.068	1.063	1.065	1.061	1.063	1.059	1.061	1.057	1.059	1.054	1.057	1.054	1.054	1.052	1.054	1.047
43	1.070	1.074	1.069	1.070	1.065	1.070	1.063	1.065	1.063	1.065	1.061	1.063	1.061	1.061	1.057	1.057	1.054	1.054	1.054	1.052
44	1.080	1.072	1.076	1.070	1.074	1.068	1.072	1.065	1.070	1.070	1.070	1.065	1.068	1.063	1.065	1.061	1.065	1.059	1.061	1.057
45	1.089	1.087	1.086	1.084	1.080	1.082	1.082	1.080	1.078	1.076	1.074	1.076	1.070	1.074	1.070	1.072	1.065	1.072	1.063	1.068
46	1.100	1.098	1.098	1.093	1.093	1.089	1.089	1.086	1.087	1.086	1.084	1.082	1.084	1.078	1.082	1.076	1.080	1.074	1.076	1.074
47	1.110	1.108	1.106	1.106	1.102	1.098	1.096	1.091	1.093	1.089	1.091	1.086	1.087	1.086	1.086	1.082	1.084	1.082	1.082	1.078
48	1.137	1.125	1.117	1.114	1.111	1.106	1.105	1.100	1.096	1.096	1.093	1.093	1.091	1.098	1.091	1.087	1.086	1.087	1.086	1.084
49	1.214	1.166	1.139	1.126	1.116	1.113	1.108	1.106	1.105	1.103	1.100	1.100	1.096	1.095	1.091	1.093	1.089	1.091	1.087	1.087
50	1.389	1.239	1.173	1.150	1.139	1.131	1.119	1.116	1.110	1.108	1.106	1.105	1.102	1.102	1.100	1.098	1.095	1.096	1.093	1.093
51	1.613	1.483	1.296	1.195	1.154	1.139	1.137	1.125	1.120	1.114	1.114	1.110	1.108	1.105	1.105	1.102	1.102	1.098	1.100	1.095
52	1.630	1.648	1.559	1.369	1.232	1.167	1.140	1.136	1.122	1.114	1.102	1.105	1.098	1.100	1.095	1.095	1.089	1.091	1.089	1.091
53	1.655	1.637	1.653	1.595	1.407	1.245	1.175	1.143	1.133	1.120	1.106	1.098	1.093	1.089	1.086	1.086	1.082	1.082	1.082	1.086
54	1.730	1.708	1.675	1.661	1.625	1.473	1.285	1.194	1.154	1.136	1.129	1.108	1.102	1.095	1.093	1.087	1.087	1.086	1.089	1.089
55	1.738	1.749	1.749	1.731	1.706	1.679	1.572	1.375	1.234	1.172	1.148	1.133	1.122	1.106	1.102	1.095	1.095	1.091	1.098	1.098
56	1.724	1.732	1.741	1.751	1.755	1.751	1.743	1.686	1.514	1.310	1.208	1.161	1.141	1.131	1.111	1.103	1.100	1.102	1.102	1.106
57	1.722	1.726	1.725	1.727	1.736	1.746	1.758	1.769	1.754	1.625	1.397	1.252	1.182	1.149	1.136	1.119	1.105	1.102	1.102	1.105
58	1.711	1.721	1.726	1.731	1.733	1.734	1.740	1.754	1.772	1.769	1.666	1.457	1.281	1.196	1.154	1.141	1.125	1.113	1.105	1.105
59	1.690	1.700	1.707	1.711	1.718	1.726	1.733	1.739	1.751	1.767	1.763	1.657	1.442	1.268	1.190	1.149	1.137	1.117	1.108	1.095
60	1.683	1.686	1.692	1.697	1.696	1.693	1.694	1.710	1.737	1.763	1.785	1.773	1.651	1.443	1.273	1.190	1.149	1.136	1.122	1.106
61	1.689	1.686	1.688	1.692	1.696	1.698	1.695	1.682	1.665	1.670	1.708	1.721	1.719	1.673	1.511	1.312	1.208	1.158	1.139	1.123
62	1.699	1.699	1.698	1.694	1.692	1.695	1.703	1.711	1.721	1.713	1.644	1.562	1.558	1.611	1.648	1.569	1.383	1.233	1.171	1.140
63	1.691	1.698	1.707	1.712	1.713	1.711	1.713	1.727	1.753	1.759	1.721	1.690	1.643	1.568	1.507	1.507	1.498	1.393	1.253	1.181

NASA/RI OH90 TRANSITION TEST
V41R-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 53

IR SCAN TIME 10.82 SEC
INITIAL TEMP 535.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	1.044	1.047	1.042	1.042	1.039	1.042	1.037	1.039	1.037	1.037	1.037	1.039	1.037	1.037	1.034	1.037	1.037	1.039	1.037	1.039
30	1.037	1.037	1.034	1.034	1.031	1.034	1.034	1.034	1.028	1.031	1.031	1.034	1.031	1.034	1.031	1.034	1.031	1.034	1.031	1.034
31	1.031	1.023	1.031	1.023	1.031	1.023	1.028	1.023	1.028	1.023	1.031	1.028	1.034	1.026	1.031	1.028	1.031	1.028	1.034	1.028
32	1.031	1.031	1.031	1.028	1.026	1.028	1.023	1.026	1.026	1.026	1.023	1.026	1.026	1.028	1.016	1.026	1.020	1.026	1.016	1.031
33	1.031	1.031	1.031	1.031	1.028	1.028	1.031	1.028	1.026	1.026	1.026	1.026	1.023	1.026	1.023	1.026	1.023	1.023	1.023	1.026
34	1.031	1.034	1.031	1.034	1.028	1.028	1.026	1.028	1.026	1.026	1.026	1.028	1.026	1.026	1.023	1.026	1.023	1.028	1.020	1.023
35	1.034	1.031	1.034	1.031	1.031	1.028	1.031	1.028	1.028	1.028	1.028	1.023	1.028	1.026	1.028	1.026	1.026	1.023	1.023	1.023
36	1.037	1.037	1.037	1.034	1.034	1.034	1.034	1.034	1.031	1.031	1.031	1.034	1.031	1.028	1.026	1.028	1.028	1.028	1.026	1.026
37	1.042	1.039	1.042	1.037	1.039	1.037	1.039	1.039	1.037	1.034	1.037	1.031	1.034	1.031	1.034	1.031	1.031	1.031	1.031	1.028
38	1.044	1.037	1.042	1.037	1.042	1.034	1.039	1.031	1.037	1.039	1.039	1.037	1.039	1.037	1.039	1.034	1.037	1.031	1.037	1.031
39	1.042	1.042	1.042	1.044	1.042	1.042	1.037	1.039	1.039	1.037	1.037	1.039	1.028	1.039	1.028	1.037	1.028	1.037	1.028	1.037
40	1.049	1.047	1.047	1.044	1.047	1.042	1.047	1.044	1.044	1.042	1.042	1.042	1.042	1.039	1.042	1.039	1.042	1.037	1.039	1.037
41	1.052	1.049	1.052	1.047	1.052	1.047	1.049	1.044	1.047	1.042	1.047	1.042	1.044	1.042	1.044	1.042	1.044	1.039	1.042	1.039
42	1.052	1.049	1.052	1.047	1.052	1.047	1.049	1.044	1.047	1.042	1.049	1.044	1.047	1.042	1.047	1.042	1.047	1.042	1.044	1.042
43	1.052	1.052	1.052	1.052	1.049	1.052	1.047	1.052	1.047	1.049	1.047	1.049	1.047	1.047	1.044	1.047	1.042	1.044	1.042	1.047
44	1.061	1.057	1.059	1.052	1.057	1.054	1.057	1.052	1.057	1.052	1.054	1.052	1.054	1.052	1.054	1.052	1.052	1.052	1.052	1.049
45	1.063	1.068	1.061	1.065	1.061	1.065	1.059	1.065	1.061	1.063	1.061	1.061	1.059	1.061	1.061	1.061	1.057	1.059	1.057	1.061
46	1.076	1.072	1.074	1.072	1.072	1.072	1.072	1.065	1.070	1.052	1.070	1.057	1.068	1.057	1.070	1.057	1.068	1.054	1.068	1.054
47	1.082	1.078	1.078	1.076	1.076	1.074	1.076	1.074	1.074	1.072	1.076	1.072	1.074	1.072	1.070	1.068	1.070	1.068	1.070	1.068
48	1.086	1.086	1.082	1.082	1.080	1.080	1.076	1.080	1.078	1.078	1.068	1.076	1.076	1.076	1.078	1.074	1.074	1.074	1.074	1.076
49	1.086	1.087	1.086	1.086	1.086	1.086	1.082	1.082	1.080	1.082	1.080	1.080	1.076	1.078	1.076	1.078	1.074	1.076	1.074	1.076
50	1.089	1.091	1.086	1.087	1.086	1.086	1.086	1.087	1.086	1.086	1.082	1.084	1.082	1.082	1.078	1.082	1.078	1.080	1.076	1.078
51	1.096	1.093	1.095	1.095	1.093	1.089	1.091	1.087	1.089	1.087	1.089	1.087	1.087	1.084	1.086	1.082	1.084	1.084	1.084	1.082
52	1.089	1.093	1.089	1.093	1.091	1.095	1.093	1.095	1.093	1.091	1.091	1.091	1.089	1.089	1.087	1.087	1.086	1.087	1.086	1.086
53	1.086	1.091	1.093	1.096	1.095	1.096	1.095	1.096	1.091	1.096	1.091	1.096	1.091	1.095	1.089	1.091	1.087	1.089	1.086	1.086
54	1.095	1.098	1.102	1.102	1.102	1.102	1.103	1.102	1.103	1.102	1.103	1.102	1.102	1.100	1.100	1.095	1.096	1.093	1.095	1.089
55	1.103	1.105	1.108	1.105	1.108	1.105	1.108	1.106	1.108	1.106	1.108	1.105	1.108	1.105	1.105	1.102	1.102	1.098	1.100	1.095
56	1.108	1.110	1.110	1.110	1.110	1.108	1.108	1.108	1.108	1.108	1.106	1.106	1.105	1.106	1.102	1.103	1.098	1.100	1.095	1.095
57	1.102	1.105	1.102	1.102	1.098	1.100	1.096	1.098	1.095	1.095	1.093	1.093	1.089	1.089	1.089	1.086	1.086	1.086	1.086	1.084
58	1.103	1.103	1.102	1.102	1.100	1.103	1.102	1.102	1.100	1.100	1.098	1.098	1.095	1.096	1.095	1.093	1.095	1.095	1.091	1.089
59	1.095	1.087	1.089	1.086	1.089	1.084	1.086	1.080	1.082	1.078	1.080	1.070	1.074	1.070	1.074	1.068	1.070	1.063	1.065	1.063
60	1.095	1.093	1.089	1.087	1.086	1.086	1.078	1.082	1.074	1.078	1.074	1.074	1.068	1.072	1.065	1.068	1.063	1.068	1.063	1.065
61	1.111	1.096	1.095	1.089	1.091	1.086	1.089	1.084	1.086	1.080	1.078	1.074	1.074	1.072	1.072	1.068	1.070	1.063	1.068	1.065
62	1.131	1.114	1.102	1.095	1.095	1.089	1.089	1.086	1.086	1.082	1.082	1.076	1.078	1.074	1.076	1.068	1.074	1.068	1.072	1.065
63	1.144	1.132	1.120	1.106	1.096	1.093	1.089	1.087	1.082	1.084	1.080	1.080	1.076	1.076	1.074	1.076	1.070	1.072	1.068	1.072

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 53

IR SCAN TIME 10.82 SEC
INITIAL TEMP 535.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	1.037	1.037	1.037	1.037	1.037	1.039	1.037	1.037	1.034	1.037	1.031	1.034	1.031	1.031	1.028	1.028	1.026	1.028	1.026	1.028
30	1.034	1.034	1.031	1.037	1.031	1.037	1.034	1.034	1.034	1.034	1.031	1.031	1.028	1.028	1.031	1.028	1.026	1.026	1.026	1.026
31	1.031	1.028	1.031	1.028	1.031	1.028	1.034	1.031	1.031	1.031	1.031	1.028	1.031	1.026	1.028	1.023	1.028	1.013	1.023	1.020
32	1.020	1.028	1.020	1.028	1.020	1.028	1.020	1.028	1.016	1.028	1.026	1.026	1.026	1.026	1.023	1.026	1.020	1.026	1.020	1.020
33	1.023	1.023	1.023	1.023	1.023	1.026	1.023	1.023	1.020	1.020	1.020	1.023	1.013	1.020	1.010	1.016	1.010	1.016	1.010	1.020
34	1.023	1.023	1.020	1.023	1.016	1.023	1.020	1.020	1.016	1.020	1.016	1.016	1.016	1.020	1.016	1.016	1.016	1.016	1.013	1.020
35	1.026	1.023	1.026	1.020	1.023	1.023	1.020	1.020	1.023	1.016	1.020	1.016	1.020	1.016	1.023	1.016	1.020	1.016	1.020	1.020
36	1.026	1.026	1.026	1.026	1.026	1.026	1.023	1.026	1.023	1.026	1.026	1.023	1.023	1.023	1.023	1.023	1.016	1.023	1.020	1.028
37	1.034	1.031	1.031	1.026	1.028	1.028	1.028	1.026	1.028	1.026	1.028	1.026	1.026	1.023	1.028	1.023	1.023	1.023	1.028	1.026
38	1.037	1.031	1.034	1.029	1.031	1.028	1.028	1.028	1.028	1.028	1.031	1.028	1.031	1.026	1.028	1.026	1.028	1.023	1.028	1.026
39	1.031	1.034	1.031	1.031	1.026	1.031	1.026	1.031	1.031	1.031	1.031	1.034	1.028	1.031	1.028	1.028	1.028	1.031	1.026	1.028
40	1.039	1.037	1.037	1.034	1.037	1.034	1.034	1.031	1.031	1.031	1.034	1.026	1.031	1.026	1.034	1.026	1.031	1.026	1.034	1.028
41	1.044	1.037	1.042	1.039	1.042	1.037	1.037	1.034	1.039	1.034	1.039	1.034	1.037	1.034	1.037	1.031	1.034	1.031	1.034	1.031
42	1.042	1.039	1.042	1.037	1.042	1.039	1.042	1.037	1.037	1.037	1.039	1.034	1.039	1.034	1.037	1.034	1.039	1.031	1.037	1.034
43	1.042	1.044	1.042	1.042	1.042	1.042	1.039	1.042	1.039	1.039	1.037	1.039	1.034	1.039	1.037	1.039	1.037	1.039	1.037	1.039
44	1.052	1.047	1.049	1.047	1.049	1.047	1.052	1.042	1.049	1.042	1.047	1.044	1.047	1.042	1.047	1.042	1.047	1.044	1.044	1.042
45	1.057	1.057	1.057	1.057	1.052	1.059	1.057	1.057	1.057	1.057	1.057	1.057	1.057	1.057	1.054	1.054	1.052	1.054	1.052	1.054
46	1.068	1.059	1.070	1.059	1.070	1.065	1.068	1.063	1.065	1.063	1.063	1.061	1.065	1.063	1.061	1.059	1.061	1.059	1.063	1.059
47	1.072	1.070	1.074	1.072	1.072	1.070	1.070	1.065	1.070	1.063	1.065	1.063	1.068	1.061	1.065	1.063	1.065	1.061	1.065	1.061
48	1.076	1.070	1.078	1.080	1.074	1.076	1.065	1.070	1.070	1.070	1.068	1.065	1.063	1.068	1.068	1.072	1.065	1.065	1.070	1.070
49	1.074	1.078	1.076	1.078	1.074	1.076	1.072	1.074	1.070	1.072	1.070	1.074	1.070	1.072	1.068	1.070	1.068	1.070	1.068	1.070
50	1.076	1.078	1.078	1.078	1.076	1.076	1.074	1.076	1.074	1.076	1.072	1.074	1.074	1.074	1.074	1.074	1.072	1.074	1.070	1.072
51	1.084	1.078	1.082	1.080	1.082	1.076	1.080	1.076	1.078	1.076	1.078	1.074	1.078	1.074	1.076	1.072	1.074	1.072	1.074	1.070
52	1.084	1.086	1.080	1.080	1.078	1.076	1.072	1.072	1.068	1.068	1.068	1.068	1.065	1.065	1.063	1.065	1.063	1.065	1.061	1.061
53	1.082	1.084	1.078	1.082	1.074	1.070	1.063	1.063	1.057	1.061	1.057	1.054	1.052	1.054	1.052	1.052	1.047	1.052	1.047	1.052
54	1.089	1.086	1.086	1.082	1.080	1.070	1.068	1.057	1.059	1.049	1.057	1.047	1.054	1.047	1.052	1.044	1.052	1.042	1.047	1.039
55	1.095	1.089	1.089	1.086	1.086	1.076	1.074	1.065	1.065	1.057	1.059	1.054	1.054	1.052	1.052	1.044	1.052	1.047	1.052	1.044
56	1.089	1.089	1.086	1.086	1.082	1.080	1.068	1.068	1.061	1.061	1.057	1.052	1.052	1.052	1.052	1.049	1.047	1.047	1.042	1.042
57	1.078	1.078	1.074	1.074	1.072	1.070	1.063	1.063	1.059	1.057	1.052	1.054	1.052	1.052	1.047	1.049	1.047	1.047	1.042	1.044
58	1.089	1.089	1.086	1.089	1.087	1.089	1.086	1.086	1.082	1.084	1.080	1.080	1.072	1.074	1.074	1.078	1.072	1.074	1.070	1.072
59	1.065	1.061	1.063	1.059	1.057	1.052	1.057	1.052	1.054	1.047	1.052	1.049	1.049	1.044	1.047	1.039	1.044	1.039	1.039	1.037
60	1.061	1.063	1.059	1.061	1.054	1.057	1.052	1.054	1.047	1.052	1.047	1.049	1.044	1.049	1.039	1.044	1.039	1.044	1.039	1.039
61	1.068	1.061	1.063	1.061	1.061	1.054	1.059	1.052	1.054	1.047	1.052	1.047	1.049	1.044	1.047	1.039	1.044	1.039	1.042	1.039
62	1.070	1.065	1.068	1.063	1.063	1.057	1.057	1.054	1.057	1.052	1.052	1.047	1.052	1.047	1.049	1.042	1.047	1.039	1.044	1.037
63	1.065	1.070	1.063	1.068	1.061	1.063	1.057	1.059	1.057	1.057	1.052	1.052	1.052	1.052	1.052	1.047	1.044	1.044	1.039	1.042

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 53

IR SCAN TIME 10.82 SEC
INITIAL TEMP 535.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	1.026	1.026	1.023	1.023	1.020	1.026	1.020	1.023	1.020	1.023
30	1.023	1.026	1.020	1.026	1.020	1.023	1.016	1.020	1.016	1.020
31	1.023	1.020	1.023	1.016	1.020	1.016	1.020	1.016	1.020	1.016
32	1.016	1.020	1.016	1.016	1.016	1.016	1.016	1.016	1.016	1.016
33	1.007	1.016	1.013	1.016	1.010	1.013	1.007	1.016	1.016	1.016
34	1.016	1.023	1.016	1.016	1.013	1.013	1.010	1.013	1.013	1.013
35	1.020	1.016	1.016	1.016	1.016	1.013	1.016	1.013	1.016	1.016
36	1.023	1.023	1.020	1.023	1.020	1.020	1.016	1.016	1.016	1.023
37	1.026	1.023	1.026	1.023	1.026	1.020	1.023	1.020	1.026	1.020
38	1.028	1.026	1.028	1.026	1.028	1.023	1.026	1.026	1.028	1.026
39	1.028	1.028	1.028	1.028	1.026	1.028	1.028	1.028	1.028	1.028
40	1.031	1.026	1.028	1.023	1.031	1.028	1.031	1.028	1.034	1.028
41	1.037	1.031	1.034	1.031	1.031	1.031	1.031	1.026	1.037	1.026
42	1.034	1.031	1.037	1.031	1.037	1.034	1.034	1.031	1.037	1.034
43	1.037	1.037	1.037	1.037	1.037	1.037	1.037	1.037	1.037	1.037
44	1.044	1.042	1.044	1.042	1.047	1.039	1.044	1.042	1.044	1.042
45	1.052	1.052	1.052	1.052	1.052	1.052	1.052	1.052	1.052	1.052
46	1.061	1.061	1.061	1.059	1.059	1.057	1.059	1.057	1.059	1.057
47	1.065	1.061	1.068	1.063	1.065	1.061	1.065	1.063	1.061	1.057
48	1.068	1.065	1.068	1.065	1.063	1.065	1.065	1.065	1.065	1.063
49	1.065	1.070	1.065	1.070	1.065	1.065	1.065	1.068	1.063	1.065
50	1.068	1.072	1.070	1.072	1.065	1.070	1.065	1.070	1.063	1.070
51	1.072	1.070	1.074	1.070	1.072	1.068	1.070	1.065	1.068	1.065
52	1.059	1.061	1.059	1.061	1.057	1.059	1.054	1.057	1.052	1.054
53	1.047	1.047	1.044	1.044	1.042	1.044	1.042	1.042	1.042	1.039
54	1.047	1.039	1.042	1.037	1.039	1.037	1.039	1.034	1.034	1.031
55	1.042	1.039	1.042	1.026	1.042	1.026	1.039	1.023	1.034	1.020
56	1.037	1.039	1.037	1.037	1.034	1.034	1.031	1.031	1.028	1.028
57	1.039	1.042	1.037	1.042	1.037	1.039	1.037	1.039	1.037	1.037
58	1.065	1.065	1.063	1.063	1.061	1.061	1.059	1.054	1.052	1.054
59	1.039	1.034	1.037	1.031	1.034	1.031	1.034	1.028	1.031	1.026
60	1.037	1.039	1.037	1.037	1.037	1.034	1.031	1.031	1.028	1.028
61	1.042	1.039	1.039	1.037	1.037	1.031	1.034	1.031	1.031	1.028
62	1.039	1.037	1.037	1.028	1.037	1.028	1.031	1.026	1.028	1.023
63	1.039	1.037	1.037	1.039	1.037	1.034	1.031	1.034	1.031	1.031

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 53

IR SCAN TIME 10.82 SEC
INITIAL TEMP 535.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	1.047	1.049	1.052	1.052	1.057	1.054	1.061	1.061	1.068	1.065	1.074	1.070	1.084	1.122	1.280	1.379	1.419	1.441	1.458	1.469
65	1.042	1.042	1.047	1.047	1.049	1.052	1.057	1.057	1.063	1.063	1.070	1.070	1.082	1.154	1.308	1.385	1.418	1.440	1.455	1.464
66	1.034	1.031	1.042	1.039	1.042	1.042	1.047	1.047	1.054	1.057	1.059	1.065	1.087	1.203	1.338	1.392	1.420	1.438	1.453	1.464
67	1.026	1.026	1.026	1.028	1.028	1.034	1.037	1.039	1.042	1.049	1.052	1.061	1.095	1.240	1.350	1.393	1.418	1.435	1.446	1.457
68	1.020	1.023	1.028	1.026	1.031	1.028	1.037	1.037	1.044	1.047	1.052	1.061	1.129	1.277	1.358	1.390	1.412	1.425	1.434	1.445
69	1.023	1.026	1.026	1.026	1.031	1.031	1.037	1.039	1.042	1.047	1.052	1.068	1.166	1.300	1.360	1.387	1.406	1.419	1.430	1.440
70	1.028	1.016	1.028	1.023	1.034	1.039	1.042	1.042	1.047	1.047	1.054	1.072	1.184	1.309	1.361	1.385	1.403	1.415	1.427	1.437
71	1.026	1.026	1.028	1.031	1.031	1.037	1.039	1.047	1.042	1.047	1.047	1.082	1.210	1.325	1.367	1.390	1.406	1.419	1.429	1.439
72	1.028	1.028	1.028	1.028	1.037	1.037	1.044	1.042	1.047	1.047	1.057	1.091	1.233	1.333	1.371	1.392	1.408	1.418	1.430	1.439
73	1.026	1.028	1.031	1.028	1.037	1.037	1.042	1.042	1.049	1.047	1.057	1.119	1.258	1.338	1.370	1.388	1.403	1.413	1.424	1.433
74	1.026	1.028	1.028	1.031	1.031	1.037	1.037	1.042	1.044	1.049	1.059	1.160	1.289	1.348	1.372	1.388	1.400	1.410	1.420	1.430
75	1.028	1.026	1.023	1.028	1.031	1.031	1.042	1.039	1.042	1.047	1.076	1.198	1.311	1.353	1.374	1.389	1.400	1.409	1.417	1.425
76	1.028	1.028	1.028	1.028	1.031	1.031	1.034	1.037	1.039	1.049	1.098	1.241	1.326	1.358	1.376	1.388	1.399	1.408	1.415	1.424
77	1.028	1.026	1.034	1.028	1.028	1.037	1.042	1.042	1.042	1.052	1.128	1.267	1.335	1.360	1.376	1.388	1.397	1.404	1.412	1.420
78	1.034	1.052	1.074	1.074	1.061	1.057	1.049	1.057	1.052	1.054	1.144	1.282	1.335	1.361	1.375	1.386	1.393	1.401	1.408	1.417
79	1.049	1.089	1.119	1.084	1.074	1.065	1.057	1.047	1.057	1.074	1.177	1.294	1.340	1.361	1.375	1.384	1.392	1.398	1.405	1.413
80	1.065	1.111	1.160	1.102	1.070	1.072	1.072	1.070	1.059	1.076	1.188	1.300	1.341	1.361	1.372	1.381	1.387	1.394	1.400	1.407
81	1.093	1.144	1.205	1.164	1.096	1.080	1.074	1.076	1.076	1.103	1.225	1.318	1.348	1.364	1.373	1.379	1.384	1.389	1.396	1.403
82	1.160	1.204	1.255	1.243	1.158	1.108	1.074	1.068	1.078	1.141	1.267	1.333	1.357	1.371	1.378	1.383	1.387	1.390	1.393	1.398
83	1.159	1.180	1.246	1.256	1.175	1.120	1.080	1.047	1.063	1.174	1.296	1.342	1.361	1.371	1.378	1.384	1.388	1.390	1.394	1.396
84	1.175	1.120	1.160	1.172	1.132	1.098	1.072	1.072	1.100	1.212	1.310	1.342	1.361	1.379	1.389	1.395	1.397	1.397	1.396	1.399
85	1.114	1.113	1.113	1.116	1.119	1.098	1.093	1.100	1.116	1.113	1.122	1.129	1.141	1.154	1.181	1.207	1.240	1.260	1.289	1.318
86	1.095	1.087	1.093	1.098	1.089	1.089	1.089	1.095	1.108	1.110	1.106	1.106	1.105	1.105	1.105	1.106	1.108	1.111	1.113	1.116
87	1.061	1.057	1.061	1.061	1.070	1.065	1.074	1.087	1.106	1.105	1.105	1.098	1.098	1.096	1.096	1.096	1.096	1.098	1.102	1.105
88	1.039	1.034	1.034	1.037	1.042	1.052	1.057	1.080	1.096	1.103	1.100	1.100	1.091	1.093	1.089	1.091	1.089	1.089	1.089	1.093
89	1.023	1.016	1.016	1.028	1.039	1.049	1.052	1.072	1.093	1.098	1.098	1.098	1.093	1.091	1.087	1.087	1.086	1.086	1.086	1.087
90	1.010	1.010	1.010	1.026	1.034	1.039	1.042	1.061	1.089	1.098	1.098	1.098	1.095	1.093	1.089	1.089	1.086	1.087	1.086	1.087
91	1.007	1.003	1.010	1.020	1.028	1.034	1.039	1.054	1.082	1.095	1.100	1.096	1.098	1.095	1.093	1.089	1.091	1.087	1.089	1.086
92	1.003	1.007	1.003	1.020	1.016	1.031	1.031	1.052	1.078	1.093	1.089	1.096	1.091	1.095	1.091	1.091	1.086	1.089	1.086	1.086
93	1.023	1.016	1.016	1.026	1.031	1.037	1.042	1.054	1.078	1.089	1.096	1.096	1.095	1.093	1.093	1.093	1.093	1.087	1.086	1.084
94	1.054	1.052	1.054	1.052	1.057	1.054	1.057	1.061	1.086	1.087	1.091	1.093	1.098	1.095	1.096	1.095	1.095	1.089	1.087	1.082
95	1.068	1.070	1.070	1.072	1.068	1.068	1.063	1.074	1.086	1.095	1.089	1.095	1.096	1.100	1.098	1.100	1.096	1.096	1.087	1.086
96	1.080	1.080	1.082	1.078	1.082	1.076	1.076	1.074	1.093	1.096	1.096	1.098	1.102	1.102	1.105	1.103	1.105	1.098	1.095	1.086
97	1.082	1.084	1.086	1.086	1.086	1.080	1.074	1.076	1.091	1.089	1.091	1.096	1.102	1.105	1.108	1.105	1.105	1.096	1.093	1.089
98	1.086	1.084	1.087	1.086	1.089	1.080	1.076	1.076	1.091	1.086	1.089	1.089	1.100	1.105	1.106	1.106	1.102	1.096	1.095	1.096

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 53

IR SCAN TIME 10.82 SEC
INITIAL TEMP 535.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	1.477	1.485	1.496	1.504	1.518	1.535	1.552	1.570	1.589	1.604	1.614	1.628	1.647	1.656	1.661	1.667	1.673	1.678	1.678	1.677
65	1.472	1.482	1.495	1.505	1.519	1.534	1.549	1.563	1.586	1.602	1.612	1.621	1.638	1.644	1.647	1.655	1.663	1.669	1.673	1.678
66	1.473	1.482	1.495	1.507	1.522	1.536	1.552	1.569	1.584	1.604	1.620	1.624	1.630	1.639	1.645	1.650	1.657	1.661	1.661	1.666
67	1.466	1.476	1.488	1.500	1.513	1.528	1.543	1.560	1.578	1.596	1.614	1.625	1.630	1.632	1.640	1.649	1.649	1.648	1.650	1.653
68	1.454	1.463	1.474	1.486	1.500	1.512	1.526	1.543	1.562	1.580	1.598	1.615	1.623	1.629	1.634	1.640	1.647	1.653	1.659	1.661
69	1.447	1.457	1.469	1.480	1.494	1.508	1.518	1.532	1.548	1.567	1.586	1.602	1.612	1.621	1.629	1.634	1.638	1.644	1.651	1.656
70	1.447	1.457	1.469	1.480	1.492	1.507	1.521	1.530	1.541	1.559	1.575	1.588	1.599	1.603	1.608	1.612	1.620	1.628	1.636	1.643
71	1.444	1.454	1.466	1.478	1.486	1.502	1.516	1.528	1.541	1.557	1.569	1.580	1.589	1.593	1.596	1.598	1.603	1.608	1.611	1.615
72	1.448	1.456	1.465	1.474	1.487	1.497	1.513	1.524	1.537	1.551	1.565	1.575	1.584	1.589	1.592	1.592	1.596	1.600	1.604	1.606
73	1.442	1.452	1.462	1.473	1.488	1.502	1.516	1.531	1.544	1.555	1.566	1.574	1.584	1.594	1.594	1.592	1.592	1.593	1.598	1.604
74	1.439	1.448	1.458	1.468	1.478	1.493	1.506	1.519	1.533	1.546	1.557	1.569	1.580	1.590	1.592	1.591	1.592	1.593	1.597	1.604
75	1.432	1.442	1.453	1.464	1.475	1.487	1.500	1.512	1.523	1.535	1.547	1.555	1.560	1.565	1.568	1.573	1.579	1.586	1.589	1.592
76	1.432	1.440	1.449	1.460	1.472	1.484	1.496	1.508	1.517	1.529	1.540	1.550	1.555	1.561	1.565	1.569	1.572	1.575	1.576	1.579
77	1.429	1.437	1.447	1.456	1.467	1.479	1.492	1.504	1.516	1.524	1.533	1.542	1.550	1.556	1.561	1.565	1.569	1.570	1.573	1.575
78	1.424	1.434	1.443	1.454	1.464	1.476	1.491	1.504	1.515	1.526	1.533	1.540	1.545	1.550	1.554	1.560	1.564	1.568	1.572	1.575
79	1.422	1.431	1.441	1.450	1.461	1.472	1.486	1.496	1.509	1.520	1.530	1.538	1.545	1.549	1.555	1.558	1.563	1.565	1.568	1.570
80	1.415	1.424	1.433	1.444	1.454	1.464	1.476	1.491	1.504	1.517	1.529	1.539	1.546	1.551	1.555	1.557	1.558	1.560	1.562	1.565
81	1.409	1.417	1.426	1.436	1.448	1.460	1.471	1.483	1.495	1.509	1.521	1.531	1.539	1.546	1.550	1.553	1.556	1.559	1.560	1.562
82	1.404	1.411	1.420	1.432	1.443	1.455	1.466	1.479	1.491	1.503	1.513	1.521	1.528	1.534	1.538	1.543	1.547	1.552	1.555	1.558
83	1.401	1.407	1.416	1.426	1.439	1.451	1.464	1.475	1.488	1.499	1.510	1.517	1.524	1.530	1.535	1.538	1.540	1.544	1.548	1.551
84	1.401	1.405	1.411	1.419	1.428	1.440	1.453	1.466	1.476	1.487	1.498	1.508	1.514	1.520	1.524	1.529	1.532	1.536	1.539	1.543
85	1.333	1.344	1.360	1.374	1.389	1.398	1.402	1.409	1.422	1.443	1.486	1.505	1.485	1.473	1.476	1.483	1.490	1.497	1.501	1.506
86	1.116	1.120	1.117	1.123	1.123	1.132	1.128	1.132	1.131	1.137	1.143	1.159	1.151	1.151	1.151	1.158	1.162	1.172	1.179	1.188
87	1.106	1.105	1.108	1.108	1.110	1.110	1.113	1.111	1.111	1.111	1.116	1.114	1.119	1.116	1.119	1.117	1.120	1.120	1.123	1.120
88	1.095	1.096	1.096	1.096	1.098	1.102	1.105	1.105	1.105	1.105	1.105	1.105	1.105	1.106	1.106	1.105	1.106	1.106	1.108	1.108
89	1.089	1.091	1.091	1.093	1.093	1.095	1.096	1.098	1.100	1.098	1.098	1.098	1.098	1.102	1.098	1.100	1.100	1.102	1.102	1.105
90	1.086	1.089	1.089	1.091	1.091	1.095	1.093	1.095	1.093	1.096	1.096	1.100	1.102	1.102	1.098	1.098	1.098	1.098	1.098	1.096
91	1.086	1.086	1.089	1.089	1.089	1.089	1.093	1.093	1.095	1.102	1.128	1.233	1.304	1.255	1.158	1.111	1.100	1.095	1.098	1.096
92	1.082	1.086	1.086	1.087	1.087	1.089	1.089	1.093	1.091	1.098	1.116	1.209	1.277	1.240	1.148	1.110	1.096	1.091	1.091	1.093
93	1.074	1.082	1.076	1.084	1.080	1.087	1.082	1.089	1.086	1.091	1.087	1.093	1.089	1.095	1.086	1.093	1.089	1.089	1.087	1.091
94	1.084	1.078	1.082	1.082	1.087	1.086	1.089	1.087	1.093	1.089	1.093	1.091	1.089	1.086	1.089	1.086	1.089	1.086	1.089	1.086
95	1.082	1.082	1.082	1.086	1.084	1.087	1.087	1.091	1.091	1.093	1.093	1.093	1.091	1.091	1.089	1.089	1.089	1.087	1.086	1.089
96	1.086	1.082	1.087	1.086	1.089	1.089	1.091	1.091	1.095	1.093	1.096	1.095	1.096	1.093	1.093	1.087	1.089	1.086	1.089	1.086
97	1.089	1.086	1.089	1.086	1.091	1.089	1.093	1.091	1.095	1.095	1.095	1.095	1.096	1.091	1.091	1.087	1.091	1.087	1.089	1.086
98	1.096	1.095	1.096	1.095	1.098	1.096	1.100	1.096	1.098	1.095	1.095	1.093	1.095	1.093	1.095	1.089	1.089	1.089	1.095	1.095

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP COPP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 10.82 SEC
GROUP 53 INITIAL TEMP 535.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	1.675	1.669	1.664	1.665	1.674	1.689	1.710	1.737	1.766	1.750	1.725	1.724	1.721	1.710	1.670	1.592	1.507	1.452	1.388	1.275
65	1.685	1.686	1.683	1.666	1.644	1.622	1.608	1.609	1.629	1.635	1.657	1.688	1.704	1.711	1.715	1.713	1.686	1.619	1.517	1.414
66	1.672	1.677	1.681	1.685	1.687	1.680	1.664	1.642	1.598	1.525	1.481	1.464	1.481	1.524	1.579	1.634	1.675	1.696	1.691	1.633
67	1.657	1.659	1.659	1.660	1.667	1.681	1.696	1.717	1.701	1.645	1.606	1.553	1.501	1.462	1.440	1.433	1.453	1.508	1.576	1.629
68	1.663	1.667	1.673	1.671	1.669	1.677	1.693	1.710	1.703	1.688	1.687	1.668	1.632	1.578	1.522	1.479	1.451	1.439	1.432	1.430
69	1.660	1.665	1.671	1.677	1.682	1.690	1.705	1.724	1.712	1.689	1.684	1.682	1.681	1.672	1.648	1.609	1.555	1.501	1.463	1.443
70	1.650	1.658	1.666	1.673	1.679	1.691	1.707	1.730	1.724	1.703	1.699	1.691	1.687	1.684	1.678	1.669	1.660	1.638	1.596	1.543
71	1.620	1.626	1.636	1.647	1.655	1.664	1.684	1.721	1.717	1.698	1.699	1.697	1.696	1.696	1.694	1.688	1.684	1.681	1.678	1.670
72	1.609	1.611	1.612	1.611	1.611	1.616	1.631	1.661	1.660	1.639	1.646	1.650	1.653	1.657	1.664	1.673	1.681	1.687	1.696	1.702
73	1.610	1.613	1.610	1.605	1.606	1.611	1.625	1.648	1.664	1.642	1.627	1.614	1.598	1.577	1.553	1.535	1.522	1.517	1.527	1.543
74	1.611	1.619	1.623	1.622	1.619	1.624	1.643	1.672	1.692	1.665	1.646	1.638	1.629	1.617	1.602	1.586	1.559	1.524	1.485	1.445
75	1.596	1.604	1.614	1.621	1.625	1.635	1.654	1.689	1.713	1.670	1.652	1.649	1.646	1.644	1.638	1.633	1.625	1.616	1.602	1.579
76	1.581	1.585	1.590	1.594	1.600	1.608	1.621	1.652	1.671	1.618	1.614	1.618	1.617	1.619	1.621	1.626	1.629	1.632	1.632	1.629
77	1.579	1.581	1.584	1.584	1.586	1.586	1.589	1.594	1.602	1.590	1.568	1.556	1.547	1.540	1.533	1.530	1.532	1.536	1.541	1.549
78	1.577	1.579	1.582	1.583	1.583	1.585	1.589	1.598	1.611	1.609	1.583	1.571	1.561	1.547	1.530	1.512	1.492	1.473	1.455	1.439
79	1.573	1.574	1.576	1.577	1.578	1.579	1.583	1.591	1.607	1.614	1.593	1.584	1.582	1.577	1.571	1.563	1.555	1.543	1.529	1.511
80	1.568	1.571	1.573	1.575	1.575	1.576	1.578	1.586	1.599	1.615	1.598	1.585	1.586	1.586	1.583	1.581	1.578	1.577	1.572	1.568
81	1.564	1.568	1.570	1.572	1.573	1.576	1.579	1.585	1.596	1.613	1.604	1.590	1.590	1.591	1.591	1.589	1.589	1.587	1.585	1.584
82	1.561	1.563	1.565	1.568	1.571	1.573	1.576	1.583	1.596	1.617	1.610	1.593	1.592	1.594	1.594	1.593	1.596	1.594	1.593	1.595
83	1.555	1.558	1.563	1.566	1.570	1.572	1.575	1.580	1.592	1.616	1.619	1.593	1.590	1.589	1.590	1.590	1.591	1.592	1.595	1.598
84	1.546	1.550	1.554	1.558	1.560	1.564	1.568	1.573	1.582	1.604	1.612	1.588	1.583	1.583	1.583	1.584	1.585	1.586	1.586	1.589
85	1.512	1.520	1.529	1.535	1.540	1.545	1.550	1.557	1.566	1.586	1.600	1.575	1.566	1.567	1.568	1.568	1.568	1.568	1.570	1.571
86	1.196	1.209	1.225	1.234	1.244	1.258	1.269	1.279	1.293	1.327	1.351	1.338	1.332	1.342	1.362	1.358	1.349	1.355	1.361	1.368
87	1.125	1.123	1.129	1.125	1.131	1.129	1.135	1.132	1.135	1.135	1.137	1.133	1.137	1.132	1.136	1.131	1.133	1.131	1.132	1.129
88	1.108	1.113	1.114	1.116	1.116	1.117	1.116	1.117	1.117	1.120	1.117	1.119	1.116	1.116	1.116	1.114	1.111	1.111	1.105	1.110
89	1.105	1.105	1.106	1.108	1.106	1.110	1.106	1.106	1.106	1.106	1.106	1.106	1.105	1.105	1.105	1.102	1.102	1.098	1.102	1.102
90	1.102	1.103	1.102	1.105	1.105	1.106	1.105	1.106	1.105	1.106	1.108	1.105	1.105	1.105	1.102	1.098	1.096	1.098	1.095	1.096
91	1.096	1.096	1.100	1.098	1.102	1.102	1.105	1.106	1.106	1.108	1.136	1.211	1.243	1.186	1.128	1.105	1.100	1.095	1.095	1.091
92	1.095	1.095	1.093	1.096	1.095	1.096	1.098	1.098	1.096	1.105	1.151	1.279	1.322	1.248	1.151	1.111	1.096	1.091	1.089	1.089
93	1.091	1.093	1.091	1.093	1.093	1.095	1.095	1.096	1.095	1.095	1.095	1.105	1.119	1.106	1.095	1.093	1.091	1.089	1.089	1.089
94	1.089	1.086	1.089	1.086	1.093	1.091	1.096	1.091	1.095	1.091	1.093	1.087	1.093	1.089	1.093	1.089	1.089	1.087	1.089	1.086
95	1.086	1.087	1.086	1.089	1.089	1.091	1.091	1.095	1.093	1.091	1.089	1.089	1.089	1.089	1.086	1.087	1.082	1.086	1.080	1.086
96	1.089	1.086	1.087	1.086	1.089	1.089	1.093	1.091	1.095	1.091	1.091	1.086	1.089	1.086	1.089	1.086	1.087	1.082	1.084	1.078
97	1.087	1.086	1.086	1.086	1.087	1.087	1.089	1.089	1.091	1.089	1.089	1.087	1.087	1.086	1.087	1.082	1.086	1.080	1.084	1.080
98	1.096	1.089	1.089	1.086	1.087	1.086	1.089	1.087	1.091	1.089	1.089	1.086	1.086	1.084	1.086	1.082	1.084	1.080	1.082	1.080

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 53

IR SCAN TIME 10.82 SEC
INITIAL TEMP 535.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	1.183	1.145	1.133	1.122	1.113	1.096	1.091	1.086	1.087	1.082	1.086	1.080	1.082	1.078	1.080	1.074	1.076	1.072	1.074	1.070
65	1.308	1.204	1.153	1.132	1.126	1.116	1.102	1.091	1.089	1.086	1.086	1.080	1.082	1.078	1.078	1.074	1.074	1.070	1.072	1.068
66	1.522	1.384	1.253	1.171	1.140	1.125	1.119	1.100	1.089	1.084	1.082	1.078	1.080	1.074	1.078	1.070	1.072	1.068	1.068	1.065
67	1.638	1.590	1.486	1.347	1.212	1.154	1.122	1.119	1.096	1.086	1.074	1.076	1.065	1.070	1.063	1.068	1.059	1.063	1.057	1.061
68	1.455	1.486	1.497	1.456	1.354	1.225	1.160	1.128	1.119	1.105	1.087	1.074	1.072	1.065	1.065	1.061	1.063	1.057	1.057	1.052
69	1.430	1.423	1.424	1.439	1.443	1.394	1.280	1.180	1.136	1.120	1.108	1.091	1.074	1.072	1.065	1.065	1.061	1.059	1.057	1.054
70	1.496	1.464	1.450	1.443	1.442	1.440	1.412	1.311	1.196	1.141	1.120	1.111	1.098	1.080	1.074	1.065	1.065	1.061	1.061	1.057
71	1.647	1.611	1.560	1.504	1.460	1.433	1.419	1.396	1.323	1.213	1.145	1.123	1.111	1.103	1.084	1.074	1.068	1.065	1.059	1.061
72	1.703	1.700	1.696	1.680	1.650	1.601	1.536	1.470	1.420	1.360	1.260	1.168	1.132	1.113	1.106	1.089	1.078	1.068	1.068	1.061
73	1.564	1.587	1.614	1.635	1.652	1.669	1.679	1.673	1.634	1.563	1.476	1.360	1.228	1.150	1.123	1.108	1.096	1.078	1.072	1.063
74	1.415	1.399	1.393	1.395	1.402	1.422	1.446	1.481	1.517	1.543	1.532	1.482	1.380	1.258	1.171	1.131	1.105	1.098	1.082	1.072
75	1.550	1.510	1.466	1.426	1.396	1.379	1.370	1.364	1.363	1.363	1.365	1.369	1.369	1.333	1.243	1.163	1.120	1.108	1.096	1.084
76	1.625	1.618	1.605	1.583	1.553	1.512	1.464	1.418	1.382	1.361	1.352	1.349	1.346	1.341	1.319	1.252	1.164	1.122	1.105	1.096
77	1.560	1.570	1.580	1.586	1.590	1.592	1.589	1.575	1.549	1.505	1.449	1.397	1.361	1.342	1.332	1.314	1.264	1.180	1.128	1.105
78	1.427	1.421	1.417	1.419	1.424	1.435	1.448	1.464	1.481	1.501	1.514	1.514	1.495	1.460	1.417	1.378	1.344	1.300	1.220	1.143
79	1.492	1.470	1.445	1.423	1.402	1.383	1.375	1.369	1.366	1.362	1.359	1.359	1.367	1.375	1.387	1.390	1.387	1.378	1.354	1.286
80	1.561	1.551	1.536	1.523	1.502	1.476	1.445	1.420	1.400	1.385	1.373	1.363	1.352	1.348	1.344	1.342	1.337	1.336	1.339	1.344
81	1.580	1.576	1.568	1.563	1.558	1.552	1.540	1.525	1.506	1.485	1.462	1.438	1.413	1.390	1.369	1.357	1.349	1.340	1.330	1.324
82	1.591	1.587	1.580	1.575	1.571	1.570	1.569	1.566	1.561	1.556	1.549	1.540	1.527	1.509	1.480	1.447	1.418	1.388	1.360	1.343
83	1.596	1.593	1.591	1.588	1.585	1.582	1.583	1.584	1.585	1.582	1.582	1.581	1.579	1.574	1.568	1.560	1.548	1.526	1.494	1.456
84	1.591	1.592	1.593	1.593	1.591	1.590	1.590	1.592	1.594	1.596	1.598	1.598	1.598	1.599	1.599	1.598	1.594	1.588	1.578	1.567
85	1.573	1.575	1.577	1.579	1.581	1.583	1.584	1.585	1.585	1.584	1.586	1.589	1.590	1.591	1.592	1.590	1.586	1.578	1.569	1.560
86	1.378	1.388	1.397	1.403	1.408	1.412	1.417	1.423	1.426	1.430	1.435	1.441	1.443	1.444	1.448	1.454	1.457	1.459	1.458	1.456
87	1.131	1.129	1.132	1.129	1.132	1.128	1.129	1.123	1.126	1.120	1.123	1.122	1.122	1.119	1.123	1.122	1.126	1.126	1.128	1.123
88	1.105	1.111	1.105	1.110	1.105	1.108	1.102	1.103	1.098	1.102	1.096	1.098	1.095	1.098	1.098	1.100	1.100	1.102	1.100	1.096
89	1.100	1.100	1.100	1.098	1.096	1.096	1.095	1.093	1.093	1.091	1.089	1.089	1.087	1.087	1.086	1.089	1.087	1.091	1.086	1.089
90	1.095	1.096	1.095	1.096	1.093	1.093	1.093	1.091	1.089	1.089	1.087	1.086	1.086	1.084	1.091	1.117	1.114	1.098	1.091	1.091
91	1.093	1.091	1.093	1.089	1.093	1.091	1.091	1.089	1.095	1.120	1.170	1.160	1.111	1.086	1.086	1.086	1.089	1.086	1.089	1.086
92	1.087	1.087	1.086	1.086	1.086	1.087	1.086	1.091	1.102	1.192	1.283	1.268	1.173	1.108	1.086	1.084	1.082	1.086	1.086	1.084
93	1.087	1.087	1.086	1.086	1.084	1.086	1.082	1.086	1.082	1.091	1.117	1.120	1.091	1.080	1.076	1.080	1.080	1.084	1.082	1.082
94	1.089	1.086	1.086	1.084	1.087	1.082	1.084	1.080	1.082	1.082	1.080	1.078	1.078	1.074	1.076	1.078	1.084	1.086	1.086	1.082
95	1.080	1.084	1.078	1.082	1.076	1.080	1.076	1.076	1.072	1.074	1.070	1.076	1.072	1.074	1.072	1.080	1.082	1.087	1.086	1.089
96	1.082	1.078	1.080	1.078	1.082	1.076	1.080	1.074	1.076	1.074	1.074	1.072	1.074	1.068	1.076	1.076	1.089	1.087	1.095	1.089
97	1.084	1.078	1.080	1.076	1.078	1.076	1.078	1.074	1.078	1.074	1.076	1.072	1.074	1.068	1.078	1.086	1.098	1.102	1.105	1.106
98	1.084	1.078	1.078	1.074	1.078	1.076	1.078	1.074	1.078	1.074	1.078	1.072	1.076	1.074	1.095	1.133	1.155	1.136	1.129	1.123

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 53

IR SCAN TIME 10.82 SEC
INITIAL TEMP 535.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	1.072	1.065	1.070	1.063	1.065	1.063	1.065	1.057	1.059	1.054	1.057	1.052	1.057	1.047	1.052	1.047	1.047	1.044	1.047	1.039
65	1.070	1.065	1.070	1.063	1.065	1.059	1.059	1.059	1.059	1.054	1.052	1.052	1.049	1.049	1.049	1.044	1.044	1.039	1.042	1.037
66	1.065	1.063	1.061	1.059	1.057	1.054	1.054	1.047	1.052	1.049	1.049	1.044	1.044	1.042	1.042	1.037	1.039	1.037	1.037	1.031
67	1.057	1.057	1.054	1.052	1.052	1.052	1.047	1.047	1.044	1.044	1.039	1.039	1.034	1.037	1.031	1.028	1.028	1.028	1.026	1.026
68	1.054	1.047	1.052	1.047	1.047	1.039	1.044	1.034	1.039	1.031	1.037	1.031	1.034	1.026	1.031	1.020	1.026	1.026	1.026	1.020
69	1.052	1.052	1.052	1.052	1.052	1.047	1.042	1.042	1.037	1.039	1.037	1.034	1.031	1.031	1.026	1.028	1.026	1.026	1.023	1.023
70	1.057	1.052	1.057	1.047	1.052	1.047	1.049	1.044	1.044	1.042	1.042	1.037	1.034	1.031	1.031	1.026	1.031	1.026	1.026	1.023
71	1.057	1.057	1.054	1.054	1.052	1.052	1.047	1.047	1.044	1.042	1.039	1.039	1.037	1.037	1.031	1.031	1.028	1.028	1.026	1.026
72	1.061	1.057	1.057	1.052	1.052	1.052	1.052	1.047	1.049	1.044	1.044	1.039	1.042	1.037	1.037	1.034	1.034	1.028	1.028	1.026
73	1.063	1.061	1.059	1.054	1.054	1.057	1.052	1.047	1.049	1.047	1.047	1.039	1.042	1.037	1.039	1.037	1.034	1.028	1.031	1.026
74	1.063	1.061	1.057	1.057	1.052	1.054	1.049	1.052	1.044	1.047	1.039	1.042	1.037	1.039	1.037	1.034	1.031	1.031	1.028	1.028
75	1.070	1.057	1.057	1.052	1.052	1.052	1.049	1.052	1.047	1.047	1.042	1.042	1.037	1.042	1.037	1.031	1.031	1.031	1.028	1.031
76	1.089	1.078	1.063	1.059	1.054	1.052	1.052	1.049	1.047	1.047	1.042	1.042	1.037	1.037	1.037	1.034	1.031	1.031	1.023	1.028
77	1.096	1.091	1.089	1.074	1.065	1.054	1.052	1.047	1.049	1.042	1.047	1.042	1.042	1.037	1.044	1.037	1.037	1.031	1.031	1.026
78	1.110	1.095	1.087	1.089	1.086	1.076	1.061	1.052	1.047	1.044	1.039	1.039	1.037	1.037	1.031	1.031	1.028	1.028	1.026	1.026
79	1.191	1.128	1.102	1.089	1.087	1.086	1.086	1.076	1.070	1.054	1.047	1.037	1.037	1.034	1.034	1.028	1.031	1.026	1.028	1.023
80	1.327	1.248	1.150	1.111	1.095	1.091	1.087	1.086	1.082	1.084	1.078	1.074	1.063	1.061	1.052	1.052	1.047	1.047	1.042	1.044
81	1.314	1.292	1.228	1.149	1.102	1.089	1.082	1.082	1.078	1.078	1.074	1.074	1.070	1.070	1.063	1.065	1.057	1.052	1.042	1.039
82	1.328	1.319	1.299	1.250	1.166	1.108	1.082	1.078	1.074	1.074	1.068	1.072	1.065	1.072	1.065	1.065	1.061	1.065	1.061	1.063
83	1.419	1.382	1.353	1.324	1.280	1.201	1.128	1.087	1.078	1.070	1.072	1.068	1.070	1.065	1.068	1.054	1.065	1.049	1.063	1.052
84	1.550	1.525	1.491	1.453	1.404	1.339	1.246	1.151	1.095	1.080	1.068	1.065	1.063	1.065	1.063	1.063	1.063	1.063	1.059	1.061
85	1.553	1.550	1.551	1.548	1.535	1.500	1.432	1.323	1.202	1.116	1.086	1.065	1.065	1.059	1.061	1.061	1.063	1.059	1.061	1.059
86	1.451	1.443	1.431	1.418	1.407	1.402	1.390	1.359	1.289	1.186	1.105	1.074	1.061	1.059	1.052	1.057	1.052	1.052	1.052	1.052
87	1.122	1.116	1.113	1.106	1.106	1.102	1.103	1.100	1.098	1.082	1.070	1.057	1.054	1.052	1.052	1.047	1.047	1.047	1.047	1.042
88	1.089	1.086	1.078	1.076	1.070	1.072	1.065	1.070	1.063	1.063	1.057	1.054	1.049	1.047	1.042	1.044	1.042	1.042	1.042	1.039
89	1.080	1.078	1.065	1.065	1.061	1.061	1.057	1.059	1.052	1.054	1.047	1.052	1.044	1.044	1.042	1.042	1.037	1.037	1.037	1.037
90	1.106	1.110	1.082	1.065	1.059	1.059	1.054	1.054	1.052	1.049	1.047	1.047	1.042	1.042	1.037	1.042	1.034	1.039	1.031	1.037
91	1.087	1.082	1.074	1.061	1.059	1.052	1.052	1.049	1.049	1.044	1.047	1.042	1.044	1.039	1.042	1.037	1.039	1.034	1.037	1.034
92	1.078	1.078	1.065	1.061	1.054	1.054	1.052	1.049	1.047	1.044	1.039	1.042	1.037	1.039	1.037	1.037	1.034	1.037	1.031	1.034
93	1.078	1.074	1.063	1.059	1.052	1.052	1.047	1.049	1.047	1.047	1.042	1.042	1.037	1.037	1.037	1.037	1.034	1.034	1.031	1.031
94	1.084	1.076	1.068	1.057	1.057	1.049	1.052	1.047	1.047	1.042	1.044	1.037	1.042	1.037	1.039	1.034	1.037	1.031	1.037	1.031
95	1.084	1.082	1.068	1.059	1.052	1.052	1.047	1.049	1.047	1.044	1.042	1.042	1.037	1.039	1.037	1.037	1.034	1.037	1.031	1.034
96	1.091	1.084	1.076	1.057	1.057	1.047	1.052	1.044	1.047	1.044	1.047	1.042	1.042	1.037	1.039	1.034	1.042	1.034	1.034	1.031
97	1.102	1.093	1.082	1.061	1.054	1.047	1.052	1.047	1.052	1.044	1.047	1.034	1.042	1.028	1.037	1.028	1.037	1.026	1.037	1.026
98	1.128	1.131	1.111	1.074	1.061	1.052	1.052	1.047	1.049	1.044	1.047	1.042	1.044	1.037	1.039	1.037	1.037	1.034	1.037	1.031

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 53

IR SCAN TIME 10.82 SEC
INITIAL TEMP 535.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	1.047	1.037	1.042	1.037	1.042	1.031	1.034	1.031	1.031	1.026
65	1.037	1.034	1.037	1.028	1.031	1.028	1.031	1.026	1.026	1.023
66	1.031	1.026	1.028	1.026	1.026	1.023	1.023	1.016	1.020	1.016
67	1.023	1.023	1.020	1.016	1.016	1.016	1.010	1.010	1.007	1.010
68	1.020	1.016	1.020	1.010	1.016	1.010	1.016	1.003	1.010	1.003
69	1.010	1.020	1.007	1.016	1.003	1.013	1.000	1.010	0.996	1.007
70	1.026	1.020	1.020	1.016	1.016	1.013	1.013	1.007	1.010	1.003
71	1.020	1.023	1.020	1.020	1.016	1.013	1.013	1.013	1.007	1.010
72	1.026	1.023	1.023	1.016	1.016	1.016	1.010	1.010	1.013	1.010
73	1.026	1.023	1.023	1.020	1.020	1.013	1.013	1.013	1.013	1.007
74	1.023	1.026	1.016	1.020	1.013	1.016	1.010	1.013	1.007	1.010
75	1.026	1.020	1.023	1.028	1.020	1.016	1.010	1.010	1.010	1.007
76	1.020	1.023	1.013	1.020	1.010	1.016	1.007	1.013	1.003	1.010
77	1.028	1.023	1.026	1.020	1.020	1.016	1.016	1.010	1.013	1.007
78	1.023	1.023	1.020	1.020	1.013	1.016	1.013	1.013	1.010	1.007
79	1.026	1.020	1.023	1.016	1.020	1.013	1.013	1.010	1.013	1.007
80	1.042	1.044	1.042	1.039	1.037	1.037	1.037	1.031	1.028	1.028
81	1.028	1.026	1.023	1.020	1.016	1.013	1.007	1.013	1.007	1.010
82	1.057	1.057	1.047	1.047	1.037	1.031	1.023	1.020	1.010	1.013
83	1.061	1.047	1.059	1.044	1.057	1.042	1.052	1.039	1.044	1.031
84	1.057	1.057	1.057	1.054	1.052	1.052	1.052	1.052	1.052	1.049
85	1.059	1.054	1.057	1.052	1.054	1.049	1.052	1.052	1.052	1.047
86	1.049	1.052	1.044	1.049	1.047	1.044	1.042	1.044	1.039	1.042
87	1.044	1.039	1.042	1.042	1.042	1.039	1.039	1.039	1.039	1.037
88	1.037	1.042	1.039	1.039	1.037	1.037	1.034	1.037	1.034	1.037
89	1.037	1.037	1.034	1.037	1.034	1.037	1.031	1.037	1.034	1.037
90	1.031	1.034	1.028	1.034	1.026	1.034	1.028	1.031	1.028	1.037
91	1.037	1.031	1.034	1.031	1.031	1.031	1.031	1.031	1.031	1.026
92	1.031	1.031	1.028	1.031	1.028	1.031	1.026	1.028	1.026	1.028
93	1.028	1.031	1.028	1.031	1.026	1.028	1.028	1.028	1.026	1.028
94	1.034	1.031	1.031	1.028	1.031	1.028	1.031	1.026	1.028	1.026
95	1.031	1.031	1.028	1.031	1.028	1.031	1.026	1.031	1.028	1.031
96	1.034	1.031	1.031	1.026	1.031	1.034	1.037	1.031	1.037	1.031
97	1.031	1.023	1.031	1.023	1.034	1.026	1.037	1.031	1.037	1.034
98	1.031	1.028	1.031	1.028	1.034	1.031	1.034	1.034	1.037	1.031

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 10.82 SEC
GROUP 53 HRFR = 0.364E-01

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	0.040	0.042	0.045	0.045	0.045	0.041	0.041	0.042	0.044	0.044	0.044	0.044	0.042	0.045	0.045	0.046	0.046	0.048	0.047	0.048
30	0.045	0.045	0.044	0.043	0.041	0.041	0.041	0.044	0.044	0.046	0.046	0.047	0.046	0.047	0.046	0.047	0.047	0.048	0.046	0.046
31	0.044	0.042	0.042	0.041	0.043	0.043	0.046	0.046	0.047	0.046	0.047	0.046	0.047	0.047	0.048	0.047	0.046	0.043	0.041	0.038
32	0.042	0.042	0.042	0.045	0.045	0.047	0.047	0.047	0.045	0.046	0.046	0.047	0.046	0.045	0.042	0.041	0.038	0.037	0.037	0.038
33	0.044	0.045	0.045	0.046	0.045	0.046	0.045	0.046	0.045	0.045	0.043	0.042	0.038	0.036	0.035	0.037	0.038	0.041	0.040	0.042
34	0.048	0.047	0.045	0.044	0.044	0.044	0.042	0.041	0.040	0.038	0.034	0.035	0.035	0.036	0.038	0.041	0.041	0.042	0.042	0.044
35	0.045	0.044	0.044	0.041	0.040	0.037	0.036	0.033	0.035	0.035	0.036	0.035	0.038	0.037	0.041	0.041	0.042	0.043	0.044	0.042
36	0.041	0.039	0.037	0.035	0.033	0.034	0.034	0.035	0.037	0.037	0.038	0.039	0.040	0.041	0.041	0.042	0.040	0.037	0.031	0.026
37	0.035	0.034	0.034	0.034	0.035	0.036	0.037	0.038	0.038	0.040	0.041	0.041	0.042	0.040	0.037	0.031	0.026	0.020	0.018	0.016
38	0.033	0.034	0.036	0.036	0.037	0.037	0.038	0.039	0.041	0.041	0.041	0.038	0.034	0.027	0.022	0.017	0.017	0.017	0.017	0.016
39	0.035	0.035	0.037	0.038	0.038	0.038	0.040	0.041	0.038	0.035	0.029	0.023	0.019	0.017	0.016	0.017	0.017	0.017	0.017	0.018
40	0.037	0.038	0.039	0.039	0.040	0.040	0.037	0.032	0.026	0.020	0.018	0.017	0.017	0.017	0.018	0.017	0.019	0.017	0.017	0.017
41	0.040	0.041	0.042	0.041	0.037	0.029	0.024	0.019	0.018	0.017	0.018	0.017	0.018	0.017	0.019	0.018	0.019	0.019	0.019	0.019
42	0.046	0.042	0.038	0.027	0.022	0.016	0.017	0.015	0.018	0.016	0.019	0.016	0.019	0.019	0.020	0.019	0.020	0.019	0.020	0.020
43	0.039	0.028	0.021	0.019	0.017	0.018	0.017	0.018	0.017	0.018	0.018	0.019	0.019	0.019	0.019	0.020	0.019	0.021	0.020	0.021
44	0.022	0.020	0.020	0.019	0.020	0.018	0.020	0.019	0.020	0.020	0.020	0.020	0.021	0.020	0.022	0.022	0.023	0.023	0.025	0.024
45	0.020	0.021	0.021	0.022	0.020	0.022	0.021	0.023	0.022	0.023	0.023	0.024	0.023	0.026	0.025	0.026	0.026	0.030	0.042	0.057
46	0.023	0.023	0.024	0.023	0.025	0.023	0.026	0.024	0.026	0.024	0.027	0.026	0.028	0.027	0.028	0.029	0.031	0.051	0.112	0.163
47	0.024	0.026	0.024	0.026	0.027	0.026	0.028	0.026	0.027	0.026	0.028	0.028	0.029	0.029	0.030	0.030	0.035	0.066	0.137	0.189
48	0.026	0.025	0.026	0.027	0.027	0.028	0.027	0.028	0.028	0.029	0.029	0.030	0.030	0.030	0.032	0.032	0.037	0.075	0.149	0.202
49	0.026	0.026	0.026	0.028	0.027	0.028	0.027	0.029	0.028	0.030	0.029	0.031	0.030	0.032	0.032	0.034	0.040	0.087	0.161	0.208
50	0.027	0.027	0.027	0.029	0.029	0.029	0.029	0.030	0.029	0.030	0.030	0.031	0.032	0.034	0.033	0.036	0.048	0.112	0.183	0.219
51	0.027	0.026	0.028	0.028	0.028	0.028	0.029	0.029	0.030	0.030	0.031	0.032	0.033	0.034	0.035	0.037	0.061	0.130	0.192	0.220
52	0.023	0.024	0.024	0.025	0.026	0.026	0.026	0.028	0.027	0.029	0.028	0.030	0.030	0.032	0.032	0.038	0.075	0.153	0.203	0.224
53	0.019	0.020	0.020	0.020	0.020	0.022	0.022	0.023	0.023	0.025	0.025	0.026	0.026	0.028	0.030	0.038	0.095	0.170	0.208	0.226
54	0.016	0.017	0.018	0.019	0.019	0.019	0.020	0.020	0.023	0.022	0.025	0.024	0.026	0.026	0.029	0.043	0.111	0.178	0.209	0.225
55	0.016	0.017	0.019	0.017	0.020	0.019	0.021	0.022	0.022	0.023	0.025	0.025	0.027	0.028	0.030	0.049	0.121	0.183	0.211	0.225
56	0.017	0.018	0.014	0.020	0.016	0.020	0.018	0.022	0.020	0.025	0.023	0.026	0.026	0.028	0.030	0.056	0.129	0.188	0.213	0.227
57	0.016	0.016	0.017	0.017	0.017	0.019	0.019	0.020	0.021	0.022	0.023	0.025	0.024	0.028	0.030	0.067	0.144	0.194	0.215	0.228
58	0.014	0.016	0.016	0.016	0.017	0.018	0.018	0.020	0.020	0.021	0.022	0.024	0.023	0.028	0.034	0.089	0.164	0.203	0.222	0.234
59	0.016	0.015	0.016	0.016	0.017	0.017	0.019	0.019	0.020	0.020	0.023	0.022	0.026	0.026	0.045	0.113	0.177	0.206	0.221	0.232
60	0.016	0.015	0.016	0.016	0.016	0.018	0.019	0.020	0.020	0.022	0.021	0.024	0.025	0.029	0.058	0.134	0.185	0.208	0.222	0.232
61	0.016	0.016	0.017	0.017	0.018	0.019	0.021	0.020	0.022	0.023	0.025	0.024	0.028	0.032	0.079	0.150	0.189	0.208	0.222	0.231
62	0.016	0.017	0.018	0.017	0.020	0.019	0.021	0.021	0.023	0.023	0.025	0.025	0.028	0.037	0.092	0.155	0.188	0.206	0.218	0.226
63	0.016	0.017	0.016	0.018	0.016	0.019	0.019	0.022	0.022	0.024	0.024	0.026	0.028	0.040	0.102	0.162	0.189	0.203	0.213	0.222

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 10.82 SEC
HRFR = 0.364E-01

GROUP 53

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	0.047	0.048	0.046	0.046	0.042	0.041	0.038	0.038	0.037	0.039	0.038	0.040	0.038	0.041	0.040	0.043	0.043	0.045	0.045	0.047
30	0.043	0.042	0.040	0.040	0.038	0.038	0.038	0.039	0.040	0.042	0.043	0.045	0.045	0.046	0.046	0.048	0.048	0.049	0.045	0.047
31	0.038	0.036	0.038	0.040	0.042	0.042	0.043	0.042	0.045	0.045	0.048	0.048	0.049	0.048	0.048	0.044	0.042	0.037	0.035	0.030
32	0.039	0.041	0.041	0.042	0.044	0.046	0.045	0.046	0.047	0.048	0.045	0.045	0.040	0.035	0.030	0.026	0.021	0.017	0.016	0.014
33	0.042	0.044	0.043	0.045	0.046	0.046	0.043	0.040	0.037	0.034	0.028	0.023	0.018	0.016	0.013	0.014	0.012	0.014	0.013	0.014
34	0.045	0.045	0.042	0.041	0.036	0.032	0.026	0.021	0.016	0.014	0.012	0.013	0.012	0.013	0.014	0.013	0.014	0.014	0.013	0.014
35	0.040	0.034	0.029	0.022	0.017	0.016	0.015	0.013	0.014	0.013	0.013	0.013	0.014	0.014	0.014	0.013	0.015	0.014	0.015	0.014
36	0.019	0.016	0.014	0.015	0.012	0.015	0.013	0.015	0.012	0.014	0.012	0.014	0.012	0.016	0.015	0.015	0.015	0.016	0.015	0.016
37	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.017	0.016	0.017	0.016	0.016	0.016	0.016	0.017	0.012	0.017	0.012	0.017	0.013
38	0.017	0.016	0.017	0.016	0.016	0.016	0.017	0.016	0.017	0.016	0.017	0.016	0.017	0.017	0.017	0.016	0.017	0.017	0.020	0.017
39	0.017	0.017	0.017	0.018	0.017	0.018	0.017	0.019	0.017	0.019	0.018	0.019	0.017	0.018	0.018	0.019	0.018	0.019	0.017	0.019
40	0.019	0.017	0.019	0.018	0.020	0.019	0.020	0.019	0.020	0.019	0.021	0.020	0.021	0.020	0.020	0.020	0.020	0.020	0.020	0.020
41	0.020	0.019	0.021	0.020	0.021	0.020	0.022	0.020	0.022	0.021	0.022	0.021	0.023	0.021	0.022	0.021	0.022	0.021	0.023	0.020
42	0.021	0.020	0.023	0.021	0.023	0.022	0.023	0.022	0.024	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.022
43	0.020	0.023	0.020	0.024	0.022	0.024	0.023	0.025	0.023	0.025	0.023	0.026	0.025	0.025	0.024	0.025	0.024	0.025	0.023	0.025
44	0.026	0.025	0.028	0.026	0.028	0.028	0.028	0.027	0.028	0.028	0.028	0.028	0.030	0.026	0.028	0.026	0.028	0.025	0.026	0.025
45	0.060	0.059	0.055	0.052	0.048	0.044	0.040	0.038	0.036	0.035	0.034	0.034	0.033	0.033	0.032	0.032	0.031	0.031	0.030	0.030
46	0.186	0.196	0.205	0.212	0.218	0.219	0.215	0.202	0.181	0.152	0.117	0.083	0.060	0.047	0.042	0.037	0.037	0.035	0.035	0.034
47	0.213	0.224	0.232	0.242	0.253	0.269	0.289	0.309	0.324	0.333	0.335	0.318	0.280	0.229	0.171	0.114	0.073	0.051	0.044	0.040
48	0.227	0.242	0.253	0.265	0.275	0.285	0.294	0.305	0.317	0.328	0.339	0.346	0.345	0.342	0.338	0.326	0.277	0.180	0.098	0.064
49	0.231	0.249	0.264	0.278	0.292	0.309	0.325	0.338	0.337	0.333	0.333	0.336	0.341	0.346	0.350	0.347	0.345	0.337	0.252	0.138
50	0.237	0.253	0.265	0.280	0.296	0.315	0.335	0.357	0.372	0.385	0.387	0.378	0.364	0.359	0.363	0.366	0.358	0.351	0.352	0.290
51	0.236	0.247	0.260	0.276	0.292	0.311	0.332	0.355	0.381	0.402	0.410	0.412	0.407	0.392	0.377	0.364	0.360	0.355	0.347	0.355
52	0.239	0.251	0.261	0.275	0.291	0.309	0.327	0.349	0.373	0.391	0.401	0.413	0.426	0.435	0.437	0.429	0.408	0.384	0.363	0.347
53	0.238	0.248	0.257	0.271	0.285	0.304	0.326	0.348	0.369	0.389	0.399	0.406	0.413	0.426	0.446	0.465	0.473	0.461	0.454	0.423
54	0.237	0.244	0.254	0.266	0.283	0.301	0.321	0.343	0.366	0.387	0.404	0.415	0.418	0.420	0.428	0.436	0.448	0.464	0.480	0.488
55	0.236	0.244	0.252	0.263	0.279	0.297	0.316	0.337	0.359	0.380	0.398	0.410	0.419	0.426	0.433	0.434	0.440	0.448	0.455	0.472
56	0.237	0.244	0.252	0.263	0.276	0.292	0.311	0.331	0.351	0.369	0.380	0.391	0.400	0.407	0.416	0.426	0.438	0.449	0.458	0.465
57	0.236	0.244	0.252	0.263	0.276	0.292	0.308	0.326	0.344	0.361	0.374	0.382	0.391	0.404	0.413	0.417	0.420	0.431	0.446	0.461
58	0.242	0.247	0.256	0.268	0.281	0.296	0.314	0.335	0.352	0.366	0.374	0.380	0.392	0.404	0.407	0.406	0.413	0.422	0.427	0.438
59	0.241	0.247	0.257	0.269	0.284	0.300	0.318	0.336	0.357	0.370	0.377	0.386	0.397	0.408	0.409	0.405	0.412	0.420	0.422	0.420
60	0.240	0.247	0.258	0.269	0.280	0.298	0.317	0.338	0.358	0.372	0.382	0.396	0.411	0.421	0.418	0.414	0.417	0.420	0.418	0.418
61	0.237	0.243	0.254	0.264	0.275	0.291	0.308	0.327	0.348	0.360	0.371	0.388	0.408	0.419	0.425	0.431	0.430	0.423	0.417	0.422
62	0.232	0.238	0.247	0.256	0.267	0.279	0.296	0.316	0.334	0.345	0.355	0.369	0.387	0.398	0.408	0.416	0.422	0.429	0.429	0.430
63	0.228	0.235	0.244	0.253	0.262	0.274	0.289	0.309	0.326	0.338	0.349	0.366	0.386	0.397	0.403	0.407	0.407	0.414	0.419	0.420

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 10.82 SEC
GROUP 53 HREF = 0.364E-01

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	0.048	0.048	0.046	0.047	0.045	0.045	0.043	0.042	0.039	0.035	0.032	0.031	0.029	0.028	0.026	0.025	0.021	0.020	0.020	0.018
30	0.043	0.043	0.038	0.036	0.031	0.030	0.025	0.024	0.019	0.017	0.014	0.015	0.011	0.014	0.012	0.013	0.012	0.012	0.011	0.012
31	0.028	0.022	0.019	0.016	0.016	0.012	0.013	0.012	0.012	0.011	0.011	0.010	0.010	0.010	0.012	0.009	0.012	0.007	0.011	0.007
32	0.013	0.013	0.012	0.013	0.012	0.012	0.011	0.012	0.011	0.012	0.011	0.011	0.010	0.011	0.010	0.010	0.010	0.010	0.009	0.010
33	0.013	0.014	0.012	0.013	0.012	0.013	0.012	0.012	0.011	0.012	0.010	0.012	0.010	0.011	0.010	0.010	0.009	0.010	0.009	0.010
34	0.014	0.014	0.013	0.014	0.012	0.013	0.012	0.012	0.012	0.013	0.012	0.012	0.010	0.012	0.010	0.011	0.010	0.010	0.010	0.010
35	0.015	0.016	0.015	0.014	0.015	0.014	0.014	0.014	0.014	0.012	0.013	0.012	0.013	0.012	0.012	0.011	0.013	0.010	0.012	0.010
36	0.015	0.016	0.016	0.016	0.016	0.015	0.015	0.015	0.014	0.015	0.014	0.014	0.014	0.014	0.012	0.013	0.013	0.013	0.012	0.013
37	0.017	0.012	0.017	0.013	0.016	0.012	0.017	0.012	0.016	0.011	0.016	0.015	0.016	0.014	0.016	0.014	0.015	0.013	0.014	0.013
38	0.018	0.017	0.017	0.017	0.017	0.016	0.017	0.016	0.017	0.016	0.016	0.016	0.016	0.014	0.016	0.013	0.015	0.011	0.015	0.011
39	0.018	0.018	0.018	0.018	0.017	0.018	0.017	0.017	0.017	0.017	0.017	0.017	0.016	0.016	0.016	0.016	0.016	0.016	0.015	0.016
40	0.020	0.020	0.020	0.019	0.019	0.018	0.019	0.018	0.019	0.017	0.019	0.017	0.017	0.017	0.017	0.016	0.017	0.016	0.017	0.016
41	0.022	0.020	0.021	0.020	0.021	0.020	0.021	0.020	0.021	0.019	0.020	0.018	0.018	0.017	0.019	0.017	0.018	0.017	0.017	0.016
42	0.023	0.022	0.023	0.021	0.023	0.021	0.022	0.020	0.021	0.020	0.020	0.019	0.020	0.018	0.019	0.018	0.018	0.017	0.018	0.016
43	0.023	0.025	0.023	0.023	0.022	0.023	0.021	0.022	0.021	0.022	0.020	0.021	0.020	0.020	0.019	0.019	0.018	0.018	0.018	0.017
44	0.027	0.024	0.026	0.023	0.025	0.023	0.024	0.022	0.023	0.023	0.023	0.022	0.023	0.021	0.022	0.020	0.022	0.020	0.020	0.019
45	0.030	0.030	0.029	0.028	0.027	0.028	0.028	0.027	0.026	0.026	0.025	0.026	0.023	0.025	0.023	0.024	0.022	0.024	0.021	0.023
46	0.034	0.034	0.034	0.032	0.032	0.030	0.030	0.029	0.030	0.029	0.028	0.028	0.028	0.026	0.028	0.026	0.027	0.025	0.026	0.025
47	0.038	0.037	0.037	0.037	0.035	0.034	0.033	0.031	0.032	0.030	0.031	0.029	0.030	0.029	0.029	0.028	0.028	0.028	0.028	0.026
48	0.048	0.044	0.041	0.040	0.038	0.037	0.036	0.034	0.033	0.033	0.032	0.032	0.031	0.034	0.031	0.030	0.029	0.030	0.029	0.028
49	0.080	0.059	0.049	0.044	0.040	0.039	0.037	0.037	0.036	0.035	0.034	0.034	0.033	0.032	0.031	0.032	0.030	0.031	0.030	0.030
50	0.169	0.090	0.063	0.053	0.049	0.046	0.041	0.040	0.038	0.037	0.037	0.036	0.035	0.035	0.034	0.034	0.032	0.033	0.032	0.032
51	0.340	0.230	0.118	0.071	0.055	0.049	0.048	0.044	0.042	0.040	0.040	0.038	0.037	0.036	0.036	0.035	0.035	0.034	0.034	0.032
52	0.357	0.377	0.290	0.157	0.088	0.060	0.049	0.048	0.042	0.040	0.035	0.036	0.034	0.034	0.032	0.032	0.030	0.031	0.030	0.031
53	0.385	0.366	0.384	0.323	0.179	0.093	0.063	0.050	0.047	0.042	0.037	0.034	0.032	0.030	0.029	0.029	0.028	0.028	0.028	0.029
54	0.481	0.450	0.409	0.392	0.353	0.223	0.112	0.071	0.055	0.048	0.045	0.037	0.035	0.032	0.032	0.030	0.030	0.029	0.030	0.030
55	0.494	0.510	0.511	0.483	0.449	0.414	0.301	0.160	0.089	0.062	0.052	0.047	0.042	0.037	0.035	0.032	0.032	0.031	0.034	0.034
56	0.473	0.484	0.498	0.514	0.519	0.513	0.501	0.423	0.253	0.125	0.077	0.058	0.050	0.046	0.038	0.035	0.034	0.035	0.035	0.037
57	0.470	0.475	0.475	0.477	0.490	0.505	0.524	0.542	0.517	0.352	0.173	0.097	0.066	0.053	0.048	0.041	0.036	0.035	0.035	0.036
58	0.455	0.469	0.476	0.483	0.485	0.488	0.496	0.518	0.547	0.542	0.399	0.211	0.110	0.072	0.055	0.050	0.044	0.039	0.036	0.036
59	0.427	0.440	0.449	0.455	0.464	0.476	0.486	0.495	0.514	0.540	0.532	0.388	0.202	0.104	0.069	0.053	0.048	0.041	0.037	0.032
60	0.418	0.422	0.430	0.437	0.435	0.431	0.433	0.453	0.492	0.533	0.569	0.549	0.381	0.202	0.107	0.069	0.053	0.048	0.042	0.037
61	0.426	0.423	0.425	0.430	0.436	0.437	0.434	0.418	0.397	0.402	0.451	0.468	0.466	0.406	0.250	0.126	0.077	0.056	0.049	0.043
62	0.439	0.439	0.438	0.432	0.430	0.434	0.444	0.455	0.469	0.457	0.373	0.293	0.289	0.338	0.377	0.299	0.165	0.088	0.062	0.049
63	0.429	0.438	0.449	0.456	0.458	0.455	0.458	0.477	0.516	0.527	0.469	0.427	0.371	0.298	0.247	0.248	0.241	0.171	0.097	0.066

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP COPP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 10,82 SEC
HRFR = 0,364E-01

GROUP 53

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.015	0.016	0.014	0.014	0.013	0.014	0.012	0.013	0.012	0.012	0.012	0.013	0.012	0.012	0.011	0.012	0.012	0.013	0.012	0.013
30	0.012	0.012	0.011	0.011	0.010	0.011	0.011	0.011	0.009	0.010	0.010	0.011	0.010	0.011	0.010	0.011	0.010	0.011	0.010	0.011
31	0.010	0.007	0.010	0.007	0.010	0.007	0.009	0.007	0.009	0.007	0.010	0.009	0.011	0.008	0.010	0.009	0.010	0.009	0.011	0.009
32	0.010	0.010	0.010	0.009	0.008	0.009	0.007	0.008	0.008	0.008	0.007	0.008	0.008	0.009	0.005	0.008	0.006	0.008	0.005	0.010
33	0.010	0.010	0.010	0.010	0.009	0.009	0.010	0.009	0.008	0.008	0.008	0.008	0.007	0.008	0.007	0.008	0.007	0.007	0.007	0.008
34	0.010	0.011	0.010	0.011	0.009	0.009	0.008	0.009	0.008	0.008	0.008	0.009	0.008	0.008	0.007	0.008	0.007	0.009	0.006	0.007
35	0.011	0.010	0.011	0.010	0.010	0.009	0.010	0.009	0.009	0.009	0.009	0.007	0.009	0.008	0.009	0.008	0.008	0.007	0.007	0.007
36	0.012	0.012	0.012	0.011	0.011	0.011	0.011	0.011	0.010	0.010	0.010	0.011	0.010	0.009	0.008	0.009	0.009	0.009	0.008	0.008
37	0.014	0.013	0.014	0.012	0.013	0.012	0.013	0.013	0.012	0.011	0.012	0.010	0.011	0.010	0.011	0.010	0.010	0.010	0.010	0.009
38	0.015	0.012	0.014	0.012	0.014	0.011	0.013	0.010	0.012	0.013	0.013	0.012	0.013	0.012	0.013	0.011	0.012	0.010	0.012	0.010
39	0.014	0.014	0.014	0.015	0.014	0.014	0.012	0.013	0.013	0.012	0.012	0.013	0.009	0.013	0.009	0.012	0.009	0.012	0.009	0.012
40	0.016	0.016	0.016	0.015	0.016	0.014	0.016	0.015	0.015	0.014	0.014	0.014	0.014	0.013	0.014	0.013	0.014	0.012	0.013	0.012
41	0.017	0.016	0.017	0.016	0.017	0.016	0.016	0.015	0.016	0.014	0.016	0.014	0.015	0.014	0.015	0.014	0.015	0.013	0.014	0.013
42	0.017	0.016	0.017	0.016	0.017	0.016	0.016	0.015	0.016	0.014	0.016	0.015	0.016	0.014	0.016	0.014	0.016	0.014	0.015	0.014
43	0.017	0.017	0.017	0.017	0.016	0.017	0.016	0.017	0.016	0.016	0.016	0.016	0.016	0.015	0.016	0.014	0.015	0.014	0.014	0.016
44	0.020	0.019	0.020	0.017	0.019	0.018	0.019	0.017	0.019	0.017	0.018	0.017	0.018	0.017	0.018	0.017	0.017	0.017	0.017	0.016
45	0.021	0.023	0.020	0.022	0.020	0.022	0.020	0.022	0.020	0.021	0.020	0.020	0.020	0.020	0.020	0.020	0.019	0.020	0.019	0.020
46	0.026	0.024	0.025	0.024	0.024	0.024	0.024	0.022	0.023	0.017	0.023	0.019	0.023	0.019	0.023	0.019	0.023	0.018	0.023	0.018
47	0.028	0.026	0.026	0.026	0.026	0.025	0.026	0.025	0.025	0.024	0.026	0.024	0.025	0.024	0.023	0.023	0.023	0.023	0.023	0.023
48	0.029	0.029	0.028	0.028	0.027	0.027	0.026	0.027	0.026	0.026	0.023	0.026	0.026	0.026	0.026	0.026	0.025	0.025	0.025	0.026
49	0.029	0.030	0.029	0.029	0.029	0.029	0.028	0.028	0.027	0.028	0.027	0.027	0.026	0.026	0.026	0.026	0.025	0.026	0.025	0.026
50	0.030	0.031	0.029	0.030	0.029	0.029	0.029	0.030	0.029	0.029	0.028	0.028	0.028	0.026	0.028	0.026	0.027	0.026	0.026	0.026
51	0.033	0.032	0.032	0.032	0.032	0.030	0.031	0.030	0.030	0.030	0.030	0.030	0.030	0.028	0.029	0.028	0.028	0.028	0.028	0.028
52	0.030	0.032	0.030	0.032	0.031	0.032	0.032	0.032	0.032	0.031	0.031	0.031	0.030	0.030	0.030	0.030	0.029	0.030	0.029	0.029
53	0.029	0.031	0.032	0.033	0.032	0.033	0.032	0.033	0.031	0.033	0.031	0.033	0.031	0.032	0.030	0.031	0.030	0.030	0.029	0.029
54	0.032	0.034	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.034	0.034	0.032	0.033	0.032	0.032	0.030
55	0.035	0.036	0.037	0.036	0.037	0.036	0.037	0.037	0.037	0.037	0.037	0.036	0.037	0.036	0.036	0.035	0.035	0.034	0.034	0.032
56	0.037	0.038	0.038	0.038	0.038	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.036	0.037	0.035	0.035	0.034	0.034	0.032	0.032
57	0.035	0.036	0.035	0.035	0.034	0.034	0.033	0.034	0.032	0.032	0.032	0.032	0.030	0.030	0.030	0.030	0.029	0.029	0.029	0.028
58	0.035	0.035	0.035	0.035	0.034	0.035	0.035	0.035	0.034	0.034	0.034	0.034	0.032	0.033	0.032	0.032	0.032	0.032	0.031	0.030
59	0.032	0.030	0.030	0.029	0.030	0.028	0.029	0.027	0.028	0.026	0.027	0.023	0.025	0.023	0.025	0.023	0.023	0.021	0.022	0.021
60	0.032	0.032	0.030	0.030	0.029	0.029	0.026	0.028	0.025	0.026	0.025	0.025	0.023	0.024	0.022	0.023	0.021	0.023	0.021	0.022
61	0.038	0.033	0.032	0.030	0.031	0.029	0.030	0.028	0.029	0.027	0.026	0.025	0.025	0.024	0.024	0.023	0.023	0.021	0.023	0.022
62	0.046	0.040	0.035	0.032	0.032	0.030	0.030	0.029	0.029	0.028	0.028	0.026	0.026	0.025	0.026	0.023	0.025	0.023	0.024	0.022
63	0.051	0.046	0.042	0.037	0.033	0.032	0.030	0.030	0.028	0.028	0.027	0.027	0.026	0.026	0.025	0.026	0.023	0.024	0.023	0.024

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
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50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR HEAT TRANSFER COEFFICIENT - H(,9TO)/HREF
IR SCAN TIME 10.82 SEC
GROUP 53 HREF = 0.364E-01

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.012	0.012	0.012	0.012	0.012	0.013	0.012	0.012	0.011	0.012	0.010	0.011	0.010	0.010	0.009	0.009	0.008	0.009	0.008	0.009
30	0.011	0.011	0.010	0.012	0.010	0.012	0.011	0.011	0.011	0.011	0.010	0.010	0.009	0.009	0.010	0.009	0.008	0.008	0.008	0.008
31	0.010	0.009	0.010	0.009	0.010	0.009	0.011	0.010	0.010	0.010	0.010	0.009	0.010	0.008	0.009	0.007	0.009	0.004	0.007	0.006
32	0.006	0.009	0.006	0.009	0.006	0.009	0.006	0.009	0.005	0.009	0.008	0.008	0.008	0.008	0.007	0.008	0.006	0.008	0.006	0.006
33	0.007	0.007	0.007	0.007	0.007	0.008	0.007	0.007	0.006	0.006	0.006	0.007	0.004	0.006	0.003	0.005	0.003	0.005	0.003	0.006
34	0.007	0.007	0.006	0.007	0.005	0.007	0.006	0.006	0.005	0.006	0.005	0.005	0.005	0.006	0.005	0.005	0.005	0.005	0.004	0.006
35	0.008	0.007	0.008	0.006	0.007	0.007	0.006	0.006	0.007	0.005	0.006	0.005	0.006	0.005	0.007	0.005	0.006	0.005	0.006	0.006
36	0.008	0.008	0.008	0.008	0.008	0.008	0.007	0.008	0.007	0.008	0.008	0.007	0.007	0.007	0.007	0.007	0.005	0.007	0.006	0.009
37	0.011	0.010	0.010	0.008	0.009	0.009	0.009	0.008	0.009	0.008	0.009	0.008	0.008	0.007	0.009	0.007	0.007	0.007	0.009	0.008
38	0.012	0.010	0.011	0.009	0.010	0.009	0.009	0.009	0.009	0.009	0.010	0.009	0.010	0.008	0.009	0.008	0.009	0.007	0.009	0.008
39	0.010	0.011	0.010	0.010	0.008	0.010	0.008	0.010	0.010	0.010	0.010	0.011	0.009	0.010	0.009	0.009	0.009	0.010	0.008	0.009
40	0.013	0.012	0.012	0.011	0.012	0.011	0.011	0.010	0.010	0.010	0.011	0.008	0.010	0.008	0.011	0.008	0.010	0.008	0.011	0.009
41	0.015	0.012	0.014	0.013	0.014	0.012	0.012	0.011	0.013	0.011	0.013	0.011	0.012	0.011	0.012	0.010	0.011	0.010	0.011	0.010
42	0.014	0.013	0.014	0.012	0.014	0.013	0.014	0.012	0.012	0.012	0.013	0.011	0.013	0.011	0.012	0.011	0.013	0.010	0.012	0.011
43	0.014	0.015	0.014	0.014	0.014	0.014	0.013	0.014	0.013	0.013	0.012	0.013	0.011	0.013	0.012	0.013	0.012	0.013	0.012	0.013
44	0.017	0.016	0.016	0.016	0.016	0.016	0.017	0.014	0.016	0.014	0.016	0.015	0.016	0.014	0.016	0.014	0.016	0.015	0.015	0.014
45	0.019	0.019	0.019	0.019	0.017	0.020	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.018	0.018	0.017	0.018	0.017	0.018
46	0.023	0.020	0.023	0.020	0.023	0.022	0.023	0.021	0.022	0.021	0.021	0.020	0.022	0.021	0.020	0.020	0.020	0.020	0.021	0.020
47	0.024	0.023	0.025	0.024	0.024	0.023	0.023	0.022	0.023	0.021	0.022	0.021	0.023	0.020	0.022	0.021	0.022	0.020	0.022	0.020
48	0.026	0.023	0.026	0.027	0.025	0.026	0.022	0.023	0.023	0.023	0.023	0.022	0.021	0.023	0.023	0.024	0.022	0.022	0.023	0.023
49	0.028	0.026	0.024	0.026	0.025	0.026	0.024	0.025	0.023	0.024	0.023	0.025	0.023	0.024	0.023	0.023	0.023	0.023	0.023	0.023
50	0.026	0.026	0.026	0.026	0.026	0.026	0.025	0.026	0.025	0.026	0.024	0.025	0.025	0.025	0.025	0.025	0.024	0.025	0.023	0.024
51	0.029	0.026	0.028	0.027	0.028	0.026	0.027	0.026	0.026	0.026	0.026	0.025	0.026	0.025	0.026	0.024	0.025	0.024	0.025	0.023
52	0.028	0.029	0.027	0.027	0.026	0.026	0.024	0.024	0.023	0.023	0.023	0.023	0.022	0.022	0.021	0.022	0.021	0.022	0.020	0.020
53	0.028	0.028	0.026	0.028	0.025	0.023	0.021	0.021	0.019	0.020	0.019	0.018	0.017	0.018	0.017	0.017	0.016	0.017	0.016	0.017
54	0.030	0.029	0.029	0.028	0.027	0.023	0.023	0.019	0.020	0.016	0.019	0.016	0.018	0.016	0.017	0.015	0.017	0.014	0.016	0.013
55	0.032	0.030	0.030	0.029	0.029	0.026	0.025	0.022	0.022	0.019	0.020	0.018	0.018	0.017	0.017	0.015	0.017	0.016	0.017	0.015
56	0.030	0.030	0.029	0.029	0.028	0.027	0.023	0.023	0.020	0.020	0.019	0.017	0.017	0.017	0.017	0.016	0.016	0.016	0.014	0.014
57	0.026	0.026	0.025	0.025	0.024	0.023	0.021	0.021	0.020	0.019	0.017	0.018	0.017	0.017	0.016	0.016	0.016	0.016	0.014	0.015
58	0.030	0.030	0.029	0.030	0.030	0.030	0.029	0.029	0.028	0.028	0.027	0.027	0.024	0.025	0.025	0.026	0.024	0.025	0.023	0.024
59	0.022	0.020	0.021	0.020	0.019	0.017	0.019	0.017	0.018	0.016	0.017	0.016	0.016	0.015	0.016	0.013	0.015	0.013	0.013	0.012
60	0.020	0.021	0.020	0.020	0.018	0.019	0.017	0.018	0.016	0.017	0.016	0.016	0.015	0.016	0.013	0.015	0.013	0.015	0.013	0.013
61	0.023	0.020	0.021	0.020	0.020	0.018	0.020	0.017	0.018	0.016	0.017	0.016	0.016	0.015	0.016	0.013	0.015	0.013	0.014	0.013
62	0.023	0.022	0.023	0.021	0.021	0.019	0.019	0.018	0.019	0.017	0.017	0.016	0.017	0.016	0.016	0.014	0.016	0.013	0.015	0.012
63	0.022	0.023	0.021	0.023	0.020	0.021	0.019	0.020	0.019	0.019	0.017	0.017	0.017	0.017	0.017	0.016	0.015	0.015	0.013	0.014

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 10.82 SEC
HRFR = 0.364E-01

GROUP 53

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.008	0.008	0.007	0.007	0.006	0.008	0.006	0.007	0.006	0.007
30	0.007	0.008	0.006	0.008	0.006	0.007	0.005	0.006	0.005	0.006
31	0.007	0.006	0.007	0.005	0.006	0.005	0.006	0.005	0.006	0.005
32	0.005	0.006	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
33	0.002	0.005	0.004	0.005	0.003	0.004	0.002	0.005	0.005	0.005
34	0.005	0.007	0.005	0.005	0.004	0.004	0.003	0.004	0.004	0.004
35	0.006	0.005	0.005	0.005	0.005	0.004	0.005	0.004	0.005	0.005
36	0.007	0.007	0.006	0.007	0.006	0.006	0.005	0.005	0.005	0.007
37	0.008	0.007	0.008	0.007	0.008	0.006	0.007	0.006	0.008	0.006
38	0.009	0.008	0.009	0.008	0.009	0.007	0.008	0.008	0.009	0.008
39	0.009	0.009	0.009	0.009	0.008	0.009	0.009	0.009	0.009	0.009
40	0.010	0.008	0.009	0.007	0.010	0.009	0.010	0.009	0.011	0.009
41	0.012	0.010	0.011	0.010	0.010	0.010	0.010	0.008	0.012	0.008
42	0.011	0.010	0.012	0.010	0.012	0.011	0.011	0.010	0.012	0.011
43	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
44	0.015	0.014	0.015	0.014	0.016	0.013	0.015	0.014	0.015	0.014
45	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017
46	0.020	0.020	0.020	0.020	0.020	0.019	0.020	0.019	0.020	0.019
47	0.022	0.020	0.023	0.021	0.022	0.020	0.022	0.021	0.020	0.019
48	0.023	0.022	0.023	0.022	0.021	0.022	0.022	0.022	0.022	0.021
49	0.022	0.023	0.022	0.023	0.022	0.022	0.022	0.023	0.021	0.022
50	0.023	0.024	0.023	0.024	0.022	0.023	0.022	0.023	0.021	0.023
51	0.024	0.023	0.025	0.023	0.024	0.023	0.023	0.022	0.023	0.022
52	0.020	0.020	0.020	0.020	0.019	0.020	0.018	0.019	0.017	0.018
53	0.016	0.016	0.015	0.015	0.014	0.015	0.014	0.014	0.014	0.013
54	0.016	0.013	0.014	0.012	0.013	0.012	0.013	0.011	0.011	0.010
55	0.014	0.013	0.014	0.008	0.014	0.008	0.013	0.007	0.011	0.006
56	0.012	0.013	0.012	0.012	0.011	0.011	0.010	0.010	0.009	0.009
57	0.013	0.014	0.012	0.014	0.012	0.013	0.012	0.013	0.012	0.012
58	0.022	0.022	0.021	0.021	0.020	0.020	0.020	0.018	0.017	0.018
59	0.013	0.011	0.012	0.010	0.011	0.010	0.011	0.009	0.010	0.008
60	0.012	0.013	0.012	0.012	0.012	0.011	0.010	0.010	0.009	0.009
61	0.014	0.013	0.013	0.012	0.012	0.010	0.011	0.010	0.010	0.009
62	0.013	0.012	0.012	0.009	0.012	0.009	0.010	0.008	0.009	0.007
63	0.013	0.012	0.012	0.013	0.012	0.011	0.010	0.011	0.010	0.010

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 10.82 SEC
GROUP 53 HREF = 0.364E-01

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.016	0.016	0.017	0.017	0.019	0.018	0.020	0.020	0.023	0.022	0.025	0.023	0.028	0.042	0.110	0.162	0.186	0.201	0.212	0.220
65	0.014	0.014	0.016	0.016	0.016	0.017	0.019	0.019	0.021	0.021	0.023	0.023	0.028	0.055	0.124	0.166	0.186	0.200	0.210	0.216
66	0.011	0.010	0.014	0.013	0.014	0.014	0.016	0.016	0.018	0.019	0.020	0.022	0.030	0.075	0.139	0.170	0.187	0.199	0.208	0.217
67	0.008	0.008	0.008	0.009	0.009	0.011	0.012	0.013	0.014	0.016	0.017	0.020	0.032	0.091	0.146	0.171	0.186	0.197	0.204	0.211
68	0.006	0.007	0.009	0.008	0.010	0.009	0.012	0.012	0.015	0.016	0.017	0.020	0.045	0.109	0.151	0.169	0.182	0.190	0.197	0.203
69	0.007	0.008	0.008	0.008	0.010	0.010	0.012	0.013	0.014	0.016	0.017	0.023	0.059	0.120	0.152	0.167	0.178	0.187	0.194	0.200
70	0.009	0.005	0.009	0.007	0.011	0.013	0.014	0.014	0.016	0.016	0.018	0.024	0.067	0.124	0.152	0.166	0.177	0.184	0.192	0.198
71	0.008	0.008	0.009	0.010	0.010	0.012	0.013	0.016	0.014	0.016	0.016	0.028	0.078	0.133	0.156	0.169	0.179	0.187	0.193	0.199
72	0.009	0.009	0.009	0.009	0.012	0.012	0.015	0.014	0.016	0.016	0.019	0.031	0.088	0.137	0.158	0.170	0.180	0.186	0.194	0.199
73	0.008	0.009	0.010	0.009	0.012	0.012	0.014	0.014	0.016	0.016	0.019	0.041	0.100	0.139	0.157	0.168	0.176	0.183	0.190	0.195
74	0.008	0.009	0.009	0.010	0.010	0.012	0.012	0.014	0.015	0.016	0.020	0.057	0.115	0.145	0.159	0.168	0.175	0.181	0.187	0.194
75	0.009	0.008	0.007	0.009	0.010	0.010	0.014	0.013	0.014	0.016	0.026	0.073	0.126	0.148	0.159	0.168	0.175	0.180	0.185	0.190
76	0.009	0.009	0.009	0.009	0.010	0.010	0.011	0.012	0.013	0.016	0.034	0.092	0.133	0.150	0.161	0.168	0.174	0.180	0.184	0.190
77	0.009	0.008	0.011	0.009	0.009	0.012	0.014	0.014	0.014	0.017	0.045	0.104	0.138	0.151	0.161	0.168	0.173	0.178	0.182	0.187
78	0.011	0.017	0.025	0.025	0.020	0.019	0.016	0.019	0.017	0.018	0.051	0.111	0.138	0.152	0.160	0.166	0.171	0.175	0.180	0.185
79	0.016	0.030	0.041	0.028	0.025	0.022	0.019	0.016	0.019	0.025	0.064	0.117	0.140	0.152	0.160	0.165	0.170	0.174	0.178	0.183
80	0.022	0.038	0.057	0.035	0.023	0.024	0.024	0.023	0.020	0.026	0.069	0.120	0.141	0.152	0.158	0.163	0.167	0.171	0.175	0.179
81	0.032	0.051	0.076	0.059	0.033	0.027	0.025	0.026	0.026	0.035	0.085	0.129	0.145	0.154	0.159	0.163	0.166	0.169	0.172	0.176
82	0.057	0.075	0.098	0.093	0.056	0.037	0.025	0.023	0.026	0.050	0.104	0.137	0.150	0.158	0.162	0.165	0.167	0.169	0.171	0.174
83	0.057	0.065	0.094	0.100	0.063	0.042	0.027	0.016	0.021	0.063	0.118	0.141	0.152	0.158	0.162	0.165	0.168	0.169	0.171	0.172
84	0.044	0.042	0.057	0.062	0.046	0.034	0.024	0.024	0.034	0.079	0.125	0.142	0.152	0.163	0.168	0.172	0.173	0.173	0.172	0.174
85	0.040	0.039	0.039	0.040	0.041	0.034	0.032	0.034	0.040	0.039	0.042	0.045	0.050	0.055	0.066	0.077	0.091	0.101	0.114	0.129
86	0.032	0.030	0.032	0.034	0.030	0.030	0.030	0.032	0.037	0.038	0.037	0.037	0.036	0.036	0.036	0.037	0.037	0.038	0.039	0.040
87	0.020	0.019	0.020	0.020	0.023	0.022	0.025	0.030	0.037	0.036	0.036	0.034	0.034	0.033	0.033	0.033	0.033	0.034	0.035	0.036
88	0.013	0.011	0.011	0.012	0.014	0.017	0.019	0.027	0.033	0.035	0.034	0.034	0.031	0.032	0.030	0.031	0.030	0.030	0.030	0.032
89	0.007	0.005	0.005	0.009	0.013	0.016	0.017	0.024	0.032	0.034	0.034	0.034	0.032	0.031	0.030	0.030	0.029	0.029	0.029	0.030
90	0.003	0.003	0.003	0.008	0.011	0.013	0.014	0.020	0.030	0.034	0.034	0.034	0.032	0.032	0.030	0.030	0.029	0.030	0.029	0.030
91	0.002	0.001	0.003	0.006	0.009	0.011	0.013	0.018	0.028	0.032	0.034	0.033	0.034	0.032	0.032	0.030	0.031	0.030	0.030	0.029
92	0.001	0.002	0.001	0.006	0.005	0.010	0.010	0.017	0.026	0.032	0.030	0.033	0.031	0.032	0.031	0.031	0.029	0.030	0.029	0.029
93	0.007	0.005	0.005	0.008	0.010	0.012	0.014	0.018	0.026	0.030	0.033	0.033	0.032	0.032	0.032	0.032	0.032	0.030	0.029	0.028
94	0.018	0.017	0.018	0.017	0.019	0.018	0.019	0.020	0.029	0.030	0.031	0.032	0.034	0.032	0.033	0.032	0.032	0.030	0.030	0.028
95	0.023	0.023	0.023	0.024	0.023	0.023	0.021	0.025	0.029	0.032	0.030	0.032	0.033	0.034	0.034	0.034	0.033	0.033	0.030	0.029
96	0.027	0.027	0.028	0.026	0.028	0.026	0.026	0.025	0.032	0.033	0.033	0.034	0.035	0.035	0.036	0.035	0.036	0.034	0.032	0.029
97	0.028	0.028	0.029	0.029	0.029	0.027	0.025	0.026	0.031	0.030	0.031	0.033	0.035	0.036	0.037	0.036	0.036	0.033	0.032	0.030
98	0.029	0.028	0.030	0.029	0.030	0.027	0.026	0.026	0.031	0.029	0.030	0.030	0.034	0.036	0.037	0.037	0.035	0.033	0.032	0.033

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 10.82 SEC
HRFR = 0.364E-01

GROUP 53

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	0.225	0.231	0.239	0.245	0.256	0.269	0.284	0.299	0.317	0.331	0.342	0.355	0.376	0.386	0.392	0.400	0.407	0.412	0.413	0.411
65	0.222	0.229	0.239	0.246	0.257	0.269	0.282	0.294	0.314	0.329	0.339	0.348	0.366	0.372	0.376	0.385	0.395	0.401	0.407	0.413
66	0.222	0.229	0.239	0.248	0.259	0.270	0.284	0.298	0.312	0.332	0.347	0.352	0.358	0.367	0.374	0.380	0.388	0.392	0.393	0.398
67	0.218	0.224	0.233	0.242	0.252	0.264	0.276	0.291	0.307	0.324	0.341	0.352	0.357	0.360	0.368	0.378	0.379	0.377	0.379	0.383
68	0.210	0.216	0.223	0.232	0.242	0.252	0.263	0.276	0.292	0.308	0.326	0.342	0.350	0.356	0.362	0.368	0.376	0.383	0.390	0.392
69	0.205	0.212	0.220	0.228	0.238	0.248	0.256	0.267	0.281	0.297	0.314	0.329	0.339	0.348	0.357	0.362	0.366	0.373	0.380	0.386
70	0.205	0.211	0.220	0.228	0.236	0.248	0.259	0.266	0.275	0.290	0.304	0.316	0.326	0.330	0.335	0.339	0.347	0.355	0.364	0.371
71	0.203	0.210	0.218	0.226	0.232	0.244	0.254	0.264	0.275	0.288	0.299	0.309	0.317	0.321	0.323	0.325	0.330	0.335	0.338	0.342
72	0.205	0.211	0.217	0.224	0.233	0.240	0.252	0.261	0.271	0.283	0.295	0.304	0.312	0.317	0.320	0.320	0.323	0.328	0.332	0.333
73	0.202	0.208	0.215	0.223	0.233	0.244	0.254	0.267	0.277	0.286	0.296	0.303	0.312	0.321	0.322	0.320	0.320	0.321	0.326	0.331
74	0.199	0.205	0.212	0.219	0.226	0.237	0.247	0.257	0.268	0.279	0.288	0.299	0.309	0.318	0.319	0.319	0.319	0.321	0.325	0.331
75	0.195	0.201	0.209	0.216	0.224	0.233	0.242	0.252	0.260	0.270	0.280	0.287	0.291	0.295	0.298	0.302	0.308	0.314	0.317	0.320
76	0.195	0.200	0.206	0.214	0.222	0.230	0.239	0.248	0.255	0.265	0.274	0.282	0.287	0.292	0.295	0.299	0.301	0.304	0.305	0.308
77	0.193	0.198	0.205	0.211	0.218	0.227	0.236	0.245	0.254	0.261	0.268	0.275	0.282	0.288	0.292	0.295	0.298	0.299	0.302	0.304
78	0.190	0.197	0.202	0.210	0.217	0.225	0.235	0.245	0.254	0.262	0.268	0.274	0.278	0.282	0.286	0.290	0.294	0.298	0.301	0.304
79	0.189	0.194	0.201	0.207	0.214	0.222	0.232	0.239	0.249	0.258	0.266	0.272	0.278	0.281	0.287	0.289	0.293	0.295	0.298	0.300
80	0.184	0.190	0.196	0.203	0.210	0.216	0.225	0.235	0.245	0.256	0.265	0.273	0.279	0.283	0.286	0.288	0.289	0.290	0.292	0.295
81	0.180	0.185	0.191	0.198	0.205	0.213	0.221	0.230	0.239	0.249	0.258	0.267	0.273	0.279	0.282	0.285	0.287	0.290	0.291	0.292
82	0.177	0.182	0.187	0.195	0.202	0.210	0.218	0.227	0.236	0.244	0.252	0.259	0.264	0.269	0.273	0.276	0.280	0.284	0.286	0.289
83	0.176	0.179	0.185	0.191	0.199	0.208	0.216	0.224	0.233	0.241	0.250	0.256	0.261	0.266	0.270	0.272	0.274	0.277	0.281	0.283
84	0.176	0.178	0.182	0.187	0.192	0.200	0.209	0.218	0.225	0.233	0.241	0.248	0.253	0.257	0.261	0.264	0.267	0.271	0.273	0.276
85	0.137	0.143	0.152	0.159	0.169	0.174	0.176	0.180	0.189	0.202	0.232	0.246	0.231	0.222	0.225	0.230	0.235	0.240	0.243	0.247
86	0.040	0.042	0.041	0.043	0.043	0.046	0.045	0.046	0.046	0.048	0.050	0.057	0.054	0.054	0.054	0.056	0.058	0.062	0.065	0.069
87	0.037	0.036	0.037	0.037	0.038	0.038	0.039	0.038	0.038	0.038	0.040	0.040	0.041	0.040	0.041	0.041	0.042	0.042	0.043	0.042
88	0.032	0.033	0.033	0.033	0.034	0.035	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.037	0.037	0.036	0.037	0.037	0.037	0.037
89	0.030	0.031	0.031	0.032	0.032	0.032	0.033	0.034	0.034	0.034	0.034	0.034	0.034	0.035	0.034	0.034	0.034	0.035	0.035	0.036
90	0.029	0.030	0.030	0.031	0.031	0.032	0.032	0.032	0.032	0.033	0.033	0.034	0.035	0.035	0.034	0.034	0.034	0.034	0.034	0.033
91	0.029	0.029	0.030	0.030	0.030	0.030	0.032	0.032	0.032	0.035	0.045	0.088	0.122	0.098	0.056	0.038	0.034	0.032	0.034	0.033
92	0.028	0.029	0.029	0.030	0.030	0.030	0.030	0.032	0.031	0.034	0.040	0.078	0.109	0.091	0.052	0.038	0.033	0.031	0.031	0.032
93	0.025	0.028	0.026	0.028	0.027	0.030	0.028	0.030	0.029	0.031	0.030	0.032	0.030	0.032	0.029	0.032	0.030	0.030	0.030	0.031
94	0.028	0.026	0.028	0.028	0.030	0.029	0.030	0.030	0.032	0.030	0.032	0.031	0.030	0.029	0.030	0.029	0.030	0.029	0.030	0.029
95	0.028	0.028	0.028	0.029	0.028	0.030	0.030	0.031	0.031	0.032	0.032	0.032	0.031	0.031	0.030	0.030	0.030	0.030	0.029	0.030
96	0.029	0.028	0.030	0.029	0.030	0.030	0.031	0.031	0.032	0.032	0.033	0.032	0.033	0.032	0.032	0.030	0.030	0.029	0.030	0.029
97	0.030	0.029	0.030	0.029	0.031	0.030	0.032	0.031	0.032	0.032	0.032	0.032	0.033	0.031	0.031	0.030	0.031	0.030	0.030	0.029
98	0.033	0.032	0.033	0.032	0.034	0.033	0.034	0.033	0.034	0.032	0.032	0.032	0.032	0.032	0.032	0.030	0.030	0.030	0.032	0.032

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREFR
IR SCAN TIME 10.82 SEC
HREFR = 0.364E-01

GROUP 53

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	0.409	0.402	0.396	0.397	0.407	0.426	0.454	0.492	0.537	0.511	0.474	0.474	0.468	0.454	0.403	0.319	0.247	0.208	0.168	0.107
65	0.421	0.423	0.418	0.398	0.372	0.350	0.335	0.336	0.357	0.363	0.388	0.425	0.445	0.454	0.460	0.457	0.423	0.346	0.256	0.184
66	0.405	0.411	0.417	0.421	0.423	0.415	0.395	0.371	0.325	0.262	0.228	0.216	0.228	0.261	0.307	0.362	0.409	0.436	0.429	0.360
67	0.388	0.390	0.390	0.392	0.400	0.417	0.436	0.463	0.441	0.373	0.333	0.284	0.243	0.215	0.200	0.195	0.209	0.248	0.305	0.356
68	0.395	0.399	0.406	0.405	0.402	0.412	0.431	0.453	0.444	0.425	0.423	0.401	0.360	0.306	0.259	0.227	0.208	0.199	0.195	0.194
69	0.391	0.397	0.404	0.411	0.418	0.428	0.446	0.473	0.456	0.426	0.421	0.418	0.416	0.405	0.377	0.336	0.287	0.243	0.215	0.202
70	0.380	0.388	0.399	0.406	0.414	0.429	0.449	0.481	0.473	0.444	0.439	0.429	0.423	0.420	0.412	0.402	0.391	0.366	0.323	0.276
71	0.347	0.353	0.363	0.376	0.385	0.395	0.420	0.469	0.463	0.437	0.440	0.437	0.435	0.435	0.432	0.424	0.420	0.416	0.413	0.403
72	0.336	0.338	0.339	0.338	0.338	0.343	0.359	0.392	0.392	0.368	0.375	0.380	0.383	0.388	0.396	0.406	0.417	0.424	0.435	0.443
73	0.338	0.340	0.337	0.332	0.333	0.338	0.353	0.377	0.396	0.370	0.354	0.341	0.325	0.306	0.284	0.269	0.259	0.255	0.263	0.276
74	0.338	0.346	0.350	0.350	0.346	0.351	0.372	0.406	0.430	0.397	0.375	0.366	0.356	0.345	0.329	0.314	0.290	0.261	0.231	0.203
75	0.324	0.331	0.341	0.348	0.352	0.363	0.384	0.426	0.457	0.403	0.382	0.379	0.375	0.373	0.366	0.360	0.353	0.343	0.329	0.308
76	0.310	0.313	0.317	0.321	0.327	0.335	0.348	0.382	0.404	0.345	0.341	0.345	0.345	0.346	0.349	0.354	0.357	0.360	0.359	0.356
77	0.307	0.310	0.312	0.313	0.314	0.314	0.317	0.321	0.329	0.318	0.298	0.287	0.280	0.274	0.268	0.266	0.267	0.270	0.274	0.282
78	0.306	0.309	0.310	0.311	0.312	0.313	0.317	0.325	0.338	0.336	0.311	0.301	0.291	0.279	0.266	0.252	0.237	0.223	0.210	0.200
79	0.302	0.303	0.305	0.306	0.307	0.308	0.311	0.319	0.334	0.341	0.321	0.312	0.311	0.306	0.301	0.294	0.286	0.276	0.264	0.251
80	0.297	0.300	0.302	0.304	0.304	0.305	0.307	0.314	0.327	0.342	0.325	0.314	0.314	0.314	0.311	0.310	0.307	0.306	0.302	0.298
81	0.294	0.298	0.300	0.301	0.303	0.305	0.308	0.314	0.324	0.340	0.332	0.318	0.318	0.318	0.318	0.317	0.317	0.315	0.313	0.313
82	0.291	0.294	0.295	0.298	0.300	0.302	0.305	0.311	0.324	0.345	0.338	0.320	0.320	0.321	0.322	0.321	0.323	0.322	0.321	0.322
83	0.287	0.289	0.293	0.296	0.299	0.301	0.304	0.309	0.320	0.344	0.346	0.320	0.318	0.317	0.317	0.318	0.319	0.320	0.322	0.325
84	0.279	0.282	0.286	0.289	0.291	0.294	0.298	0.302	0.311	0.331	0.339	0.316	0.311	0.311	0.312	0.312	0.313	0.314	0.314	0.317
85	0.252	0.257	0.265	0.269	0.274	0.278	0.282	0.288	0.296	0.314	0.328	0.304	0.296	0.297	0.298	0.298	0.298	0.298	0.300	0.301
86	0.072	0.078	0.085	0.089	0.093	0.100	0.105	0.110	0.116	0.134	0.147	0.139	0.136	0.142	0.153	0.151	0.146	0.149	0.152	0.156
87	0.044	0.043	0.045	0.044	0.046	0.045	0.047	0.046	0.047	0.047	0.048	0.047	0.048	0.046	0.048	0.046	0.047	0.046	0.046	0.045
88	0.037	0.039	0.040	0.040	0.040	0.041	0.040	0.041	0.041	0.042	0.041	0.041	0.040	0.040	0.040	0.040	0.038	0.038	0.036	0.038
89	0.036	0.036	0.037	0.037	0.037	0.038	0.037	0.037	0.037	0.037	0.037	0.037	0.036	0.036	0.036	0.035	0.035	0.034	0.035	0.035
90	0.035	0.035	0.035	0.036	0.036	0.037	0.036	0.037	0.036	0.037	0.037	0.036	0.036	0.036	0.035	0.034	0.033	0.034	0.032	0.033
91	0.033	0.033	0.034	0.034	0.035	0.035	0.036	0.037	0.037	0.037	0.048	0.078	0.093	0.068	0.045	0.036	0.034	0.032	0.032	0.031
92	0.032	0.032	0.032	0.033	0.032	0.033	0.034	0.034	0.033	0.036	0.054	0.110	0.131	0.095	0.054	0.038	0.033	0.031	0.030	0.030
93	0.031	0.032	0.031	0.032	0.032	0.032	0.032	0.033	0.032	0.032	0.032	0.036	0.041	0.037	0.032	0.032	0.031	0.030	0.030	0.030
94	0.030	0.029	0.030	0.029	0.032	0.031	0.033	0.031	0.032	0.031	0.032	0.030	0.032	0.030	0.032	0.030	0.030	0.030	0.030	0.029
95	0.029	0.030	0.029	0.030	0.030	0.031	0.031	0.032	0.032	0.031	0.030	0.030	0.030	0.030	0.029	0.030	0.028	0.029	0.027	0.029
96	0.030	0.029	0.030	0.029	0.030	0.030	0.032	0.031	0.032	0.031	0.031	0.029	0.030	0.029	0.030	0.029	0.030	0.028	0.028	0.026
97	0.030	0.029	0.029	0.029	0.030	0.030	0.030	0.030	0.031	0.030	0.030	0.030	0.030	0.029	0.030	0.028	0.029	0.027	0.028	0.027
98	0.033	0.030	0.030	0.029	0.030	0.029	0.030	0.030	0.031	0.030	0.030	0.029	0.029	0.028	0.029	0.028	0.028	0.027	0.028	0.027

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR HEAT TRANSFER COEFFICIENT - H(,9TO)/HRFR
IR SCAN TIME 10.82 SEC
HRFR = 0.364E-01

GROUP 53

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.066	0.051	0.047	0.042	0.039	0.033	0.031	0.029	0.030	0.028	0.029	0.027	0.028	0.026	0.027	0.025	0.026	0.024	0.025	0.023
65	0.124	0.075	0.054	0.046	0.044	0.040	0.035	0.031	0.030	0.029	0.029	0.027	0.028	0.026	0.026	0.025	0.025	0.023	0.024	0.023
66	0.259	0.166	0.097	0.062	0.049	0.044	0.041	0.034	0.030	0.028	0.028	0.026	0.027	0.025	0.026	0.023	0.024	0.023	0.023	0.022
67	0.366	0.317	0.232	0.145	0.079	0.055	0.042	0.041	0.033	0.029	0.025	0.026	0.022	0.023	0.021	0.023	0.020	0.021	0.019	0.020
68	0.210	0.232	0.240	0.211	0.149	0.085	0.057	0.045	0.041	0.036	0.030	0.025	0.024	0.022	0.022	0.020	0.021	0.019	0.019	0.017
69	0.194	0.189	0.190	0.199	0.202	0.171	0.110	0.065	0.048	0.042	0.037	0.031	0.025	0.024	0.022	0.022	0.020	0.020	0.019	0.018
70	0.239	0.217	0.207	0.202	0.201	0.200	0.182	0.125	0.072	0.050	0.042	0.038	0.034	0.027	0.025	0.022	0.022	0.020	0.020	0.019
71	0.376	0.338	0.291	0.245	0.213	0.195	0.186	0.173	0.132	0.079	0.051	0.043	0.038	0.035	0.028	0.025	0.023	0.022	0.020	0.020
72	0.444	0.441	0.435	0.415	0.379	0.328	0.271	0.220	0.187	0.151	0.101	0.060	0.046	0.039	0.037	0.030	0.026	0.023	0.023	0.020
73	0.294	0.315	0.341	0.363	0.382	0.401	0.414	0.406	0.362	0.294	0.225	0.152	0.086	0.053	0.043	0.037	0.033	0.026	0.024	0.021
74	0.184	0.174	0.171	0.172	0.176	0.189	0.204	0.228	0.255	0.276	0.267	0.229	0.163	0.100	0.062	0.046	0.036	0.034	0.028	0.024
75	0.282	0.250	0.218	0.191	0.172	0.162	0.157	0.154	0.153	0.153	0.155	0.157	0.157	0.137	0.093	0.059	0.042	0.037	0.033	0.028
76	0.352	0.345	0.332	0.311	0.284	0.252	0.217	0.186	0.164	0.152	0.147	0.146	0.144	0.141	0.129	0.097	0.059	0.042	0.036	0.033
77	0.291	0.299	0.308	0.314	0.318	0.319	0.317	0.304	0.281	0.246	0.206	0.173	0.152	0.142	0.137	0.127	0.102	0.065	0.045	0.036
78	0.192	0.188	0.186	0.187	0.190	0.197	0.205	0.216	0.229	0.243	0.253	0.253	0.239	0.213	0.186	0.162	0.143	0.120	0.082	0.050
79	0.236	0.220	0.203	0.189	0.176	0.165	0.160	0.157	0.155	0.153	0.151	0.151	0.156	0.160	0.167	0.169	0.167	0.162	0.148	0.113
80	0.291	0.283	0.271	0.260	0.244	0.225	0.203	0.187	0.175	0.166	0.159	0.153	0.147	0.145	0.143	0.141	0.139	0.138	0.140	0.143
81	0.309	0.305	0.297	0.293	0.289	0.284	0.274	0.262	0.246	0.231	0.215	0.199	0.183	0.169	0.157	0.150	0.145	0.140	0.135	0.132
82	0.319	0.315	0.309	0.304	0.300	0.300	0.299	0.296	0.292	0.287	0.281	0.273	0.263	0.249	0.228	0.205	0.186	0.168	0.152	0.143
83	0.323	0.320	0.319	0.316	0.313	0.310	0.311	0.312	0.313	0.311	0.310	0.309	0.308	0.303	0.298	0.291	0.281	0.262	0.238	0.211
84	0.318	0.320	0.321	0.321	0.319	0.317	0.318	0.320	0.322	0.324	0.325	0.326	0.326	0.327	0.326	0.325	0.322	0.316	0.307	0.297
85	0.303	0.304	0.306	0.308	0.309	0.311	0.313	0.313	0.313	0.313	0.314	0.317	0.318	0.319	0.320	0.318	0.314	0.307	0.299	0.291
86	0.162	0.168	0.173	0.177	0.180	0.182	0.186	0.189	0.191	0.194	0.197	0.201	0.202	0.203	0.205	0.210	0.212	0.213	0.212	0.211
87	0.046	0.045	0.046	0.045	0.046	0.045	0.045	0.043	0.044	0.042	0.043	0.042	0.042	0.041	0.043	0.042	0.044	0.044	0.045	0.043
88	0.036	0.038	0.036	0.038	0.036	0.037	0.035	0.035	0.034	0.035	0.033	0.034	0.032	0.034	0.034	0.034	0.034	0.035	0.034	0.033
89	0.034	0.034	0.034	0.034	0.033	0.033	0.032	0.032	0.032	0.031	0.030	0.030	0.030	0.030	0.029	0.030	0.030	0.031	0.029	0.030
90	0.032	0.033	0.032	0.033	0.032	0.032	0.032	0.031	0.030	0.030	0.030	0.029	0.029	0.028	0.031	0.041	0.040	0.034	0.031	0.031
91	0.032	0.031	0.032	0.030	0.032	0.031	0.031	0.030	0.032	0.042	0.061	0.057	0.038	0.029	0.029	0.029	0.030	0.029	0.030	0.029
92	0.030	0.030	0.029	0.029	0.029	0.030	0.029	0.031	0.035	0.070	0.112	0.104	0.063	0.037	0.029	0.028	0.028	0.029	0.029	0.028
93	0.030	0.030	0.029	0.029	0.028	0.029	0.028	0.029	0.028	0.031	0.041	0.042	0.031	0.027	0.026	0.027	0.027	0.028	0.028	0.028
94	0.030	0.029	0.029	0.028	0.030	0.028	0.028	0.027	0.028	0.028	0.027	0.026	0.026	0.025	0.026	0.026	0.028	0.029	0.029	0.028
95	0.027	0.028	0.026	0.028	0.026	0.027	0.026	0.026	0.024	0.025	0.023	0.026	0.024	0.025	0.024	0.027	0.028	0.030	0.029	0.030
96	0.028	0.026	0.027	0.026	0.028	0.026	0.027	0.025	0.026	0.025	0.025	0.024	0.025	0.023	0.026	0.026	0.030	0.030	0.032	0.030
97	0.028	0.026	0.027	0.026	0.026	0.026	0.026	0.025	0.026	0.025	0.026	0.024	0.025	0.023	0.026	0.029	0.034	0.035	0.036	0.037
98	0.028	0.026	0.026	0.025	0.026	0.026	0.026	0.025	0.026	0.025	0.026	0.024	0.026	0.025	0.032	0.047	0.055	0.048	0.045	0.043

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
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50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 10.82 SEC
GROUP 53 HRFR = 0.364E-01

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.024	0.022	0.023	0.021	0.022	0.021	0.022	0.019	0.020	0.018	0.019	0.017	0.019	0.016	0.017	0.016	0.016	0.015	0.016	0.013
65	0.023	0.022	0.023	0.021	0.022	0.020	0.020	0.020	0.020	0.018	0.017	0.017	0.016	0.016	0.016	0.015	0.015	0.013	0.014	0.012
66	0.022	0.021	0.020	0.020	0.019	0.018	0.018	0.016	0.017	0.016	0.016	0.015	0.015	0.014	0.014	0.012	0.013	0.012	0.012	0.010
67	0.019	0.019	0.018	0.017	0.017	0.017	0.016	0.016	0.015	0.015	0.013	0.013	0.011	0.012	0.010	0.009	0.009	0.009	0.008	0.008
68	0.018	0.016	0.017	0.016	0.016	0.013	0.015	0.011	0.013	0.010	0.012	0.010	0.011	0.008	0.010	0.006	0.008	0.008	0.008	0.006
69	0.017	0.017	0.017	0.017	0.017	0.016	0.014	0.014	0.012	0.013	0.012	0.011	0.010	0.010	0.008	0.009	0.008	0.008	0.007	0.007
70	0.019	0.017	0.019	0.016	0.017	0.016	0.016	0.015	0.015	0.014	0.014	0.012	0.011	0.010	0.010	0.008	0.010	0.008	0.008	0.007
71	0.019	0.019	0.018	0.018	0.017	0.017	0.016	0.016	0.015	0.014	0.013	0.013	0.012	0.012	0.010	0.010	0.009	0.009	0.008	0.008
72	0.020	0.019	0.019	0.017	0.017	0.017	0.017	0.016	0.016	0.015	0.015	0.013	0.014	0.012	0.012	0.011	0.011	0.009	0.009	0.008
73	0.021	0.020	0.020	0.018	0.018	0.019	0.017	0.016	0.016	0.016	0.016	0.013	0.014	0.012	0.013	0.012	0.011	0.009	0.010	0.008
74	0.021	0.020	0.019	0.019	0.017	0.018	0.016	0.017	0.015	0.016	0.013	0.014	0.012	0.013	0.012	0.011	0.010	0.010	0.009	0.009
75	0.023	0.019	0.019	0.017	0.017	0.017	0.016	0.017	0.016	0.016	0.014	0.014	0.012	0.014	0.012	0.010	0.010	0.010	0.009	0.010
76	0.030	0.026	0.021	0.020	0.018	0.017	0.017	0.016	0.016	0.016	0.014	0.014	0.012	0.012	0.012	0.011	0.010	0.010	0.007	0.009
77	0.033	0.031	0.030	0.025	0.022	0.018	0.017	0.016	0.016	0.014	0.016	0.014	0.014	0.012	0.015	0.012	0.012	0.010	0.010	0.008
78	0.038	0.032	0.030	0.030	0.029	0.026	0.020	0.017	0.016	0.015	0.013	0.013	0.012	0.012	0.010	0.010	0.009	0.009	0.008	0.008
79	0.070	0.045	0.035	0.030	0.030	0.029	0.029	0.026	0.023	0.018	0.016	0.012	0.012	0.011	0.011	0.009	0.010	0.008	0.009	0.007
80	0.134	0.095	0.053	0.038	0.032	0.031	0.030	0.029	0.028	0.028	0.026	0.025	0.021	0.020	0.017	0.017	0.016	0.016	0.014	0.015
81	0.127	0.116	0.086	0.053	0.035	0.030	0.028	0.028	0.026	0.026	0.025	0.025	0.023	0.023	0.021	0.022	0.019	0.017	0.014	0.013
82	0.135	0.130	0.120	0.096	0.059	0.037	0.028	0.026	0.025	0.025	0.023	0.024	0.022	0.024	0.022	0.022	0.020	0.022	0.020	0.021
83	0.186	0.164	0.148	0.132	0.110	0.074	0.045	0.030	0.026	0.023	0.024	0.023	0.023	0.022	0.023	0.018	0.022	0.016	0.021	0.017
84	0.282	0.262	0.236	0.208	0.177	0.140	0.094	0.054	0.032	0.027	0.023	0.022	0.021	0.022	0.021	0.021	0.021	0.021	0.020	0.020
85	0.285	0.282	0.283	0.291	0.269	0.242	0.195	0.132	0.075	0.040	0.029	0.022	0.022	0.020	0.020	0.020	0.021	0.020	0.020	0.020
86	0.207	0.202	0.194	0.186	0.179	0.176	0.169	0.151	0.115	0.068	0.036	0.025	0.020	0.020	0.017	0.019	0.017	0.017	0.017	0.017
87	0.042	0.040	0.039	0.037	0.037	0.035	0.035	0.034	0.034	0.028	0.023	0.019	0.018	0.017	0.017	0.016	0.016	0.016	0.016	0.014
88	0.030	0.029	0.026	0.026	0.023	0.024	0.022	0.023	0.021	0.021	0.019	0.018	0.016	0.016	0.014	0.015	0.014	0.014	0.014	0.013
89	0.027	0.026	0.022	0.022	0.020	0.020	0.019	0.020	0.017	0.018	0.016	0.017	0.015	0.015	0.014	0.014	0.012	0.012	0.012	0.012
90	0.037	0.038	0.028	0.022	0.020	0.020	0.018	0.018	0.017	0.016	0.016	0.016	0.014	0.014	0.012	0.014	0.011	0.013	0.010	0.012
91	0.030	0.028	0.025	0.020	0.020	0.017	0.017	0.016	0.016	0.015	0.016	0.014	0.015	0.013	0.014	0.012	0.013	0.011	0.012	0.011
92	0.026	0.026	0.022	0.020	0.018	0.018	0.017	0.016	0.016	0.015	0.013	0.014	0.012	0.013	0.012	0.012	0.011	0.012	0.010	0.011
93	0.026	0.025	0.021	0.020	0.017	0.017	0.016	0.016	0.016	0.016	0.014	0.014	0.012	0.012	0.012	0.012	0.011	0.011	0.010	0.010
94	0.028	0.026	0.023	0.019	0.019	0.016	0.017	0.016	0.016	0.014	0.015	0.012	0.014	0.012	0.013	0.011	0.012	0.010	0.012	0.010
95	0.028	0.028	0.023	0.020	0.017	0.017	0.016	0.016	0.016	0.015	0.014	0.014	0.012	0.013	0.012	0.012	0.011	0.012	0.010	0.011
96	0.031	0.028	0.026	0.019	0.019	0.016	0.017	0.015	0.016	0.015	0.016	0.014	0.014	0.012	0.013	0.011	0.014	0.011	0.011	0.010
97	0.035	0.032	0.028	0.020	0.018	0.016	0.017	0.016	0.017	0.015	0.016	0.011	0.014	0.009	0.012	0.009	0.012	0.008	0.012	0.008
98	0.045	0.046	0.038	0.025	0.020	0.017	0.017	0.016	0.016	0.015	0.016	0.014	0.015	0.012	0.013	0.012	0.012	0.011	0.012	0.010

NASA/RI OH90 TRANSITION TEST
V41B-P4A
APO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 7,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 10.82 SEC
HRFR = 0.364E-01

GROUP 53

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.016	0.012	0.014	0.012	0.014	0.010	0.011	0.010	0.010	0.008
65	0.012	0.011	0.012	0.009	0.010	0.009	0.010	0.008	0.008	0.007
66	0.010	0.008	0.009	0.008	0.008	0.007	0.007	0.005	0.006	0.005
67	0.007	0.007	0.006	0.005	0.005	0.005	0.003	0.003	0.002	0.003
68	0.006	0.005	0.006	0.003	0.005	0.003	0.005	0.001	0.003	0.001
69	0.003	0.006	0.002	0.005	0.001	0.004	0.004	0.003	0.003	0.002
70	0.008	0.006	0.006	0.005	0.005	0.004	0.004	0.002	0.003	0.001
71	0.006	0.007	0.006	0.006	0.005	0.004	0.004	0.004	0.002	0.003
72	0.008	0.007	0.007	0.005	0.005	0.005	0.003	0.003	0.004	0.003
73	0.008	0.007	0.007	0.006	0.006	0.004	0.004	0.004	0.004	0.002
74	0.007	0.008	0.005	0.006	0.004	0.005	0.003	0.004	0.002	0.003
75	0.008	0.006	0.007	0.009	0.006	0.005	0.003	0.003	0.003	0.002
76	0.006	0.007	0.004	0.006	0.003	0.005	0.002	0.004	0.001	0.003
77	0.009	0.007	0.008	0.006	0.006	0.005	0.005	0.003	0.004	0.002
78	0.007	0.007	0.006	0.006	0.004	0.005	0.004	0.004	0.003	0.002
79	0.008	0.006	0.007	0.005	0.006	0.004	0.004	0.003	0.004	0.002
80	0.014	0.015	0.014	0.013	0.012	0.012	0.012	0.010	0.009	0.009
81	0.009	0.008	0.007	0.006	0.005	0.004	0.002	0.004	0.002	0.003
82	0.019	0.019	0.016	0.016	0.012	0.010	0.007	0.006	0.003	0.004
83	0.020	0.016	0.020	0.015	0.019	0.014	0.017	0.013	0.015	0.010
84	0.019	0.019	0.019	0.018	0.017	0.017	0.017	0.017	0.017	0.016
85	0.020	0.018	0.019	0.017	0.018	0.016	0.017	0.017	0.017	0.016
86	0.016	0.017	0.015	0.016	0.016	0.015	0.014	0.015	0.013	0.014
87	0.015	0.013	0.014	0.014	0.014	0.013	0.013	0.013	0.013	0.012
88	0.012	0.014	0.013	0.013	0.012	0.012	0.011	0.012	0.011	0.012
89	0.012	0.012	0.011	0.012	0.011	0.012	0.010	0.012	0.011	0.012
90	0.010	0.011	0.009	0.011	0.008	0.011	0.009	0.010	0.009	0.012
91	0.012	0.010	0.011	0.010	0.010	0.010	0.010	0.010	0.010	0.008
92	0.010	0.010	0.009	0.010	0.009	0.010	0.008	0.009	0.008	0.009
93	0.009	0.010	0.009	0.010	0.008	0.009	0.009	0.009	0.008	0.009
94	0.011	0.010	0.010	0.009	0.010	0.009	0.010	0.008	0.009	0.008
95	0.010	0.010	0.009	0.010	0.009	0.010	0.008	0.010	0.009	0.010
96	0.011	0.010	0.010	0.008	0.010	0.011	0.012	0.010	0.012	0.010
97	0.010	0.007	0.010	0.007	0.011	0.008	0.012	0.010	0.012	0.011
98	0.010	0.009	0.010	0.009	0.011	0.010	0.011	0.011	0.012	0.010

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 8,1978

GROUP 69

TIME,SEC	TC1,DEG R	TC2,DEG R	TC3,DEG R	TC4,DEG R	TC5,DEG R	TC6,DEG R
138 13	591.671	-8048.725	591.671	591.671	0.000	591.671
138 14	591.671	-8048.725	591.671	591.671	0.000	591.671
138 15	591.671	-8048.725	591.671	591.671	0.000	591.671
138 17	591.671	-8048.725	591.671	591.671	0.000	591.671
138 18	591.671	-8048.725	591.671	591.671	0.000	591.671
138 18	591.671	-8048.725	591.671	591.671	0.000	591.671
138 19	591.671	-8048.725	591.671	591.671	0.000	591.671
138 20	591.671	-8048.725	591.671	591.671	0.000	591.671
138 21	591.671	-8048.725	591.671	591.671	0.000	591.671
138 22	591.671	-8048.725	591.671	591.671	0.000	591.671
138 22	591.671	-8048.725	591.671	591.671	0.000	591.671
138 22	591.671	-8048.725	591.671	591.671	0.000	591.671
138 23	591.671	-8048.725	591.671	591.671	0.000	591.671
138 24	591.671	-8048.725	591.671	591.671	0.000	591.671
138 25	591.671	-8048.725	591.671	591.671	0.000	591.671
138 26	591.671	-8048.725	591.671	591.671	0.000	591.671
138 27	591.671	-8048.725	591.671	591.671	0.000	591.671

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 8,1978

GROUP	* * * * TITLE TYPE	MODEL DESCRIPTION * * * * GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
69	RCC NOVAMIDE	0.00	0.000	-0.04	30.04	0.053	1	38	1

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/F FT-1	HRFR BTU/FT2-SEC-R	INITIAL TEMP DEG R
7.99	671.06	1333.67	96.87	0.0593	3855.	0.600E-04	0.780E-07	0.297E+07	0.365E-01	554.7

IR CAMERA INFORMATION

MOUNTING LOCATION	260
F STOP	2.5
LENS-DEG	15
SENSITIVITY	1000.
BLACK LEVEL VOLTAGE	2.3779
LINE SCAN PHI	90
MODEL EMISSIVITY	0.96
REF EMISSIVITY	0.94
WINDOW FACTOR	0.840

TIME RECORDS

LIFT OFF	0.00
CENTER LINE	1.99
IR SCAN TIME	8.24
DELTA TIME,SEC	7.13
PHOTO 1 TIME	138
PHOTO 2 TIME	0
PHOTO 3 TIME	0
PHOTO 4 TIME	0

REFERENCE TARGET INFORMATION

TCR5	501.52
TCR6	-228.49

DIGITAL DATA AREA PRINTOUT LOCATION

LINE 29 THROUGH 98
POINT 1 THROUGH 110

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR. 8,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 69

IR SCAN TIME 7.13 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	1.091	1.099	1.102	1.101	1.105	1.102	1.099	1.099	1.099	1.102	1.099	1.095	1.100	1.105	1.102	1.104	1.106	1.107	1.109	1.106
30	1.104	1.105	1.105	1.104	1.099	1.096	1.096	1.099	1.101	1.102	1.104	1.105	1.105	1.105	1.105	1.105	1.106	1.107	1.107	1.106
31	1.105	1.101	1.099	1.099	1.097	1.097	1.101	1.102	1.104	1.104	1.104	1.105	1.104	1.105	1.106	1.106	1.105	1.102	1.099	1.096
32	1.101	1.097	1.097	1.100	1.104	1.106	1.106	1.105	1.105	1.104	1.104	1.104	1.106	1.105	1.102	1.097	1.095	1.091	1.089	1.088
33	1.097	1.099	1.101	1.102	1.104	1.104	1.104	1.101	1.101	1.102	1.101	1.099	1.095	1.089	1.085	1.088	1.091	1.095	1.095	1.097
34	1.102	1.105	1.105	1.101	1.099	1.099	1.099	1.097	1.096	1.091	1.089	1.084	1.085	1.084	1.088	1.093	1.099	1.100	1.101	1.101
35	1.106	1.104	1.096	1.097	1.093	1.093	1.085	1.086	1.079	1.084	1.082	1.088	1.088	1.092	1.093	1.099	1.101	1.104	1.105	1.106
36	1.096	1.093	1.095	1.089	1.085	1.082	1.082	1.084	1.088	1.089	1.092	1.092	1.097	1.099	1.099	1.101	1.105	1.101	1.096	1.091
37	1.089	1.084	1.081	1.079	1.081	1.084	1.088	1.091	1.092	1.095	1.097	1.097	1.100	1.102	1.100	1.091	1.078	1.062	1.048	1.029
38	1.078	1.079	1.084	1.085	1.088	1.089	1.092	1.093	1.095	1.097	1.099	1.099	1.095	1.082	1.065	1.045	1.033	1.027	1.025	1.023
39	1.085	1.086	1.085	1.091	1.091	1.091	1.093	1.093	1.097	1.096	1.086	1.073	1.056	1.037	1.031	1.029	1.027	1.027	1.027	1.029
40	1.088	1.091	1.091	1.092	1.095	1.096	1.097	1.092	1.082	1.061	1.045	1.031	1.029	1.027	1.027	1.027	1.029	1.029	1.029	1.027
41	1.092	1.093	1.096	1.096	1.096	1.089	1.075	1.056	1.035	1.029	1.027	1.029	1.029	1.029	1.029	1.029	1.029	1.029	1.031	1.029
42	1.099	1.099	1.101	1.089	1.075	1.045	1.035	1.025	1.029	1.023	1.029	1.027	1.031	1.031	1.031	1.031	1.033	1.033	1.033	1.033
43	1.106	1.095	1.072	1.048	1.035	1.031	1.029	1.031	1.029	1.031	1.033	1.033	1.031	1.033	1.035	1.035	1.033	1.035	1.035	1.037
44	1.069	1.047	1.035	1.033	1.037	1.033	1.035	1.033	1.035	1.035	1.035	1.035	1.039	1.039	1.039	1.039	1.041	1.043	1.043	1.043
45	1.041	1.041	1.041	1.037	1.039	1.039	1.041	1.041	1.041	1.041	1.041	1.043	1.045	1.045	1.047	1.047	1.052	1.050	1.056	1.057
46	1.047	1.047	1.045	1.045	1.048	1.048	1.048	1.048	1.052	1.052	1.052	1.054	1.052	1.056	1.056	1.061	1.059	1.067	1.109	1.189
47	1.052	1.050	1.050	1.054	1.054	1.057	1.056	1.056	1.056	1.057	1.057	1.061	1.059	1.062	1.064	1.067	1.069	1.082	1.165	1.286
48	1.054	1.052	1.054	1.059	1.059	1.061	1.057	1.059	1.059	1.061	1.061	1.065	1.064	1.067	1.069	1.070	1.075	1.096	1.207	1.325
49	1.056	1.050	1.057	1.056	1.062	1.059	1.064	1.059	1.064	1.059	1.067	1.065	1.069	1.069	1.073	1.075	1.079	1.109	1.233	1.345
50	1.061	1.059	1.059	1.061	1.065	1.062	1.065	1.065	1.065	1.065	1.069	1.070	1.073	1.072	1.076	1.076	1.086	1.137	1.274	1.366
51	1.061	1.062	1.062	1.064	1.062	1.065	1.065	1.067	1.067	1.070	1.070	1.075	1.075	1.076	1.076	1.084	1.096	1.187	1.316	1.381
52	1.052	1.054	1.052	1.056	1.056	1.057	1.059	1.059	1.061	1.065	1.064	1.067	1.065	1.072	1.073	1.079	1.109	1.231	1.343	1.390
53	1.037	1.039	1.037	1.039	1.039	1.041	1.045	1.045	1.045	1.050	1.052	1.054	1.057	1.057	1.059	1.069	1.132	1.272	1.358	1.392
54	1.025	1.025	1.025	1.027	1.029	1.029	1.033	1.033	1.035	1.039	1.039	1.041	1.043	1.047	1.052	1.067	1.169	1.305	1.369	1.396
55	1.018	1.020	1.020	1.027	1.025	1.029	1.029	1.033	1.033	1.035	1.043	1.041	1.045	1.047	1.052	1.076	1.198	1.320	1.373	1.397
56	1.020	1.023	1.016	1.025	1.018	1.029	1.027	1.033	1.029	1.039	1.041	1.045	1.045	1.048	1.054	1.095	1.229	1.335	1.377	1.399
57	1.018	1.020	1.023	1.023	1.025	1.027	1.029	1.031	1.035	1.035	1.039	1.041	1.045	1.047	1.057	1.100	1.241	1.336	1.374	1.395
58	1.016	1.018	1.018	1.020	1.020	1.025	1.023	1.027	1.029	1.031	1.033	1.035	1.039	1.043	1.054	1.126	1.267	1.347	1.379	1.398
59	1.014	1.016	1.016	1.016	1.014	1.018	1.020	1.023	1.025	1.025	1.029	1.033	1.035	1.039	1.062	1.176	1.304	1.360	1.385	1.402
60	1.011	1.014	1.016	1.016	1.016	1.016	1.020	1.020	1.025	1.025	1.027	1.031	1.035	1.041	1.075	1.208	1.319	1.364	1.387	1.403
61	1.011	1.011	1.016	1.016	1.018	1.018	1.020	1.020	1.025	1.027	1.029	1.031	1.035	1.043	1.099	1.242	1.332	1.367	1.388	1.403
62	1.014	1.016	1.016	1.016	1.020	1.020	1.025	1.025	1.027	1.029	1.033	1.033	1.041	1.052	1.139	1.273	1.340	1.369	1.387	1.402
63	1.014	1.016	1.018	1.011	1.018	1.016	1.023	1.025	1.027	1.029	1.033	1.033	1.039	1.056	1.164	1.284	1.339	1.366	1.382	1.395

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 8,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 69

IR SCAN TIME 7.13 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	1.109	1.110	1.111	1.107	1.106	1.099	1.099	1.095	1.093	1.092	1.096	1.091	1.095	1.093	1.099	1.101	1.105	1.106	1.109	1.111
30	1.105	1.101	1.097	1.095	1.095	1.091	1.091	1.091	1.095	1.100	1.104	1.106	1.107	1.109	1.111	1.114	1.117	1.116	1.119	1.116
31	1.092	1.089	1.089	1.093	1.097	1.099	1.101	1.101	1.104	1.110	1.113	1.116	1.118	1.117	1.118	1.117	1.112	1.105	1.099	1.089
32	1.092	1.093	1.099	1.102	1.107	1.107	1.110	1.109	1.112	1.114	1.117	1.116	1.110	1.100	1.091	1.078	1.064	1.050	1.037	1.027
33	1.099	1.101	1.104	1.105	1.109	1.111	1.111	1.107	1.102	1.096	1.082	1.072	1.056	1.037	1.027	1.018	1.016	1.016	1.016	1.016
34	1.105	1.106	1.107	1.106	1.102	1.093	1.081	1.065	1.052	1.033	1.020	1.016	1.014	1.014	1.016	1.014	1.016	1.014	1.016	1.016
35	1.105	1.099	1.086	1.073	1.054	1.037	1.025	1.018	1.016	1.016	1.014	1.014	1.016	1.016	1.016	1.016	1.016	1.018	1.016	1.020
36	1.065	1.045	1.031	1.020	1.018	1.016	1.018	1.016	1.018	1.016	1.016	1.016	1.016	1.020	1.020	1.023	1.023	1.023	1.020	1.020
37	1.023	1.023	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.025	1.020	1.020	1.020	1.020	1.020	1.016	1.025	1.016	1.023	1.016
38	1.025	1.020	1.025	1.025	1.025	1.023	1.023	1.025	1.027	1.025	1.027	1.025	1.025	1.025	1.027	1.025	1.029	1.027	1.029	1.029
39	1.027	1.027	1.027	1.027	1.027	1.029	1.029	1.027	1.027	1.029	1.029	1.029	1.029	1.029	1.029	1.031	1.029	1.031	1.033	1.033
40	1.031	1.031	1.031	1.031	1.031	1.031	1.031	1.033	1.033	1.033	1.033	1.033	1.033	1.033	1.035	1.035	1.037	1.033	1.035	1.035
41	1.033	1.033	1.033	1.033	1.035	1.035	1.035	1.035	1.035	1.035	1.039	1.039	1.035	1.039	1.039	1.037	1.035	1.037	1.039	1.039
42	1.035	1.035	1.035	1.035	1.039	1.039	1.041	1.039	1.041	1.045	1.041	1.041	1.045	1.043	1.041	1.045	1.043	1.045	1.045	1.041
43	1.037	1.037	1.039	1.041	1.041	1.043	1.043	1.045	1.043	1.048	1.045	1.050	1.050	1.050	1.048	1.050	1.050	1.050	1.048	1.048
44	1.047	1.045	1.050	1.050	1.052	1.052	1.052	1.052	1.056	1.054	1.056	1.054	1.057	1.054	1.057	1.052	1.057	1.050	1.056	1.052
45	1.061	1.061	1.065	1.065	1.065	1.065	1.067	1.065	1.067	1.067	1.069	1.067	1.069	1.067	1.069	1.067	1.067	1.064	1.065	1.064
46	1.238	1.253	1.255	1.254	1.246	1.234	1.210	1.179	1.148	1.120	1.104	1.093	1.091	1.088	1.084	1.084	1.082	1.082	1.079	1.079
47	1.346	1.372	1.392	1.414	1.439	1.468	1.495	1.510	1.508	1.486	1.447	1.391	1.316	1.253	1.205	1.155	1.119	1.102	1.095	1.095
48	1.377	1.400	1.418	1.435	1.453	1.475	1.500	1.524	1.543	1.558	1.566	1.566	1.565	1.597	1.643	1.583	1.445	1.325	1.225	1.156
49	1.393	1.417	1.440	1.459	1.479	1.496	1.513	1.529	1.543	1.553	1.562	1.570	1.579	1.583	1.592	1.623	1.633	1.583	1.520	1.466
50	1.405	1.431	1.451	1.472	1.494	1.516	1.538	1.558	1.571	1.577	1.579	1.580	1.583	1.590	1.597	1.606	1.630	1.646	1.621	1.574
51	1.412	1.436	1.457	1.477	1.500	1.524	1.548	1.570	1.590	1.606	1.613	1.613	1.608	1.602	1.600	1.606	1.614	1.635	1.664	1.662
52	1.416	1.437	1.457	1.478	1.500	1.521	1.544	1.569	1.589	1.608	1.621	1.632	1.636	1.634	1.629	1.622	1.617	1.615	1.626	1.656
53	1.414	1.435	1.454	1.474	1.496	1.518	1.539	1.561	1.582	1.599	1.613	1.624	1.634	1.641	1.644	1.645	1.641	1.635	1.629	1.629
54	1.415	1.433	1.451	1.471	1.493	1.514	1.537	1.558	1.578	1.595	1.608	1.615	1.618	1.623	1.629	1.638	1.648	1.658	1.669	1.674
55	1.416	1.433	1.451	1.469	1.490	1.512	1.532	1.553	1.575	1.594	1.607	1.614	1.618	1.619	1.620	1.625	1.639	1.668	1.716	1.755
56	1.415	1.430	1.448	1.467	1.487	1.509	1.531	1.552	1.570	1.588	1.601	1.609	1.617	1.622	1.625	1.627	1.635	1.667	1.713	1.731
57	1.412	1.427	1.444	1.462	1.482	1.503	1.526	1.546	1.566	1.581	1.593	1.600	1.607	1.614	1.619	1.623	1.630	1.643	1.675	1.706
58	1.413	1.427	1.443	1.462	1.482	1.504	1.526	1.545	1.564	1.579	1.591	1.600	1.605	1.610	1.612	1.615	1.620	1.627	1.634	1.643
59	1.417	1.431	1.448	1.464	1.484	1.507	1.527	1.545	1.564	1.580	1.593	1.601	1.602	1.605	1.611	1.614	1.617	1.618	1.625	1.633
60	1.417	1.431	1.445	1.463	1.483	1.503	1.523	1.543	1.561	1.576	1.586	1.597	1.604	1.608	1.612	1.616	1.618	1.621	1.624	1.629
61	1.418	1.432	1.445	1.460	1.479	1.500	1.520	1.540	1.558	1.572	1.584	1.593	1.600	1.604	1.608	1.610	1.614	1.619	1.625	1.628
62	1.414	1.427	1.440	1.453	1.472	1.491	1.512	1.531	1.552	1.568	1.579	1.588	1.595	1.599	1.602	1.606	1.611	1.614	1.620	1.624
63	1.407	1.422	1.439	1.452	1.469	1.490	1.512	1.532	1.550	1.563	1.575	1.584	1.589	1.594	1.598	1.601	1.606	1.612	1.619	1.623

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP COPP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 8,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 69

IR SCAN TIME 7.13 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	1.116	1.118	1.116	1.116	1.118	1.119	1.118	1.116	1.110	1.102	1.096	1.091	1.088	1.081	1.079	1.072	1.067	1.059	1.059	1.050
30	1.120	1.114	1.111	1.101	1.097	1.086	1.084	1.072	1.064	1.048	1.043	1.033	1.029	1.025	1.018	1.018	1.016	1.014	1.016	1.014
31	1.081	1.069	1.059	1.047	1.033	1.025	1.018	1.016	1.014	1.011	1.014	1.011	1.011	1.011	1.011	1.006	1.014	1.006	1.011	1.004
32	1.023	1.018	1.018	1.014	1.016	1.014	1.014	1.014	1.014	1.011	1.014	1.011	1.014	1.009	1.011	1.006	1.011	1.011	1.011	1.009
33	1.016	1.016	1.014	1.014	1.016	1.014	1.014	1.014	1.014	1.011	1.011	1.014	1.009	1.011	1.011	1.009	1.006	1.011	1.006	1.009
34	1.016	1.016	1.016	1.016	1.016	1.016	1.016	1.014	1.014	1.016	1.014	1.011	1.014	1.009	1.011	1.011	1.014	1.009	1.011	1.009
35	1.018	1.018	1.018	1.018	1.018	1.016	1.016	1.016	1.016	1.016	1.016	1.023	1.016	1.016	1.014	1.011	1.011	1.014	1.011	1.014
36	1.023	1.020	1.023	1.020	1.020	1.020	1.020	1.016	1.020	1.020	1.020	1.018	1.020	1.018	1.016	1.016	1.020	1.016	1.018	1.018
37	1.025	1.014	1.025	1.014	1.025	1.016	1.025	1.016	1.023	1.016	1.023	1.023	1.020	1.020	1.020	1.020	1.018	1.020	1.020	1.018
38	1.027	1.029	1.029	1.027	1.029	1.027	1.027	1.027	1.027	1.025	1.025	1.027	1.025	1.020	1.023	1.020	1.023	1.018	1.020	1.016
39	1.031	1.033	1.033	1.029	1.029	1.029	1.031	1.029	1.029	1.029	1.029	1.023	1.027	1.027	1.029	1.025	1.025	1.025	1.025	1.020
40	1.037	1.035	1.035	1.033	1.035	1.035	1.033	1.033	1.033	1.033	1.029	1.031	1.031	1.029	1.031	1.029	1.029	1.027	1.027	1.025
41	1.039	1.039	1.039	1.039	1.039	1.037	1.037	1.035	1.037	1.035	1.035	1.033	1.033	1.031	1.031	1.029	1.029	1.029	1.029	1.027
42	1.043	1.043	1.043	1.041	1.041	1.041	1.041	1.041	1.041	1.039	1.037	1.035	1.035	1.035	1.035	1.033	1.035	1.033	1.033	1.031
43	1.048	1.048	1.048	1.047	1.047	1.045	1.043	1.045	1.043	1.043	1.043	1.041	1.041	1.039	1.039	1.039	1.039	1.037	1.035	1.033
44	1.056	1.050	1.054	1.048	1.054	1.052	1.052	1.047	1.052	1.050	1.048	1.047	1.043	1.043	1.041	1.043	1.041	1.041	1.039	1.039
45	1.065	1.062	1.064	1.061	1.061	1.057	1.059	1.057	1.057	1.054	1.056	1.052	1.054	1.048	1.054	1.047	1.050	1.047	1.047	1.043
46	1.078	1.078	1.075	1.075	1.072	1.073	1.069	1.070	1.069	1.069	1.065	1.065	1.064	1.064	1.061	1.061	1.059	1.059	1.057	1.059
47	1.092	1.092	1.089	1.089	1.085	1.084	1.079	1.081	1.078	1.078	1.075	1.075	1.072	1.072	1.069	1.070	1.067	1.067	1.065	1.065
48	1.124	1.111	1.104	1.100	1.096	1.093	1.089	1.086	1.084	1.084	1.079	1.079	1.078	1.078	1.075	1.075	1.073	1.073	1.070	1.070
49	1.404	1.323	1.228	1.158	1.125	1.110	1.101	1.096	1.095	1.091	1.091	1.085	1.085	1.082	1.082	1.079	1.081	1.076	1.076	1.075
50	1.532	1.508	1.497	1.466	1.384	1.257	1.166	1.127	1.109	1.101	1.099	1.096	1.093	1.092	1.091	1.086	1.086	1.082	1.082	1.081
51	1.621	1.575	1.535	1.522	1.547	1.546	1.446	1.281	1.176	1.131	1.111	1.104	1.099	1.097	1.096	1.095	1.091	1.091	1.085	1.086
52	1.668	1.651	1.628	1.594	1.557	1.554	1.584	1.534	1.367	1.215	1.147	1.116	1.102	1.097	1.093	1.092	1.089	1.088	1.084	1.085
53	1.638	1.656	1.684	1.710	1.699	1.639	1.583	1.591	1.575	1.432	1.248	1.157	1.111	1.092	1.082	1.078	1.075	1.075	1.072	1.072
54	1.664	1.647	1.639	1.641	1.660	1.686	1.667	1.617	1.602	1.598	1.487	1.294	1.172	1.117	1.091	1.078	1.075	1.072	1.070	1.073
55	1.755	1.734	1.698	1.667	1.654	1.657	1.678	1.686	1.656	1.625	1.619	1.545	1.362	1.205	1.135	1.100	1.085	1.082	1.079	1.082
56	1.736	1.748	1.750	1.718	1.684	1.674	1.670	1.682	1.700	1.683	1.653	1.643	1.599	1.442	1.254	1.159	1.112	1.095	1.089	1.092
57	1.720	1.722	1.715	1.702	1.683	1.683	1.689	1.690	1.692	1.706	1.702	1.678	1.668	1.655	1.549	1.346	1.202	1.135	1.105	1.095
58	1.658	1.666	1.658	1.646	1.647	1.660	1.675	1.689	1.700	1.706	1.719	1.725	1.706	1.696	1.708	1.657	1.466	1.262	1.167	1.116
59	1.638	1.646	1.651	1.652	1.650	1.647	1.648	1.659	1.673	1.685	1.697	1.723	1.743	1.738	1.747	1.766	1.692	1.484	1.275	1.170
60	1.634	1.637	1.642	1.648	1.654	1.657	1.657	1.654	1.653	1.655	1.653	1.642	1.652	1.697	1.723	1.728	1.732	1.700	1.548	1.323
61	1.629	1.630	1.634	1.639	1.643	1.646	1.650	1.654	1.660	1.664	1.661	1.649	1.620	1.587	1.594	1.623	1.644	1.672	1.685	1.588
62	1.629	1.635	1.638	1.639	1.640	1.645	1.652	1.654	1.647	1.634	1.631	1.642	1.651	1.637	1.598	1.566	1.562	1.560	1.575	1.612
63	1.628	1.633	1.638	1.642	1.646	1.652	1.656	1.661	1.663	1.661	1.651	1.617	1.576	1.568	1.594	1.616	1.608	1.586	1.567	1.544

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 8,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 69

IR SCAN TIME 7.13 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	1.039	1.035	1.033	1.029	1.029	1.025	1.027	1.025	1.023	1.020	1.023	1.023	1.023	1.023	1.023	1.023	1.020	1.020	1.020	1.020
30	1.016	1.014	1.014	1.011	1.014	1.014	1.014	1.009	1.011	1.011	1.011	1.011	1.014	1.011	1.014	1.014	1.016	1.011	1.014	1.011
31	1.011	1.004	1.011	1.006	1.009	1.006	1.009	1.004	1.006	1.001	1.009	1.006	1.009	1.009	1.009	1.009	1.009	1.009	1.011	1.009
32	1.011	1.009	1.009	1.006	1.006	1.006	1.006	1.006	1.006	1.006	1.006	1.001	1.006	0.996	1.009	0.996	1.006	0.999	1.006	1.001
33	1.009	1.009	1.006	1.009	1.006	1.009	1.004	1.006	1.004	1.006	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.001	1.001
34	1.011	1.009	1.009	1.006	1.009	1.006	1.006	1.004	1.009	1.006	1.004	1.001	1.006	1.004	1.004	1.001	1.006	1.001	1.001	0.999
35	1.011	1.014	1.011	1.009	1.009	1.011	1.009	1.009	1.006	1.009	1.006	1.006	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004
36	1.016	1.014	1.016	1.014	1.014	1.014	1.011	1.014	1.011	1.011	1.014	1.009	1.009	1.006	1.006	1.006	1.006	1.006	1.006	1.004
37	1.018	1.016	1.018	1.018	1.016	1.014	1.016	1.016	1.016	1.014	1.014	1.014	1.014	1.011	1.014	1.009	1.011	1.006	1.011	1.006
38	1.023	1.018	1.020	1.016	1.020	1.014	1.016	1.014	1.018	1.016	1.016	1.014	1.018	1.016	1.014	1.018	1.016	1.011	1.014	1.011
39	1.023	1.023	1.023	1.023	1.020	1.020	1.020	1.020	1.018	1.016	1.018	1.014	1.018	1.014	1.018	1.014	1.016	1.011	1.018	1.011
40	1.027	1.025	1.025	1.025	1.025	1.023	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.018	1.018	1.016	1.016	1.016
41	1.027	1.025	1.025	1.027	1.025	1.025	1.023	1.023	1.023	1.023	1.023	1.023	1.020	1.020	1.020	1.020	1.018	1.018	1.018	1.016
42	1.029	1.029	1.029	1.027	1.027	1.027	1.027	1.029	1.027	1.027	1.025	1.025	1.025	1.023	1.023	1.020	1.025	1.023	1.020	1.020
43	1.035	1.033	1.033	1.031	1.029	1.029	1.031	1.029	1.029	1.027	1.027	1.025	1.027	1.025	1.025	1.025	1.025	1.020	1.023	1.023
44	1.037	1.037	1.037	1.033	1.035	1.037	1.033	1.033	1.033	1.031	1.031	1.031	1.029	1.031	1.029	1.029	1.027	1.027	1.025	1.027
45	1.045	1.041	1.045	1.039	1.043	1.039	1.041	1.041	1.039	1.039	1.039	1.039	1.039	1.039	1.037	1.037	1.035	1.035	1.037	1.035
46	1.056	1.057	1.054	1.054	1.052	1.052	1.052	1.052	1.052	1.056	1.045	1.052	1.043	1.050	1.043	1.048	1.039	1.047	1.041	1.047
47	1.062	1.062	1.059	1.061	1.059	1.059	1.057	1.057	1.056	1.056	1.054	1.056	1.052	1.056	1.052	1.054	1.052	1.054	1.052	1.052
48	1.067	1.069	1.065	1.067	1.064	1.064	1.061	1.062	1.057	1.059	1.057	1.059	1.056	1.059	1.057	1.057	1.056	1.057	1.054	1.057
49	1.075	1.072	1.073	1.069	1.069	1.067	1.069	1.065	1.067	1.062	1.065	1.062	1.065	1.061	1.061	1.061	1.061	1.057	1.061	1.057
50	1.079	1.078	1.076	1.075	1.075	1.073	1.073	1.070	1.072	1.067	1.069	1.067	1.067	1.065	1.065	1.059	1.067	1.065	1.062	1.062
51	1.082	1.084	1.081	1.081	1.079	1.078	1.075	1.076	1.075	1.075	1.072	1.072	1.070	1.070	1.069	1.070	1.067	1.067	1.065	1.069
52	1.082	1.084	1.079	1.082	1.078	1.081	1.076	1.078	1.076	1.076	1.073	1.075	1.073	1.072	1.072	1.072	1.070	1.070	1.067	1.069
53	1.075	1.076	1.078	1.079	1.078	1.078	1.078	1.078	1.073	1.078	1.073	1.076	1.072	1.073	1.070	1.072	1.067	1.070	1.065	1.067
54	1.076	1.079	1.079	1.081	1.081	1.082	1.081	1.079	1.079	1.081	1.078	1.082	1.078	1.078	1.076	1.075	1.072	1.073	1.069	1.069
55	1.085	1.086	1.085	1.088	1.086	1.088	1.085	1.088	1.085	1.085	1.084	1.085	1.082	1.082	1.079	1.079	1.076	1.076	1.075	1.073
56	1.093	1.095	1.095	1.095	1.092	1.092	1.091	1.092	1.091	1.089	1.089	1.084	1.084	1.085	1.082	1.082	1.079	1.079	1.076	1.076
57	1.096	1.095	1.095	1.092	1.091	1.088	1.088	1.085	1.085	1.084	1.084	1.079	1.079	1.076	1.076	1.075	1.073	1.070	1.069	1.065
58	1.096	1.091	1.088	1.085	1.084	1.082	1.079	1.079	1.075	1.076	1.075	1.073	1.072	1.070	1.067	1.069	1.065	1.067	1.062	1.062
59	1.111	1.088	1.081	1.075	1.073	1.069	1.069	1.065	1.064	1.059	1.059	1.056	1.056	1.052	1.052	1.048	1.045	1.043	1.043	1.039
60	1.189	1.120	1.088	1.075	1.073	1.062	1.064	1.056	1.059	1.050	1.054	1.047	1.048	1.041	1.043	1.039	1.041	1.035	1.037	1.031
61	1.376	1.210	1.133	1.092	1.076	1.069	1.069	1.061	1.061	1.054	1.056	1.052	1.050	1.047	1.043	1.043	1.041	1.039	1.039	1.035
62	1.575	1.405	1.224	1.139	1.092	1.076	1.070	1.065	1.065	1.057	1.057	1.052	1.054	1.047	1.047	1.043	1.043	1.041	1.039	1.035
63	1.559	1.575	1.477	1.287	1.165	1.107	1.082	1.069	1.065	1.059	1.057	1.054	1.054	1.050	1.048	1.045	1.043	1.041	1.043	1.039

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 8,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 69

IR SCAN TIME 7.13 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	1.018	1.018	1.020	1.020	1.018	1.016	1.018	1.014	1.018	1.014	1.016	1.014	1.014	1.011	1.011	1.009	1.011	1.006	1.009	1.004
30	1.014	1.014	1.014	1.011	1.016	1.014	1.014	1.011	1.014	1.011	1.011	1.009	1.011	1.009	1.006	1.006	1.006	1.001	1.004	1.001
31	1.011	1.011	1.011	1.009	1.011	1.011	1.011	1.009	1.011	1.009	1.011	1.009	1.006	1.006	1.006	1.004	1.004	1.001	1.004	1.001
32	1.006	0.999	1.006	1.001	1.006	1.001	1.006	1.004	1.009	1.006	1.006	1.004	1.006	1.004	1.004	1.001	1.004	1.001	1.001	0.999
33	1.001	1.001	1.001	1.004	1.001	1.004	1.001	1.001	1.001	1.001	1.001	1.001	0.993	0.999	0.996	0.999	0.991	0.996	0.991	0.996
34	1.001	0.999	0.999	0.999	1.001	0.999	1.001	1.001	1.001	0.999	0.999	0.999	1.001	0.996	0.999	0.996	0.999	0.993	0.996	0.993
35	1.001	1.001	1.004	1.001	1.001	1.001	0.999	1.001	0.999	0.999	0.996	0.999	0.993	0.999	0.996	0.999	0.996	0.996	0.999	0.996
36	1.006	1.004	1.006	1.004	1.006	1.001	1.001	1.001	1.004	1.001	0.999	0.999	1.001	1.001	0.999	0.999	1.001	1.001	1.001	0.999
37	1.009	1.009	1.009	1.006	1.006	1.006	1.006	1.006	1.004	1.004	1.006	1.004	1.004	1.001	1.001	1.001	1.004	1.001	1.004	1.001
38	1.014	1.011	1.011	1.011	1.011	1.011	1.011	1.006	1.011	1.011	1.009	1.011	1.009	1.016	1.001	1.006	1.004	1.011	1.004	1.001
39	1.014	1.011	1.016	1.011	1.014	1.009	1.014	1.011	1.011	1.011	1.014	1.009	1.011	1.009	1.011	1.009	1.011	1.006	1.009	1.009
40	1.016	1.016	1.016	1.016	1.016	1.011	1.014	1.011	1.014	1.009	1.014	1.009	1.014	1.006	1.011	1.006	1.011	1.006	1.011	1.006
41	1.018	1.016	1.016	1.016	1.016	1.016	1.018	1.016	1.016	1.014	1.014	1.016	1.014	1.016	1.011	1.014	1.011	1.014	1.011	1.014
42	1.020	1.020	1.020	1.020	1.018	1.018	1.020	1.016	1.018	1.016	1.016	1.016	1.018	1.016	1.016	1.016	1.018	1.014	1.014	1.016
43	1.023	1.023	1.023	1.020	1.023	1.020	1.020	1.018	1.018	1.018	1.018	1.018	1.018	1.016	1.016	1.018	1.016	1.018	1.016	1.018
44	1.029	1.025	1.025	1.027	1.027	1.025	1.025	1.020	1.023	1.020	1.023	1.020	1.020	1.020	1.020	1.018	1.020	1.020	1.020	1.020
45	1.035	1.033	1.035	1.035	1.035	1.033	1.033	1.033	1.031	1.031	1.031	1.031	1.029	1.031	1.031	1.029	1.029	1.029	1.029	1.027
46	1.041	1.048	1.041	1.047	1.041	1.045	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.041	1.041	1.041	1.039	1.041	1.041	1.039
47	1.054	1.054	1.054	1.056	1.052	1.052	1.050	1.050	1.048	1.050	1.047	1.050	1.047	1.048	1.045	1.048	1.045	1.047	1.043	1.045
48	1.056	1.059	1.059	1.061	1.057	1.057	1.054	1.054	1.050	1.054	1.054	1.052	1.052	1.054	1.052	1.052	1.052	1.052	1.050	1.050
49	1.061	1.059	1.062	1.061	1.061	1.057	1.057	1.054	1.057	1.054	1.057	1.054	1.054	1.054	1.056	1.054	1.056	1.052	1.054	1.052
50	1.065	1.061	1.064	1.062	1.064	1.061	1.062	1.059	1.059	1.057	1.059	1.059	1.059	1.057	1.057	1.054	1.057	1.054	1.057	1.054
51	1.065	1.065	1.064	1.064	1.062	1.065	1.061	1.062	1.059	1.061	1.059	1.061	1.057	1.059	1.059	1.061	1.057	1.057	1.057	1.057
52	1.065	1.069	1.065	1.064	1.061	1.061	1.057	1.059	1.056	1.059	1.054	1.056	1.056	1.057	1.052	1.052	1.052	1.054	1.050	1.052
53	1.062	1.064	1.059	1.061	1.056	1.052	1.048	1.043	1.039	1.041	1.039	1.039	1.035	1.037	1.035	1.035	1.035	1.033	1.033	1.035
54	1.065	1.064	1.061	1.059	1.054	1.050	1.039	1.037	1.033	1.033	1.029	1.029	1.027	1.027	1.025	1.025	1.023	1.023	1.020	1.020
55	1.069	1.067	1.065	1.064	1.057	1.054	1.047	1.041	1.039	1.033	1.031	1.031	1.029	1.029	1.027	1.025	1.025	1.020	1.020	1.020
56	1.072	1.070	1.065	1.065	1.059	1.059	1.052	1.043	1.039	1.035	1.035	1.033	1.031	1.031	1.029	1.027	1.025	1.023	1.020	1.020
57	1.065	1.061	1.061	1.056	1.056	1.052	1.048	1.039	1.037	1.035	1.033	1.029	1.029	1.027	1.025	1.023	1.025	1.023	1.020	1.018
58	1.059	1.059	1.057	1.057	1.054	1.056	1.050	1.047	1.043	1.045	1.043	1.039	1.039	1.037	1.035	1.035	1.035	1.035	1.035	1.033
59	1.039	1.035	1.037	1.033	1.033	1.031	1.027	1.027	1.025	1.023	1.023	1.020	1.020	1.016	1.020	1.016	1.016	1.014	1.014	1.009
60	1.035	1.033	1.031	1.027	1.027	1.025	1.025	1.023	1.023	1.020	1.020	1.016	1.020	1.016	1.016	1.011	1.014	1.014	1.011	1.009
61	1.035	1.031	1.033	1.027	1.027	1.025	1.025	1.020	1.023	1.016	1.020	1.016	1.018	1.016	1.016	1.011	1.014	1.006	1.011	1.009
62	1.035	1.033	1.035	1.031	1.029	1.027	1.027	1.025	1.023	1.020	1.020	1.016	1.018	1.016	1.016	1.016	1.016	1.011	1.011	1.006
63	1.039	1.035	1.035	1.031	1.029	1.027	1.027	1.023	1.025	1.023	1.023	1.020	1.018	1.016	1.018	1.016	1.016	1.011	1.011	1.009

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 69

IR SCAN TIME 7.13 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	1.006	1.004	1.006	1.001	1.001	1.001	1.004	1.001	1.001	1.001
30	1.004	1.001	0.999	0.999	1.001	0.999	0.999	0.996	1.001	0.999
31	1.001	0.999	1.001	0.996	0.999	0.993	0.999	0.996	0.999	0.993
32	0.996	0.996	0.999	0.993	0.996	0.996	0.993	0.993	0.996	0.996
33	0.991	0.996	0.991	0.993	0.988	0.991	0.985	0.993	0.991	0.993
34	0.996	0.991	0.993	0.991	0.993	0.991	0.991	0.991	0.996	0.985
35	0.996	0.996	0.993	0.996	0.993	0.996	0.993	0.993	0.991	0.993
36	1.001	0.996	0.999	0.996	0.999	0.996	0.996	0.993	0.999	0.993
37	1.004	1.001	1.001	1.001	1.001	1.001	1.001	0.999	0.999	0.999
38	1.006	1.004	0.996	1.006	1.006	0.999	1.011	1.006	0.999	0.993
39	1.009	1.009	1.009	1.009	1.006	1.006	1.009	1.006	1.009	1.006
40	1.011	1.004	1.009	1.004	1.011	1.011	1.011	1.011	1.011	1.011
41	1.011	1.011	1.011	1.009	1.011	1.011	1.011	1.014	1.006	1.014
42	1.016	1.014	1.016	1.016	1.016	1.016	1.016	1.014	1.016	1.016
43	1.016	1.018	1.016	1.016	1.016	1.016	1.018	1.016	1.016	1.018
44	1.020	1.020	1.020	1.018	1.020	1.018	1.020	1.018	1.020	1.018
45	1.029	1.029	1.029	1.027	1.027	1.027	1.027	1.027	1.029	1.027
46	1.039	1.039	1.041	1.041	1.039	1.039	1.037	1.039	1.037	1.037
47	1.043	1.045	1.041	1.045	1.043	1.045	1.045	1.043	1.043	1.043
48	1.050	1.050	1.047	1.048	1.045	1.047	1.041	1.048	1.041	1.047
49	1.054	1.052	1.052	1.052	1.052	1.050	1.052	1.050	1.050	1.048
50	1.056	1.052	1.056	1.052	1.056	1.052	1.054	1.052	1.054	1.052
51	1.056	1.057	1.054	1.056	1.052	1.054	1.052	1.054	1.052	1.052
52	1.048	1.048	1.047	1.047	1.045	1.045	1.043	1.043	1.043	1.041
53	1.033	1.031	1.031	1.029	1.033	1.029	1.029	1.027	1.027	1.027
54	1.018	1.020	1.018	1.018	1.016	1.016	1.016	1.016	1.014	1.016
55	1.020	1.016	1.016	1.018	1.006	1.014	1.004	1.014	1.001	1.011
56	1.018	1.018	1.016	1.016	1.014	1.014	1.011	1.009	1.006	1.006
57	1.016	1.016	1.016	1.011	1.014	1.009	1.011	1.009	1.011	1.006
58	1.033	1.027	1.029	1.027	1.027	1.027	1.025	1.023	1.023	1.025
59	1.011	1.009	1.011	1.006	1.006	1.004	1.006	1.001	1.001	1.001
60	1.009	1.006	1.006	1.004	1.006	1.001	1.001	0.999	1.001	0.996
61	1.011	1.004	1.006	1.001	1.006	0.999	1.001	0.996	0.999	0.996
62	1.009	1.004	1.004	1.001	1.006	0.996	0.999	0.996	0.996	0.993
63	1.009	1.006	1.006	1.004	1.001	1.001	1.001	0.996	0.996	0.993

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 8,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 69

IR SCAN TIME 7.13 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	1.014	1.014	1.016	1.018	1.018	1.018	1.020	1.025	1.027	1.029	1.031	1.031	1.039	1.062	1.182	1.290	1.336	1.361	1.377	1.390
65	1.011	1.014	1.014	1.016	1.016	1.018	1.020	1.020	1.025	1.025	1.027	1.031	1.039	1.075	1.199	1.292	1.331	1.353	1.369	1.382
66	1.006	1.011	1.006	1.006	1.014	1.009	1.016	1.014	1.023	1.018	1.027	1.027	1.035	1.093	1.223	1.299	1.331	1.350	1.365	1.378
67	0.999	1.001	1.001	1.001	1.004	1.004	1.009	1.009	1.014	1.016	1.020	1.023	1.039	1.133	1.253	1.306	1.333	1.349	1.362	1.374
68	0.993	0.996	0.996	0.996	0.999	1.001	1.001	1.004	1.006	1.009	1.016	1.020	1.047	1.165	1.267	1.309	1.332	1.345	1.358	1.368
69	0.991	0.996	0.996	0.993	0.996	1.001	1.001	1.004	1.006	1.009	1.016	1.020	1.075	1.199	1.276	1.308	1.327	1.342	1.353	1.358
70	0.991	0.991	0.996	0.988	0.999	1.001	1.004	1.004	1.006	1.009	1.016	1.027	1.106	1.224	1.282	1.308	1.326	1.340	1.349	1.356
71	0.991	0.993	0.993	0.993	0.996	0.999	1.004	1.001	1.009	1.006	1.014	1.025	1.127	1.236	1.286	1.310	1.327	1.341	1.348	1.356
72	0.991	0.993	0.993	0.993	0.999	0.999	1.004	1.004	1.006	1.006	1.016	1.035	1.144	1.243	1.287	1.311	1.328	1.340	1.346	1.354
73	0.991	0.993	0.991	0.993	0.996	1.001	1.001	1.006	1.006	1.006	1.009	1.039	1.150	1.245	1.283	1.307	1.323	1.333	1.338	1.348
74	0.991	0.991	0.988	0.991	0.991	0.996	0.999	1.001	1.001	1.004	1.011	1.057	1.173	1.252	1.284	1.303	1.317	1.328	1.336	1.345
75	0.991	0.996	0.993	0.991	0.993	0.993	1.001	0.999	1.001	1.004	1.016	1.092	1.206	1.265	1.290	1.305	1.319	1.332	1.342	1.348
76	0.991	0.993	0.991	0.991	0.993	0.996	0.996	0.999	1.001	1.004	1.025	1.126	1.230	1.272	1.292	1.307	1.320	1.330	1.338	1.346
77	0.991	0.993	0.996	0.993	0.999	0.991	0.996	0.996	1.001	1.004	1.048	1.172	1.250	1.278	1.293	1.305	1.316	1.324	1.332	1.341
78	0.991	0.999	1.023	1.023	1.006	0.996	0.996	0.996	0.999	1.004	1.076	1.199	1.260	1.280	1.294	1.304	1.313	1.319	1.327	1.336
79	0.996	1.025	1.048	1.023	1.027	1.031	1.029	1.016	1.006	1.011	1.099	1.213	1.263	1.281	1.293	1.304	1.313	1.321	1.327	1.334
80	0.996	1.043	1.057	1.011	1.016	1.029	1.031	1.033	1.035	1.029	1.119	1.226	1.267	1.282	1.293	1.302	1.311	1.320	1.329	1.336
81	1.035	1.088	1.119	1.069	1.035	1.027	1.009	1.027	1.050	1.054	1.140	1.234	1.269	1.283	1.292	1.301	1.308	1.315	1.323	1.331
82	1.076	1.093	1.133	1.141	1.095	1.065	1.025	1.001	1.009	1.050	1.165	1.246	1.275	1.287	1.295	1.302	1.308	1.313	1.319	1.327
83	1.095	1.105	1.143	1.156	1.107	1.075	1.037	1.009	1.004	1.075	1.201	1.261	1.280	1.291	1.299	1.305	1.311	1.317	1.322	1.327
84	1.096	1.099	1.116	1.131	1.096	1.069	1.031	1.011	1.025	1.131	1.248	1.282	1.285	1.293	1.302	1.309	1.314	1.321	1.327	1.332
85	1.062	1.064	1.075	1.085	1.082	1.065	1.045	1.052	1.069	1.095	1.141	1.170	1.176	1.204	1.235	1.265	1.284	1.293	1.311	1.351
86	1.043	1.052	1.067	1.075	1.076	1.069	1.062	1.064	1.072	1.072	1.069	1.075	1.075	1.076	1.076	1.081	1.082	1.085	1.092	1.111
87	1.023	1.027	1.035	1.045	1.045	1.045	1.045	1.057	1.070	1.067	1.065	1.069	1.065	1.069	1.067	1.070	1.069	1.072	1.072	1.075
88	1.011	1.006	1.009	1.016	1.018	1.023	1.031	1.047	1.064	1.065	1.061	1.062	1.059	1.062	1.059	1.061	1.059	1.061	1.059	1.065
89	1.001	0.996	0.999	0.999	1.011	1.020	1.029	1.039	1.059	1.062	1.062	1.062	1.061	1.059	1.061	1.057	1.057	1.056	1.059	1.057
90	0.982	0.985	0.982	0.991	1.006	1.011	1.016	1.029	1.052	1.062	1.061	1.061	1.059	1.059	1.057	1.057	1.056	1.057	1.056	1.056
91	0.972	0.979	0.979	0.985	0.999	1.006	1.011	1.020	1.048	1.059	1.061	1.059	1.061	1.057	1.057	1.056	1.054	1.052	1.054	1.052
92	0.969	0.972	0.976	0.982	0.996	0.996	1.004	1.016	1.045	1.057	1.057	1.057	1.059	1.056	1.057	1.054	1.057	1.054	1.054	1.052
93	0.985	0.979	0.988	0.991	1.009	1.004	1.018	1.018	1.054	1.064	1.064	1.064	1.062	1.061	1.062	1.061	1.057	1.057	1.052	1.052
94	1.027	1.023	1.020	1.020	1.020	1.020	1.025	1.031	1.052	1.062	1.059	1.065	1.069	1.070	1.069	1.067	1.062	1.059	1.052	1.050
95	1.045	1.043	1.039	1.043	1.041	1.041	1.039	1.043	1.059	1.069	1.064	1.067	1.072	1.075	1.075	1.075	1.072	1.067	1.057	1.047
96	1.065	1.061	1.065	1.067	1.069	1.057	1.052	1.050	1.072	1.078	1.075	1.075	1.081	1.081	1.084	1.085	1.082	1.075	1.062	1.050
97	1.067	1.064	1.069	1.069	1.072	1.065	1.056	1.052	1.065	1.072	1.070	1.076	1.084	1.088	1.093	1.091	1.088	1.076	1.065	1.054
98	1.076	1.075	1.072	1.073	1.073	1.070	1.056	1.054	1.065	1.067	1.057	1.067	1.076	1.086	1.091	1.091	1.085	1.078	1.067	1.065

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 69

IR SCAN TIME 7.13 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	1.404	1.416	1.427	1.440	1.456	1.481	1.502	1.520	1.539	1.553	1.566	1.576	1.584	1.590	1.596	1.602	1.608	1.613	1.618	1.622
65	1.396	1.406	1.418	1.432	1.451	1.473	1.492	1.507	1.524	1.543	1.554	1.565	1.575	1.585	1.591	1.598	1.604	1.612	1.619	1.626
66	1.389	1.399	1.411	1.426	1.445	1.464	1.481	1.496	1.514	1.532	1.545	1.556	1.566	1.575	1.582	1.590	1.599	1.606	1.613	1.621
67	1.386	1.396	1.408	1.423	1.441	1.458	1.472	1.487	1.505	1.521	1.534	1.546	1.555	1.564	1.572	1.579	1.583	1.588	1.594	1.600
68	1.378	1.387	1.400	1.413	1.429	1.443	1.456	1.474	1.492	1.507	1.521	1.532	1.541	1.550	1.554	1.558	1.562	1.566	1.571	1.576
69	1.366	1.378	1.389	1.401	1.416	1.430	1.446	1.463	1.480	1.496	1.511	1.522	1.533	1.540	1.545	1.550	1.555	1.558	1.563	1.572
70	1.367	1.378	1.388	1.400	1.415	1.429	1.445	1.463	1.480	1.495	1.509	1.519	1.526	1.531	1.535	1.539	1.544	1.550	1.558	1.564
71	1.366	1.375	1.387	1.405	1.421	1.435	1.448	1.463	1.481	1.497	1.508	1.517	1.525	1.528	1.532	1.536	1.539	1.540	1.541	1.543
72	1.366	1.376	1.386	1.402	1.416	1.428	1.443	1.460	1.478	1.492	1.501	1.510	1.517	1.519	1.522	1.524	1.527	1.529	1.531	1.533
73	1.362	1.373	1.382	1.392	1.402	1.414	1.427	1.443	1.461	1.475	1.484	1.493	1.500	1.504	1.508	1.512	1.516	1.518	1.519	1.520
74	1.356	1.365	1.370	1.380	1.391	1.404	1.418	1.435	1.451	1.463	1.471	1.478	1.484	1.490	1.492	1.493	1.495	1.496	1.498	1.500
75	1.352	1.358	1.367	1.377	1.390	1.402	1.414	1.430	1.446	1.459	1.467	1.474	1.480	1.482	1.483	1.483	1.484	1.485	1.486	1.488
76	1.353	1.359	1.368	1.378	1.388	1.401	1.413	1.426	1.441	1.455	1.463	1.468	1.474	1.476	1.477	1.477	1.477	1.479	1.482	1.486
77	1.352	1.363	1.369	1.379	1.391	1.402	1.414	1.423	1.436	1.451	1.460	1.464	1.470	1.473	1.476	1.478	1.480	1.481	1.483	1.487
78	1.347	1.357	1.363	1.370	1.382	1.394	1.405	1.417	1.430	1.444	1.454	1.462	1.468	1.471	1.473	1.477	1.481	1.484	1.488	1.491
79	1.341	1.348	1.354	1.361	1.372	1.383	1.397	1.411	1.426	1.439	1.451	1.459	1.465	1.468	1.470	1.473	1.477	1.481	1.485	1.488
80	1.343	1.351	1.358	1.366	1.377	1.388	1.401	1.416	1.430	1.442	1.452	1.458	1.463	1.466	1.469	1.472	1.476	1.479	1.481	1.484
81	1.338	1.347	1.355	1.361	1.371	1.383	1.398	1.414	1.428	1.441	1.452	1.462	1.469	1.471	1.474	1.476	1.476	1.479	1.481	1.482
82	1.335	1.343	1.351	1.359	1.367	1.379	1.390	1.405	1.421	1.438	1.451	1.458	1.465	1.470	1.473	1.475	1.475	1.477	1.480	1.482
83	1.333	1.337	1.346	1.356	1.366	1.374	1.386	1.400	1.416	1.430	1.444	1.456	1.461	1.465	1.468	1.469	1.470	1.474	1.476	1.478
84	1.335	1.339	1.343	1.350	1.359	1.372	1.385	1.396	1.410	1.423	1.435	1.445	1.451	1.457	1.461	1.465	1.466	1.467	1.469	1.471
85	1.362	1.354	1.361	1.365	1.364	1.369	1.378	1.390	1.402	1.415	1.427	1.435	1.442	1.446	1.448	1.452	1.453	1.455	1.455	1.457
86	1.135	1.151	1.198	1.248	1.249	1.249	1.256	1.258	1.260	1.264	1.279	1.286	1.292	1.308	1.337	1.362	1.355	1.350	1.351	1.351
87	1.076	1.078	1.079	1.081	1.081	1.082	1.084	1.082	1.082	1.082	1.082	1.085	1.086	1.089	1.091	1.093	1.095	1.095	1.096	1.097
88	1.065	1.070	1.072	1.073	1.075	1.076	1.075	1.075	1.075	1.073	1.072	1.072	1.073	1.075	1.075	1.076	1.076	1.078	1.078	1.079
89	1.061	1.059	1.064	1.062	1.067	1.067	1.070	1.069	1.069	1.065	1.067	1.065	1.069	1.067	1.070	1.069	1.069	1.069	1.073	1.072
90	1.054	1.059	1.057	1.062	1.059	1.062	1.061	1.062	1.061	1.064	1.062	1.064	1.065	1.065	1.065	1.065	1.065	1.067	1.067	1.065
91	1.054	1.054	1.057	1.059	1.059	1.057	1.059	1.059	1.062	1.064	1.072	1.113	1.165	1.143	1.091	1.070	1.065	1.065	1.065	1.064
92	1.052	1.052	1.052	1.052	1.057	1.054	1.056	1.056	1.057	1.059	1.078	1.184	1.273	1.250	1.155	1.088	1.070	1.062	1.062	1.061
93	1.045	1.047	1.045	1.052	1.048	1.054	1.050	1.057	1.056	1.061	1.056	1.067	1.085	1.085	1.062	1.062	1.057	1.057	1.059	1.059
94	1.047	1.047	1.047	1.054	1.056	1.059	1.057	1.062	1.062	1.065	1.065	1.062	1.057	1.057	1.054	1.059	1.052	1.056	1.048	1.056
95	1.043	1.045	1.052	1.056	1.056	1.059	1.059	1.065	1.065	1.067	1.065	1.065	1.061	1.059	1.056	1.056	1.054	1.054	1.054	1.056
96	1.047	1.050	1.054	1.056	1.062	1.062	1.067	1.067	1.072	1.069	1.073	1.070	1.070	1.061	1.059	1.052	1.056	1.052	1.054	1.052
97	1.054	1.052	1.057	1.059	1.065	1.065	1.069	1.070	1.072	1.072	1.075	1.075	1.073	1.069	1.065	1.057	1.056	1.052	1.054	1.052
98	1.065	1.065	1.065	1.069	1.065	1.069	1.069	1.069	1.069	1.070	1.070	1.072	1.069	1.069	1.065	1.061	1.056	1.056	1.054	1.054

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP COPP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 8,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 69

IR SCAN TIME 7.13 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	1.627	1.632	1.635	1.639	1.645	1.653	1.661	1.664	1.665	1.666	1.663	1.656	1.640	1.604	1.552	1.508	1.512	1.551	1.584	1.583
65	1.630	1.635	1.636	1.638	1.641	1.646	1.654	1.660	1.663	1.665	1.664	1.664	1.664	1.656	1.629	1.578	1.515	1.469	1.459	1.486
66	1.626	1.632	1.638	1.642	1.644	1.648	1.653	1.656	1.656	1.654	1.654	1.653	1.651	1.650	1.646	1.638	1.622	1.586	1.524	1.463
67	1.608	1.616	1.623	1.629	1.634	1.638	1.641	1.641	1.641	1.643	1.642	1.639	1.634	1.628	1.624	1.619	1.614	1.604	1.590	1.565
68	1.582	1.590	1.599	1.609	1.620	1.628	1.633	1.636	1.634	1.632	1.631	1.630	1.627	1.621	1.615	1.611	1.607	1.607	1.607	1.600
69	1.584	1.593	1.597	1.599	1.604	1.612	1.618	1.622	1.623	1.622	1.619	1.615	1.607	1.594	1.582	1.573	1.563	1.561	1.564	1.562
70	1.569	1.574	1.579	1.584	1.589	1.595	1.600	1.603	1.603	1.602	1.600	1.597	1.591	1.580	1.566	1.550	1.532	1.518	1.506	1.497
71	1.546	1.549	1.551	1.555	1.563	1.568	1.574	1.580	1.584	1.587	1.586	1.584	1.579	1.571	1.562	1.552	1.538	1.518	1.501	1.488
72	1.536	1.539	1.541	1.543	1.549	1.552	1.555	1.556	1.557	1.556	1.554	1.555	1.558	1.556	1.553	1.553	1.549	1.540	1.522	1.498
73	1.522	1.524	1.527	1.532	1.541	1.546	1.547	1.549	1.548	1.547	1.544	1.540	1.537	1.534	1.529	1.528	1.527	1.522	1.512	1.501
74	1.503	1.507	1.510	1.516	1.525	1.530	1.532	1.535	1.535	1.538	1.540	1.538	1.536	1.534	1.532	1.529	1.528	1.523	1.513	
75	1.490	1.493	1.497	1.502	1.506	1.508	1.512	1.515	1.516	1.517	1.518	1.518	1.519	1.518	1.516	1.514	1.514	1.512	1.512	1.515
76	1.491	1.496	1.500	1.502	1.502	1.502	1.504	1.506	1.504	1.500	1.497	1.494	1.492	1.491	1.491	1.490	1.484	1.481	1.486	1.492
77	1.489	1.490	1.495	1.500	1.504	1.507	1.508	1.508	1.506	1.503	1.498	1.492	1.488	1.483	1.478	1.476	1.477	1.471	1.469	1.469
78	1.493	1.496	1.498	1.500	1.504	1.507	1.508	1.508	1.508	1.507	1.503	1.499	1.495	1.490	1.483	1.480	1.481	1.481	1.477	1.475
79	1.491	1.494	1.497	1.502	1.505	1.507	1.509	1.508	1.508	1.506	1.504	1.502	1.501	1.496	1.492	1.490	1.489	1.487	1.483	1.479
80	1.488	1.492	1.496	1.498	1.502	1.503	1.505	1.506	1.506	1.506	1.507	1.507	1.506	1.499	1.496	1.495	1.495	1.494	1.493	1.489
81	1.484	1.488	1.495	1.498	1.502	1.503	1.503	1.504	1.506	1.508	1.511	1.510	1.507	1.501	1.499	1.497	1.493	1.492	1.494	1.494
82	1.484	1.488	1.492	1.497	1.502	1.505	1.507	1.510	1.510	1.509	1.508	1.508	1.509	1.504	1.497	1.495	1.495	1.496	1.497	1.497
83	1.481	1.485	1.489	1.493	1.498	1.502	1.505	1.507	1.509	1.510	1.511	1.511	1.510	1.505	1.502	1.501	1.498	1.495	1.495	1.495
84	1.473	1.479	1.484	1.490	1.495	1.500	1.502	1.504	1.505	1.508	1.509	1.511	1.511	1.508	1.507	1.507	1.504	1.504	1.504	1.503
85	1.461	1.464	1.469	1.473	1.479	1.484	1.488	1.489	1.492	1.494	1.495	1.496	1.496	1.496	1.498	1.500	1.500	1.501	1.501	1.503
86	1.354	1.375	1.392	1.390	1.392	1.400	1.411	1.416	1.416	1.417	1.420	1.422	1.424	1.427	1.429	1.433	1.436	1.437	1.440	1.444
87	1.096	1.099	1.099	1.101	1.100	1.101	1.102	1.106	1.104	1.105	1.106	1.109	1.106	1.106	1.105	1.107	1.107	1.109	1.112	1.114
88	1.081	1.082	1.082	1.084	1.082	1.086	1.085	1.086	1.085	1.086	1.085	1.094	1.082	1.082	1.082	1.079	1.078	1.079	1.075	1.078
89	1.075	1.073	1.075	1.075	1.076	1.075	1.076	1.075	1.076	1.075	1.078	1.075	1.075	1.072	1.073	1.070	1.069	1.067	1.069	1.065
90	1.067	1.070	1.072	1.072	1.072	1.072	1.070	1.072	1.069	1.070	1.069	1.070	1.069	1.069	1.065	1.065	1.062	1.062	1.059	1.062
91	1.065	1.065	1.067	1.067	1.069	1.067	1.072	1.069	1.070	1.069	1.073	1.085	1.097	1.082	1.070	1.062	1.062	1.059	1.065	1.057
92	1.065	1.064	1.065	1.065	1.067	1.067	1.067	1.065	1.067	1.065	1.106	1.230	1.288	1.229	1.130	1.084	1.069	1.059	1.061	1.057
93	1.059	1.062	1.059	1.064	1.064	1.065	1.064	1.064	1.061	1.064	1.067	1.112	1.155	1.126	1.079	1.067	1.057	1.057	1.056	1.057
94	1.054	1.059	1.056	1.059	1.057	1.062	1.061	1.062	1.057	1.059	1.054	1.057	1.056	1.057	1.056	1.057	1.054	1.054	1.052	1.054
95	1.052	1.052	1.054	1.057	1.056	1.059	1.059	1.061	1.057	1.059	1.056	1.056	1.052	1.054	1.052	1.052	1.047	1.047	1.045	1.048
96	1.056	1.054	1.056	1.054	1.057	1.057	1.061	1.059	1.062	1.057	1.056	1.052	1.054	1.052	1.052	1.052	1.052	1.047	1.045	1.043
97	1.052	1.052	1.054	1.052	1.054	1.054	1.059	1.059	1.062	1.059	1.057	1.052	1.052	1.052	1.052	1.048	1.048	1.047	1.047	1.047
98	1.052	1.052	1.052	1.052	1.052	1.054	1.054	1.057	1.057	1.059	1.054	1.054	1.052	1.052	1.048	1.050	1.047	1.045	1.043	1.043

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 69

IR SCAN TIME 7.13 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	1.546	1.551	1.603	1.570	1.392	1.214	1.133	1.088	1.073	1.064	1.061	1.056	1.056	1.052	1.052	1.050	1.048	1.043	1.043	1.043
65	1.521	1.522	1.521	1.544	1.558	1.463	1.275	1.157	1.101	1.076	1.065	1.059	1.057	1.056	1.052	1.052	1.048	1.048	1.043	1.045
66	1.438	1.445	1.470	1.490	1.513	1.553	1.513	1.349	1.188	1.117	1.079	1.064	1.057	1.056	1.050	1.052	1.047	1.045	1.043	1.041
67	1.528	1.486	1.458	1.452	1.458	1.477	1.523	1.522	1.392	1.215	1.126	1.081	1.064	1.052	1.054	1.045	1.045	1.039	1.041	1.041
68	1.577	1.549	1.527	1.510	1.494	1.481	1.479	1.503	1.524	1.440	1.263	1.143	1.091	1.064	1.054	1.047	1.043	1.041	1.039	1.035
69	1.559	1.555	1.542	1.527	1.528	1.532	1.525	1.509	1.517	1.546	1.499	1.334	1.178	1.106	1.069	1.052	1.043	1.039	1.039	1.033
70	1.494	1.495	1.501	1.511	1.520	1.532	1.550	1.560	1.563	1.575	1.613	1.597	1.441	1.238	1.135	1.078	1.052	1.045	1.035	1.035
71	1.477	1.469	1.467	1.470	1.479	1.492	1.510	1.525	1.536	1.542	1.556	1.594	1.615	1.510	1.305	1.162	1.095	1.056	1.045	1.037
72	1.472	1.446	1.425	1.412	1.407	1.407	1.414	1.427	1.446	1.467	1.486	1.509	1.548	1.595	1.558	1.386	1.205	1.112	1.067	1.043
73	1.486	1.473	1.457	1.438	1.414	1.394	1.381	1.379	1.385	1.398	1.416	1.432	1.451	1.486	1.537	1.560	1.459	1.267	1.136	1.078
74	1.502	1.487	1.466	1.442	1.419	1.405	1.397	1.392	1.383	1.379	1.380	1.390	1.400	1.412	1.436	1.473	1.500	1.426	1.244	1.120
75	1.518	1.517	1.514	1.508	1.499	1.484	1.462	1.433	1.405	1.387	1.384	1.387	1.391	1.396	1.400	1.402	1.370	1.267	1.156	1.091
76	1.495	1.495	1.497	1.497	1.497	1.498	1.501	1.504	1.502	1.490	1.469	1.442	1.414	1.397	1.400	1.414	1.383	1.264	1.150	1.104
77	1.467	1.464	1.463	1.462	1.463	1.468	1.472	1.478	1.484	1.489	1.489	1.491	1.488	1.478	1.462	1.444	1.434	1.402	1.301	1.172
78	1.472	1.465	1.458	1.451	1.445	1.442	1.438	1.435	1.438	1.442	1.445	1.451	1.459	1.467	1.471	1.467	1.456	1.444	1.421	1.340
79	1.477	1.475	1.471	1.468	1.464	1.460	1.454	1.447	1.443	1.439	1.432	1.426	1.426	1.428	1.429	1.431	1.433	1.431	1.426	1.418
80	1.485	1.481	1.478	1.475	1.472	1.469	1.468	1.466	1.462	1.457	1.451	1.444	1.439	1.436	1.433	1.433	1.436	1.437	1.431	1.421
81	1.494	1.491	1.487	1.485	1.483	1.480	1.477	1.473	1.471	1.468	1.466	1.463	1.463	1.461	1.457	1.452	1.451	1.447	1.441	1.434
82	1.497	1.494	1.492	1.490	1.488	1.486	1.484	1.482	1.480	1.478	1.476	1.475	1.473	1.470	1.467	1.467	1.474	1.479	1.474	1.464
83	1.497	1.498	1.499	1.499	1.498	1.496	1.494	1.491	1.488	1.486	1.485	1.484	1.484	1.487	1.488	1.487	1.485	1.480	1.471	1.460
84	1.503	1.503	1.503	1.504	1.504	1.503	1.502	1.502	1.501	1.502	1.502	1.503	1.504	1.506	1.506	1.505	1.504	1.501	1.499	1.495
85	1.505	1.507	1.507	1.508	1.508	1.509	1.509	1.509	1.508	1.508	1.507	1.506	1.506	1.507	1.506	1.508	1.508	1.506	1.504	1.502
86	1.444	1.447	1.454	1.459	1.460	1.463	1.466	1.471	1.477	1.485	1.494	1.504	1.514	1.520	1.524	1.527	1.525	1.523	1.520	1.518
87	1.118	1.124	1.130	1.140	1.146	1.152	1.157	1.168	1.184	1.206	1.228	1.252	1.281	1.309	1.329	1.339	1.344	1.346	1.351	1.360
88	1.076	1.079	1.076	1.079	1.076	1.079	1.076	1.076	1.075	1.078	1.072	1.076	1.075	1.078	1.081	1.085	1.084	1.085	1.082	1.081
89	1.065	1.065	1.067	1.065	1.067	1.064	1.065	1.062	1.065	1.062	1.062	1.059	1.059	1.059	1.062	1.061	1.064	1.061	1.064	1.059
90	1.061	1.062	1.061	1.061	1.059	1.061	1.059	1.059	1.056	1.057	1.054	1.054	1.052	1.052	1.052	1.059	1.059	1.059	1.056	1.054
91	1.057	1.054	1.059	1.056	1.057	1.054	1.057	1.054	1.056	1.056	1.062	1.056	1.052	1.047	1.052	1.065	1.065	1.054	1.052	1.050
92	1.057	1.056	1.056	1.054	1.056	1.054	1.056	1.052	1.062	1.132	1.224	1.218	1.137	1.078	1.052	1.045	1.047	1.048	1.043	1.052
93	1.054	1.054	1.052	1.054	1.052	1.054	1.052	1.054	1.054	1.079	1.142	1.149	1.096	1.057	1.045	1.043	1.043	1.043	1.043	1.041
94	1.052	1.052	1.052	1.052	1.052	1.052	1.048	1.048	1.043	1.047	1.048	1.045	1.043	1.041	1.043	1.041	1.043	1.041	1.041	1.039
95	1.045	1.047	1.045	1.045	1.043	1.045	1.043	1.043	1.039	1.043	1.039	1.043	1.041	1.041	1.039	1.043	1.043	1.043	1.043	1.039
96	1.045	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.041	1.041	1.041	1.039	1.039	1.035	1.037	1.041	1.047	1.045	1.045	1.043
97	1.045	1.043	1.043	1.043	1.045	1.043	1.043	1.043	1.043	1.041	1.041	1.039	1.035	1.035	1.037	1.045	1.052	1.052	1.054	1.052
98	1.045	1.043	1.043	1.041	1.043	1.043	1.043	1.043	1.041	1.041	1.039	1.039	1.037	1.039	1.043	1.075	1.093	1.084	1.073	1.069

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 69

IR SCAN TIME 7.13 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	1.039	1.039	1.037	1.033	1.035	1.031	1.029	1.027	1.025	1.023	1.020	1.020	1.020	1.016	1.018	1.018	1.016	1.011	1.014	1.011
65	1.043	1.039	1.039	1.041	1.035	1.035	1.029	1.035	1.027	1.020	1.023	1.023	1.027	1.020	1.016	1.009	1.018	1.011	1.009	1.009
66	1.041	1.037	1.035	1.033	1.035	1.029	1.029	1.027	1.025	1.023	1.020	1.018	1.018	1.016	1.016	1.016	1.011	1.011	1.006	1.006
67	1.037	1.035	1.033	1.031	1.029	1.027	1.025	1.023	1.023	1.020	1.018	1.016	1.014	1.014	1.014	1.009	1.009	1.006	1.006	1.001
68	1.035	1.029	1.029	1.025	1.025	1.020	1.018	1.014	1.018	1.011	1.016	1.011	1.014	1.006	1.006	1.001	1.006	1.001	1.001	0.999
69	1.033	1.027	1.027	1.025	1.025	1.020	1.020	1.016	1.016	1.014	1.014	1.011	1.009	1.006	1.006	1.004	1.001	0.996	0.999	0.985
70	1.035	1.031	1.027	1.027	1.025	1.023	1.020	1.016	1.016	1.014	1.014	1.009	1.011	1.006	1.006	1.004	1.001	0.999	0.996	0.993
71	1.033	1.031	1.029	1.027	1.025	1.023	1.023	1.018	1.016	1.014	1.014	1.009	1.009	1.006	1.009	1.004	1.001	1.001	0.999	0.993
72	1.037	1.033	1.031	1.027	1.025	1.023	1.020	1.016	1.018	1.016	1.014	1.011	1.011	1.006	1.006	1.009	1.004	0.999	0.999	0.993
73	1.045	1.035	1.031	1.029	1.025	1.023	1.020	1.020	1.016	1.016	1.014	1.011	1.009	1.006	1.006	1.001	1.001	1.001	0.996	0.996
74	1.067	1.041	1.033	1.029	1.027	1.025	1.025	1.020	1.016	1.018	1.016	1.014	1.009	1.009	1.006	1.006	1.001	1.001	0.999	0.996
75	1.056	1.035	1.033	1.027	1.025	1.020	1.025	1.018	1.018	1.014	1.016	1.009	1.011	1.006	1.009	1.006	1.006	1.001	1.004	1.001
76	1.078	1.052	1.039	1.035	1.029	1.025	1.023	1.020	1.020	1.016	1.016	1.011	1.014	1.009	1.009	1.004	1.004	0.996	0.999	0.993
77	1.110	1.084	1.065	1.047	1.031	1.027	1.025	1.020	1.018	1.016	1.016	1.014	1.014	1.006	1.004	1.004	1.001	1.001	0.999	0.996
78	1.208	1.121	1.089	1.072	1.059	1.043	1.027	1.020	1.018	1.016	1.014	1.011	1.009	1.006	1.004	1.001	1.001	0.999	0.996	0.993
79	1.364	1.245	1.139	1.095	1.073	1.065	1.056	1.043	1.029	1.020	1.014	1.009	1.006	1.004	1.004	1.001	0.999	0.993	0.996	0.996
80	1.414	1.392	1.307	1.180	1.109	1.079	1.069	1.064	1.061	1.057	1.050	1.035	1.029	1.023	1.020	1.016	1.018	1.016	1.016	1.014
81	1.427	1.418	1.401	1.338	1.221	1.122	1.081	1.059	1.056	1.052	1.050	1.047	1.043	1.039	1.037	1.025	1.018	1.011	1.006	0.999
82	1.448	1.428	1.405	1.381	1.337	1.245	1.138	1.085	1.059	1.054	1.045	1.045	1.039	1.039	1.039	1.039	1.039	1.037	1.035	1.029
83	1.451	1.446	1.440	1.424	1.393	1.347	1.262	1.153	1.088	1.061	1.052	1.043	1.041	1.041	1.039	1.027	1.035	1.025	1.033	1.025
84	1.487	1.474	1.455	1.438	1.420	1.390	1.349	1.277	1.174	1.095	1.059	1.047	1.041	1.039	1.039	1.035	1.033	1.029	1.029	1.027
85	1.500	1.495	1.490	1.488	1.483	1.461	1.426	1.375	1.293	1.183	1.096	1.057	1.041	1.037	1.035	1.033	1.031	1.027	1.027	1.025
86	1.512	1.503	1.494	1.483	1.473	1.457	1.434	1.402	1.350	1.271	1.169	1.089	1.050	1.035	1.031	1.029	1.027	1.025	1.023	1.020
87	1.358	1.348	1.343	1.354	1.368	1.363	1.336	1.301	1.255	1.202	1.148	1.089	1.047	1.029	1.023	1.020	1.016	1.016	1.016	1.016
88	1.075	1.073	1.065	1.065	1.069	1.078	1.075	1.073	1.065	1.059	1.050	1.037	1.029	1.023	1.014	1.016	1.014	1.014	1.011	1.011
89	1.057	1.050	1.048	1.043	1.039	1.039	1.035	1.033	1.031	1.027	1.025	1.020	1.018	1.018	1.016	1.014	1.014	1.011	1.014	1.009
90	1.054	1.054	1.045	1.035	1.033	1.029	1.027	1.025	1.023	1.020	1.020	1.016	1.016	1.016	1.006	1.011	1.004	1.006	1.001	1.006
91	1.062	1.065	1.047	1.031	1.027	1.027	1.023	1.020	1.018	1.016	1.018	1.016	1.016	1.011	1.011	1.009	1.009	1.006	1.006	1.004
92	1.029	1.041	1.031	1.027	1.027	1.023	1.016	1.020	1.018	1.016	1.006	1.014	1.009	1.014	1.004	1.009	1.014	1.006	1.004	1.004
93	1.039	1.035	1.029	1.023	1.023	1.020	1.018	1.016	1.016	1.014	1.014	1.011	1.009	1.009	1.006	1.006	1.004	1.004	0.999	1.001
94	1.039	1.035	1.029	1.020	1.020	1.018	1.016	1.016	1.016	1.014	1.011	1.011	1.006	1.006	1.004	1.004	1.004	1.004	1.001	1.001
95	1.039	1.035	1.031	1.023	1.018	1.016	1.016	1.016	1.016	1.014	1.011	1.006	1.006	1.004	1.004	1.004	1.001	1.001	1.001	1.001
96	1.043	1.039	1.033	1.020	1.018	1.011	1.016	1.009	1.014	1.011	1.011	1.006	1.009	1.006	1.006	1.004	1.004	1.001	1.001	0.996
97	1.052	1.050	1.039	1.027	1.018	1.016	1.018	1.011	1.011	1.011	1.011	1.001	1.006	0.996	1.006	0.996	1.001	0.996	1.001	0.993
98	1.070	1.078	1.069	1.039	1.020	1.016	1.016	1.016	1.011	1.009	1.009	1.009	1.006	1.004	1.001	1.001	1.001	0.999	0.996	0.999

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 8,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 69

IR SCAN TIME 7.13 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	1.011	1.006	1.006	1.006	1.006	1.004	1.001	1.001	1.001	0.996
65	1.011	1.006	1.006	1.006	1.004	1.004	0.999	0.999	0.999	0.993
66	1.006	1.004	1.001	1.001	0.996	0.996	0.993	0.993	0.991	0.991
67	1.001	0.999	0.999	0.993	0.993	0.991	0.996	0.988	0.988	0.988
68	0.999	0.996	0.996	0.988	0.993	0.988	0.988	0.985	0.982	0.979
69	0.996	0.985	0.996	0.982	0.988	0.979	0.982	0.972	0.979	0.969
70	0.996	0.993	0.991	0.986	0.985	0.982	0.982	0.979	0.976	0.972
71	0.993	0.991	0.996	0.988	0.988	0.982	0.985	0.979	0.979	0.976
72	0.996	0.991	0.991	0.988	0.991	0.985	0.985	0.979	0.979	0.979
73	0.993	0.993	0.988	0.988	0.985	0.982	0.979	0.979	0.976	0.976
74	0.996	0.993	0.991	0.991	0.985	0.985	0.979	0.982	0.976	0.976
75	0.999	0.993	0.988	0.988	0.991	0.985	0.985	0.982	0.979	0.976
76	0.999	0.991	0.993	0.985	0.991	0.982	0.985	0.979	0.982	0.972
77	0.993	0.991	0.993	0.991	0.988	0.982	0.988	0.982	0.979	0.976
78	0.996	0.991	0.996	0.988	0.988	0.985	0.979	0.982	0.979	0.979
79	0.993	0.991	0.993	0.988	0.985	0.982	0.985	0.979	0.979	0.979
80	1.016	1.011	1.016	1.006	1.009	1.001	1.004	1.001	1.001	0.996
81	0.993	0.991	0.991	0.985	0.985	0.979	0.982	0.976	0.979	0.972
82	1.025	1.018	1.011	1.006	0.999	0.991	0.988	0.985	0.979	0.979
83	1.031	1.023	1.029	1.016	1.023	1.011	1.016	1.004	1.004	0.991
84	1.025	1.025	1.023	1.023	1.023	1.020	1.020	1.020	1.020	1.018
85	1.025	1.025	1.023	1.023	1.020	1.020	1.020	1.018	1.020	1.016
86	1.023	1.020	1.018	1.018	1.018	1.018	1.016	1.016	1.016	1.016
87	1.016	1.014	1.011	1.014	1.011	1.011	1.011	1.011	1.011	1.009
88	1.011	1.011	1.009	1.009	1.009	1.009	1.006	1.006	1.004	1.006
89	1.011	1.006	1.009	1.004	1.006	1.004	1.006	1.004	1.006	1.004
90	1.001	1.006	1.001	1.001	1.001	1.004	0.993	1.001	0.996	1.001
91	1.004	0.999	1.006	1.001	1.001	1.001	1.001	0.999	1.001	1.001
92	1.001	1.001	0.996	1.001	1.001	1.001	1.001	0.996	1.001	1.001
93	1.001	0.999	1.001	1.001	0.999	0.999	0.999	0.999	0.996	0.996
94	1.001	1.001	0.999	0.999	0.996	0.999	0.999	0.996	0.999	0.999
95	0.999	0.999	0.999	0.999	0.993	0.996	0.996	0.996	0.993	0.996
96	1.004	0.996	0.999	0.996	0.999	0.999	0.999	0.996	1.001	0.996
97	0.999	0.991	0.999	0.991	0.999	0.991	0.999	0.999	1.001	1.001
98	0.996	0.996	0.993	0.993	0.996	0.999	0.996	0.999	0.999	1.001

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 8,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 7.13 SEC
GROUP 69 HRFR = 0.365E-01

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	0.040	0.044	0.046	0.045	0.047	0.046	0.044	0.044	0.044	0.046	0.044	0.042	0.044	0.047	0.046	0.046	0.048	0.048	0.049	0.048
30	0.046	0.047	0.047	0.046	0.044	0.043	0.043	0.044	0.045	0.046	0.046	0.047	0.047	0.047	0.047	0.047	0.048	0.048	0.048	0.048
31	0.047	0.045	0.044	0.044	0.043	0.043	0.045	0.046	0.046	0.046	0.046	0.047	0.046	0.047	0.048	0.048	0.047	0.046	0.044	0.043
32	0.045	0.043	0.043	0.044	0.046	0.048	0.048	0.047	0.047	0.046	0.046	0.046	0.048	0.047	0.046	0.043	0.042	0.040	0.039	0.039
33	0.043	0.044	0.045	0.046	0.046	0.046	0.046	0.045	0.045	0.046	0.045	0.044	0.042	0.039	0.038	0.039	0.040	0.042	0.042	0.043
34	0.046	0.047	0.047	0.045	0.044	0.044	0.044	0.043	0.043	0.040	0.039	0.037	0.038	0.037	0.039	0.041	0.044	0.044	0.045	0.045
35	0.048	0.046	0.043	0.043	0.041	0.041	0.038	0.038	0.035	0.037	0.036	0.039	0.039	0.041	0.041	0.044	0.045	0.046	0.047	0.048
36	0.043	0.041	0.042	0.039	0.038	0.036	0.036	0.037	0.039	0.039	0.041	0.041	0.043	0.044	0.044	0.045	0.047	0.045	0.043	0.036
37	0.039	0.037	0.036	0.035	0.036	0.037	0.039	0.040	0.041	0.042	0.043	0.043	0.044	0.046	0.044	0.040	0.034	0.027	0.021	0.012
38	0.034	0.035	0.037	0.038	0.039	0.039	0.041	0.041	0.042	0.043	0.044	0.044	0.042	0.036	0.028	0.019	0.014	0.011	0.010	0.010
39	0.038	0.038	0.038	0.040	0.040	0.040	0.041	0.041	0.043	0.043	0.038	0.032	0.024	0.016	0.013	0.012	0.011	0.011	0.011	0.012
40	0.039	0.040	0.040	0.041	0.042	0.043	0.043	0.041	0.036	0.026	0.019	0.013	0.012	0.011	0.011	0.011	0.012	0.012	0.012	0.011
41	0.041	0.041	0.043	0.043	0.043	0.039	0.033	0.024	0.015	0.012	0.011	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.013	0.012
42	0.044	0.044	0.045	0.039	0.033	0.019	0.015	0.010	0.012	0.010	0.012	0.011	0.013	0.013	0.013	0.013	0.014	0.014	0.014	0.014
43	0.048	0.042	0.031	0.021	0.015	0.013	0.012	0.013	0.012	0.013	0.014	0.014	0.013	0.014	0.015	0.015	0.014	0.015	0.015	0.016
44	0.030	0.020	0.015	0.014	0.016	0.014	0.015	0.014	0.015	0.015	0.015	0.015	0.017	0.017	0.017	0.017	0.018	0.018	0.018	0.018
45	0.018	0.018	0.018	0.016	0.017	0.017	0.018	0.018	0.018	0.018	0.018	0.018	0.019	0.019	0.020	0.020	0.022	0.022	0.024	0.025
46	0.020	0.020	0.019	0.019	0.021	0.021	0.021	0.021	0.022	0.022	0.022	0.023	0.022	0.024	0.024	0.026	0.025	0.029	0.049	0.090
47	0.022	0.022	0.022	0.023	0.023	0.025	0.024	0.024	0.024	0.025	0.025	0.026	0.025	0.027	0.028	0.029	0.030	0.036	0.078	0.149
48	0.023	0.022	0.023	0.025	0.025	0.026	0.025	0.025	0.025	0.026	0.026	0.028	0.028	0.029	0.030	0.031	0.033	0.043	0.100	0.175
49	0.024	0.022	0.025	0.024	0.027	0.025	0.028	0.025	0.028	0.025	0.029	0.028	0.030	0.030	0.032	0.033	0.035	0.049	0.115	0.189
50	0.026	0.025	0.025	0.026	0.028	0.027	0.028	0.028	0.028	0.028	0.030	0.031	0.032	0.031	0.033	0.033	0.038	0.063	0.140	0.205
51	0.026	0.027	0.027	0.028	0.027	0.028	0.028	0.029	0.029	0.031	0.031	0.033	0.033	0.033	0.033	0.037	0.043	0.089	0.169	0.217
52	0.022	0.023	0.022	0.024	0.024	0.025	0.025	0.025	0.026	0.028	0.028	0.029	0.028	0.031	0.032	0.035	0.049	0.114	0.188	0.224
53	0.016	0.017	0.016	0.017	0.017	0.018	0.019	0.019	0.019	0.022	0.022	0.023	0.025	0.025	0.025	0.030	0.060	0.140	0.199	0.225
54	0.010	0.010	0.010	0.011	0.012	0.012	0.014	0.014	0.015	0.017	0.017	0.018	0.018	0.020	0.022	0.029	0.079	0.161	0.207	0.228
55	0.008	0.009	0.009	0.011	0.010	0.012	0.012	0.014	0.014	0.015	0.018	0.018	0.019	0.020	0.022	0.033	0.095	0.171	0.210	0.230
56	0.009	0.010	0.007	0.010	0.008	0.012	0.011	0.014	0.012	0.017	0.018	0.019	0.019	0.021	0.023	0.042	0.113	0.182	0.213	0.231
57	0.008	0.009	0.010	0.010	0.010	0.011	0.012	0.013	0.015	0.015	0.017	0.018	0.019	0.020	0.025	0.044	0.120	0.183	0.211	0.227
58	0.007	0.008	0.008	0.009	0.009	0.010	0.010	0.011	0.012	0.013	0.014	0.015	0.017	0.018	0.023	0.057	0.136	0.191	0.215	0.230
59	0.006	0.007	0.007	0.007	0.006	0.008	0.009	0.010	0.010	0.010	0.012	0.014	0.015	0.017	0.027	0.083	0.160	0.200	0.220	0.234
60	0.005	0.006	0.007	0.007	0.007	0.007	0.009	0.009	0.010	0.010	0.011	0.013	0.015	0.018	0.033	0.101	0.171	0.203	0.222	0.234
61	0.005	0.005	0.007	0.007	0.008	0.008	0.009	0.009	0.010	0.011	0.012	0.013	0.015	0.018	0.044	0.121	0.180	0.206	0.222	0.235
62	0.006	0.007	0.007	0.007	0.009	0.009	0.010	0.010	0.011	0.012	0.014	0.014	0.018	0.022	0.064	0.140	0.185	0.207	0.222	0.233
63	0.006	0.007	0.008	0.005	0.008	0.007	0.010	0.010	0.011	0.012	0.014	0.014	0.017	0.024	0.077	0.147	0.185	0.205	0.217	0.228

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 7.13 SEC
HRFR = 0.365E-01

GROUP 69

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	0.049	0.049	0.050	0.048	0.048	0.044	0.044	0.042	0.041	0.041	0.043	0.040	0.042	0.041	0.044	0.045	0.047	0.048	0.049	0.050
30	0.047	0.045	0.043	0.042	0.042	0.040	0.040	0.040	0.042	0.044	0.046	0.048	0.048	0.049	0.050	0.052	0.053	0.052	0.054	0.052
31	0.041	0.039	0.039	0.041	0.043	0.044	0.045	0.045	0.046	0.049	0.051	0.052	0.053	0.053	0.053	0.053	0.050	0.047	0.044	0.039
32	0.041	0.041	0.044	0.046	0.048	0.048	0.049	0.049	0.050	0.052	0.053	0.052	0.049	0.044	0.040	0.034	0.028	0.022	0.016	0.011
33	0.044	0.045	0.046	0.047	0.049	0.050	0.050	0.048	0.046	0.043	0.036	0.031	0.024	0.016	0.011	0.008	0.007	0.007	0.007	0.007
34	0.047	0.048	0.048	0.048	0.046	0.041	0.036	0.028	0.022	0.014	0.009	0.007	0.006	0.006	0.007	0.006	0.007	0.006	0.007	0.007
35	0.047	0.044	0.038	0.032	0.023	0.016	0.010	0.008	0.007	0.007	0.006	0.006	0.007	0.007	0.007	0.007	0.007	0.008	0.007	0.009
36	0.028	0.019	0.013	0.009	0.008	0.007	0.008	0.007	0.008	0.007	0.007	0.007	0.007	0.009	0.009	0.010	0.010	0.010	0.009	0.009
37	0.010	0.010	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.010	0.009	0.009	0.009	0.009	0.009	0.007	0.010	0.007	0.010	0.007
38	0.010	0.009	0.010	0.010	0.010	0.010	0.010	0.010	0.011	0.010	0.011	0.010	0.010	0.010	0.011	0.010	0.012	0.011	0.012	0.012
39	0.011	0.011	0.011	0.011	0.011	0.012	0.012	0.011	0.011	0.012	0.012	0.012	0.012	0.012	0.012	0.013	0.012	0.013	0.014	0.014
40	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.015	0.015	0.016	0.014	0.015	0.015
41	0.014	0.014	0.014	0.014	0.015	0.015	0.015	0.015	0.015	0.015	0.017	0.017	0.015	0.017	0.017	0.016	0.015	0.016	0.017	0.017
42	0.015	0.015	0.015	0.015	0.017	0.017	0.018	0.017	0.018	0.019	0.018	0.018	0.019	0.018	0.018	0.019	0.018	0.019	0.019	0.018
43	0.016	0.016	0.017	0.018	0.018	0.018	0.018	0.019	0.018	0.021	0.019	0.022	0.022	0.022	0.021	0.022	0.022	0.022	0.021	0.021
44	0.020	0.019	0.022	0.022	0.022	0.022	0.022	0.022	0.024	0.023	0.024	0.023	0.025	0.023	0.025	0.022	0.025	0.022	0.024	0.022
45	0.026	0.026	0.028	0.028	0.028	0.028	0.029	0.028	0.029	0.029	0.030	0.029	0.030	0.029	0.030	0.029	0.029	0.028	0.028	0.028
46	0.119	0.127	0.129	0.128	0.124	0.116	0.102	0.085	0.069	0.054	0.046	0.041	0.040	0.039	0.037	0.037	0.036	0.036	0.035	0.035
47	0.190	0.209	0.225	0.243	0.265	0.292	0.319	0.334	0.332	0.310	0.273	0.225	0.169	0.127	0.099	0.072	0.054	0.046	0.042	0.042
48	0.213	0.232	0.247	0.262	0.278	0.299	0.324	0.350	0.372	0.389	0.399	0.399	0.398	0.440	0.508	0.422	0.271	0.175	0.111	0.072
49	0.226	0.246	0.266	0.284	0.302	0.320	0.338	0.356	0.372	0.384	0.394	0.405	0.416	0.421	0.432	0.477	0.493	0.420	0.346	0.290
50	0.236	0.258	0.277	0.296	0.318	0.341	0.366	0.389	0.406	0.413	0.416	0.418	0.422	0.430	0.440	0.453	0.488	0.513	0.474	0.409
51	0.241	0.263	0.282	0.301	0.324	0.350	0.377	0.404	0.430	0.452	0.462	0.462	0.455	0.447	0.445	0.453	0.464	0.496	0.542	0.540
52	0.245	0.264	0.282	0.302	0.324	0.347	0.373	0.401	0.429	0.454	0.475	0.491	0.497	0.494	0.487	0.476	0.468	0.466	0.481	0.530
53	0.244	0.262	0.279	0.298	0.320	0.343	0.367	0.394	0.419	0.442	0.462	0.479	0.494	0.505	0.510	0.512	0.505	0.496	0.487	0.487
54	0.245	0.260	0.277	0.295	0.317	0.340	0.364	0.389	0.415	0.438	0.455	0.465	0.470	0.477	0.487	0.500	0.517	0.533	0.550	0.559
55	0.245	0.260	0.276	0.294	0.314	0.337	0.359	0.383	0.411	0.436	0.453	0.464	0.470	0.471	0.473	0.480	0.502	0.550	0.641	0.728
56	0.244	0.258	0.273	0.291	0.311	0.334	0.358	0.382	0.405	0.427	0.445	0.457	0.468	0.476	0.481	0.484	0.496	0.548	0.634	0.672
57	0.241	0.254	0.270	0.286	0.306	0.328	0.352	0.375	0.399	0.419	0.434	0.444	0.453	0.463	0.471	0.477	0.488	0.508	0.562	0.620
58	0.243	0.255	0.269	0.286	0.306	0.328	0.352	0.374	0.397	0.416	0.432	0.444	0.451	0.457	0.461	0.466	0.473	0.483	0.494	0.509
59	0.246	0.258	0.273	0.289	0.308	0.331	0.353	0.374	0.397	0.417	0.434	0.445	0.447	0.451	0.459	0.464	0.469	0.470	0.480	0.492
60	0.246	0.258	0.271	0.287	0.307	0.327	0.349	0.371	0.394	0.411	0.426	0.440	0.449	0.454	0.461	0.467	0.470	0.474	0.478	0.487
61	0.247	0.259	0.271	0.284	0.303	0.324	0.346	0.368	0.389	0.407	0.423	0.435	0.444	0.450	0.455	0.459	0.463	0.472	0.480	0.485
62	0.244	0.254	0.266	0.278	0.296	0.315	0.336	0.358	0.382	0.402	0.416	0.427	0.437	0.443	0.447	0.453	0.459	0.465	0.473	0.479
63	0.238	0.251	0.265	0.277	0.293	0.314	0.337	0.359	0.380	0.396	0.410	0.423	0.429	0.435	0.441	0.446	0.453	0.461	0.471	0.478

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 8,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 7.13 SEC
GROUP 69 HRFR = 0.365E-01

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	0.052	0.053	0.052	0.052	0.053	0.054	0.053	0.052	0.049	0.046	0.043	0.040	0.039	0.036	0.035	0.031	0.029	0.025	0.025	0.022
30	0.054	0.052	0.050	0.045	0.043	0.038	0.037	0.031	0.028	0.021	0.018	0.014	0.012	0.010	0.008	0.008	0.007	0.006	0.007	0.006
31	0.036	0.030	0.025	0.020	0.014	0.010	0.008	0.007	0.006	0.005	0.006	0.005	0.005	0.005	0.005	0.003	0.006	0.003	0.005	0.002
32	0.010	0.008	0.008	0.006	0.007	0.006	0.006	0.006	0.006	0.005	0.006	0.005	0.006	0.004	0.005	0.003	0.005	0.005	0.005	0.004
33	0.007	0.007	0.006	0.006	0.007	0.006	0.006	0.006	0.006	0.005	0.005	0.006	0.004	0.005	0.005	0.004	0.003	0.005	0.003	0.004
34	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.006	0.006	0.007	0.006	0.005	0.006	0.004	0.005	0.005	0.006	0.004	0.005	0.004
35	0.008	0.008	0.008	0.008	0.008	0.007	0.007	0.007	0.007	0.007	0.007	0.010	0.007	0.007	0.006	0.005	0.005	0.006	0.005	0.006
36	0.010	0.009	0.010	0.009	0.009	0.009	0.009	0.007	0.009	0.009	0.009	0.008	0.009	0.008	0.007	0.007	0.009	0.007	0.008	0.008
37	0.010	0.006	0.010	0.006	0.010	0.007	0.010	0.007	0.010	0.007	0.010	0.010	0.009	0.009	0.009	0.009	0.008	0.009	0.009	0.008
38	0.011	0.012	0.012	0.011	0.012	0.011	0.011	0.011	0.011	0.010	0.010	0.011	0.010	0.009	0.010	0.009	0.010	0.008	0.009	0.007
39	0.013	0.014	0.014	0.012	0.012	0.012	0.013	0.012	0.012	0.012	0.012	0.010	0.011	0.011	0.012	0.010	0.010	0.010	0.010	0.009
40	0.016	0.015	0.015	0.014	0.015	0.015	0.014	0.014	0.014	0.014	0.012	0.013	0.013	0.012	0.013	0.012	0.012	0.011	0.011	0.010
41	0.017	0.017	0.017	0.017	0.017	0.016	0.016	0.015	0.016	0.015	0.015	0.014	0.014	0.013	0.013	0.012	0.012	0.012	0.012	0.011
42	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.017	0.016	0.015	0.015	0.015	0.015	0.014	0.015	0.014	0.014	0.013
43	0.021	0.021	0.021	0.020	0.020	0.019	0.018	0.019	0.018	0.018	0.018	0.018	0.018	0.017	0.017	0.017	0.017	0.016	0.015	0.014
44	0.024	0.022	0.023	0.021	0.023	0.022	0.022	0.020	0.022	0.022	0.021	0.020	0.018	0.018	0.018	0.018	0.018	0.018	0.017	0.017
45	0.028	0.027	0.028	0.026	0.026	0.025	0.025	0.025	0.025	0.023	0.024	0.022	0.023	0.021	0.023	0.020	0.022	0.020	0.020	0.018
46	0.034	0.034	0.033	0.033	0.031	0.032	0.030	0.031	0.030	0.030	0.028	0.028	0.028	0.028	0.026	0.026	0.025	0.025	0.025	0.025
47	0.041	0.041	0.039	0.039	0.038	0.037	0.035	0.036	0.034	0.034	0.033	0.033	0.031	0.031	0.030	0.031	0.029	0.029	0.028	0.028
48	0.056	0.050	0.046	0.044	0.043	0.041	0.039	0.038	0.037	0.037	0.035	0.035	0.034	0.034	0.033	0.033	0.032	0.032	0.031	0.031
49	0.235	0.173	0.113	0.074	0.057	0.049	0.045	0.043	0.042	0.040	0.040	0.038	0.038	0.036	0.036	0.035	0.036	0.033	0.033	0.033
50	0.359	0.333	0.321	0.291	0.219	0.130	0.078	0.058	0.049	0.045	0.044	0.043	0.041	0.041	0.040	0.038	0.038	0.036	0.036	0.036
51	0.474	0.411	0.362	0.348	0.377	0.376	0.272	0.145	0.083	0.060	0.050	0.046	0.044	0.043	0.043	0.042	0.040	0.040	0.038	0.038
52	0.550	0.522	0.485	0.435	0.388	0.384	0.422	0.361	0.205	0.105	0.068	0.052	0.046	0.043	0.041	0.041	0.039	0.039	0.037	0.038
53	0.501	0.529	0.578	0.628	0.605	0.502	0.421	0.432	0.411	0.259	0.125	0.073	0.050	0.041	0.036	0.034	0.033	0.033	0.031	0.031
54	0.542	0.515	0.502	0.506	0.536	0.582	0.547	0.468	0.446	0.441	0.311	0.154	0.081	0.053	0.040	0.034	0.033	0.031	0.031	0.032
55	0.728	0.678	0.605	0.547	0.527	0.532	0.567	0.581	0.530	0.480	0.471	0.374	0.202	0.099	0.062	0.044	0.038	0.036	0.035	0.036
56	0.683	0.710	0.716	0.644	0.578	0.560	0.553	0.573	0.607	0.577	0.524	0.508	0.442	0.268	0.128	0.074	0.050	0.042	0.039	0.041
57	0.648	0.652	0.638	0.611	0.576	0.576	0.587	0.588	0.592	0.620	0.612	0.567	0.549	0.528	0.379	0.190	0.098	0.062	0.047	0.042
58	0.533	0.547	0.533	0.514	0.514	0.535	0.561	0.588	0.608	0.620	0.646	0.660	0.621	0.600	0.623	0.531	0.290	0.133	0.078	0.052
59	0.500	0.513	0.522	0.523	0.519	0.514	0.516	0.534	0.559	0.579	0.602	0.656	0.699	0.689	0.708	0.756	0.593	0.308	0.141	0.080
60	0.494	0.499	0.507	0.516	0.526	0.531	0.531	0.526	0.524	0.528	0.524	0.507	0.523	0.602	0.654	0.665	0.675	0.607	0.378	0.174
61	0.487	0.488	0.494	0.502	0.509	0.513	0.519	0.526	0.536	0.543	0.537	0.518	0.473	0.426	0.436	0.477	0.510	0.557	0.579	0.427
62	0.486	0.496	0.500	0.502	0.504	0.512	0.522	0.527	0.515	0.495	0.489	0.506	0.521	0.499	0.441	0.399	0.395	0.392	0.410	0.461
63	0.486	0.493	0.500	0.507	0.513	0.522	0.530	0.537	0.541	0.538	0.520	0.469	0.413	0.401	0.435	0.467	0.455	0.426	0.400	0.373

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 8,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 7.13 SEC
HRFR = 0.365E-01

GROUP 69

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.017	0.015	0.014	0.012	0.012	0.010	0.011	0.010	0.010	0.009	0.010	0.010	0.010	0.010	0.010	0.010	0.009	0.009	0.009	0.009
30	0.007	0.006	0.006	0.005	0.006	0.006	0.006	0.004	0.005	0.005	0.005	0.005	0.006	0.005	0.006	0.006	0.007	0.005	0.006	0.005
31	0.005	0.002	0.005	0.003	0.004	0.003	0.004	0.002	0.003	0.001	0.004	0.003	0.004	0.004	0.004	0.004	0.004	0.004	0.005	0.004
32	0.005	0.004	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.001	0.003	0.003	0.004	0.004	0.003	0.003	0.003	0.001
33	0.004	0.004	0.003	0.004	0.003	0.004	0.002	0.003	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001
34	0.005	0.004	0.004	0.003	0.004	0.003	0.003	0.002	0.004	0.003	0.002	0.001	0.003	0.002	0.002	0.001	0.003	0.001	0.001	0.001
35	0.005	0.006	0.005	0.004	0.004	0.005	0.004	0.004	0.003	0.004	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
36	0.007	0.006	0.007	0.006	0.006	0.006	0.005	0.006	0.005	0.005	0.006	0.004	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.002
37	0.008	0.007	0.008	0.008	0.007	0.006	0.007	0.007	0.007	0.006	0.006	0.006	0.006	0.005	0.006	0.004	0.005	0.003	0.005	0.003
38	0.010	0.008	0.009	0.007	0.009	0.006	0.007	0.006	0.008	0.007	0.007	0.006	0.008	0.007	0.006	0.008	0.007	0.005	0.006	0.005
39	0.010	0.010	0.010	0.010	0.009	0.009	0.009	0.009	0.008	0.007	0.008	0.006	0.008	0.006	0.008	0.006	0.007	0.005	0.008	0.005
40	0.011	0.010	0.010	0.010	0.010	0.010	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.008	0.008	0.007	0.007	0.007
41	0.011	0.010	0.010	0.011	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.009	0.009	0.009	0.009	0.008	0.008	0.008	0.007
42	0.012	0.012	0.012	0.011	0.011	0.011	0.011	0.012	0.011	0.011	0.010	0.010	0.010	0.010	0.010	0.009	0.010	0.010	0.009	0.009
43	0.015	0.014	0.014	0.013	0.012	0.012	0.013	0.012	0.012	0.011	0.011	0.010	0.011	0.010	0.010	0.010	0.010	0.009	0.010	0.010
44	0.016	0.016	0.016	0.014	0.015	0.016	0.014	0.014	0.014	0.013	0.013	0.013	0.012	0.013	0.012	0.012	0.011	0.011	0.010	0.011
45	0.019	0.018	0.019	0.017	0.018	0.017	0.018	0.018	0.017	0.017	0.017	0.017	0.017	0.017	0.016	0.016	0.015	0.015	0.016	0.015
46	0.024	0.025	0.023	0.023	0.022	0.022	0.022	0.022	0.022	0.024	0.019	0.022	0.018	0.022	0.018	0.021	0.017	0.020	0.018	0.020
47	0.027	0.027	0.025	0.026	0.025	0.025	0.025	0.025	0.024	0.024	0.023	0.024	0.022	0.024	0.022	0.023	0.022	0.023	0.022	0.022
48	0.029	0.030	0.028	0.029	0.028	0.028	0.026	0.027	0.025	0.025	0.025	0.025	0.024	0.025	0.025	0.025	0.024	0.025	0.023	0.025
49	0.033	0.031	0.032	0.030	0.030	0.029	0.030	0.028	0.029	0.027	0.028	0.027	0.028	0.026	0.026	0.026	0.026	0.025	0.026	0.025
50	0.035	0.034	0.033	0.033	0.033	0.032	0.032	0.031	0.031	0.029	0.030	0.029	0.029	0.028	0.028	0.025	0.029	0.028	0.027	0.027
51	0.036	0.037	0.036	0.036	0.035	0.034	0.033	0.033	0.033	0.033	0.031	0.031	0.031	0.031	0.030	0.031	0.029	0.029	0.028	0.030
52	0.036	0.037	0.035	0.036	0.034	0.036	0.033	0.034	0.033	0.033	0.032	0.033	0.032	0.031	0.031	0.031	0.031	0.031	0.029	0.030
53	0.033	0.033	0.034	0.035	0.034	0.034	0.034	0.034	0.032	0.034	0.032	0.033	0.031	0.032	0.031	0.031	0.029	0.031	0.028	0.029
54	0.033	0.035	0.035	0.036	0.036	0.036	0.036	0.035	0.035	0.036	0.034	0.036	0.034	0.034	0.033	0.033	0.031	0.032	0.030	0.030
55	0.038	0.038	0.038	0.039	0.038	0.039	0.038	0.039	0.038	0.038	0.037	0.038	0.036	0.036	0.035	0.035	0.033	0.033	0.033	0.032
56	0.041	0.042	0.042	0.042	0.041	0.041	0.040	0.041	0.040	0.039	0.039	0.037	0.037	0.038	0.036	0.036	0.035	0.035	0.033	0.033
57	0.043	0.042	0.042	0.041	0.040	0.039	0.039	0.038	0.038	0.037	0.037	0.035	0.035	0.033	0.033	0.033	0.032	0.031	0.030	0.028
58	0.043	0.040	0.039	0.038	0.037	0.036	0.035	0.035	0.033	0.033	0.033	0.032	0.031	0.031	0.029	0.030	0.028	0.029	0.027	0.027
59	0.050	0.039	0.036	0.033	0.032	0.030	0.030	0.028	0.028	0.025	0.025	0.024	0.024	0.022	0.022	0.021	0.019	0.018	0.018	0.017
60	0.090	0.054	0.039	0.033	0.032	0.027	0.028	0.024	0.025	0.022	0.023	0.020	0.021	0.018	0.018	0.017	0.018	0.015	0.016	0.013
61	0.213	0.102	0.061	0.041	0.033	0.030	0.030	0.026	0.026	0.023	0.024	0.022	0.022	0.020	0.018	0.018	0.018	0.017	0.017	0.015
62	0.411	0.236	0.110	0.063	0.041	0.033	0.031	0.028	0.028	0.025	0.025	0.022	0.023	0.020	0.020	0.018	0.018	0.018	0.017	0.015
63	0.391	0.410	0.301	0.149	0.078	0.048	0.036	0.030	0.028	0.025	0.025	0.023	0.023	0.022	0.021	0.019	0.018	0.018	0.018	0.017

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 8,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 7.13 SEC
GROUP 69 HREF = 0.365E-01

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.008	0.008	0.009	0.009	0.008	0.007	0.008	0.006	0.008	0.006	0.007	0.006	0.006	0.005	0.005	0.004	0.005	0.003	0.004	0.002
30	0.006	0.006	0.006	0.005	0.007	0.006	0.006	0.005	0.006	0.005	0.005	0.004	0.005	0.004	0.003	0.003	0.003	0.001	0.002	0.001
31	0.005	0.005	0.005	0.004	0.005	0.005	0.005	0.004	0.005	0.004	0.005	0.004	0.003	0.003	0.003	0.002	0.002	0.001	0.002	0.001
32	0.003	0.003	0.003	0.001	0.003	0.001	0.003	0.002	0.004	0.003	0.003	0.002	0.003	0.002	0.002	0.001	0.002	0.001	0.001	0.001
33	0.001	0.001	0.001	0.002	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.003	0.002	0.003	0.002	0.003	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
37	0.004	0.004	0.004	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.003	0.002	0.002	0.001	0.001	0.001	0.002	0.001	0.002	0.001
38	0.006	0.005	0.005	0.005	0.005	0.005	0.005	0.003	0.005	0.005	0.004	0.005	0.004	0.007	0.001	0.003	0.002	0.005	0.002	0.001
39	0.006	0.005	0.007	0.005	0.006	0.004	0.006	0.005	0.005	0.005	0.006	0.004	0.005	0.004	0.005	0.004	0.005	0.003	0.004	0.004
40	0.007	0.007	0.007	0.007	0.007	0.005	0.006	0.005	0.006	0.004	0.006	0.004	0.006	0.003	0.005	0.003	0.005	0.003	0.005	0.003
41	0.008	0.007	0.007	0.007	0.007	0.007	0.008	0.007	0.007	0.006	0.006	0.007	0.006	0.007	0.005	0.006	0.005	0.006	0.005	0.006
42	0.009	0.009	0.009	0.009	0.008	0.008	0.009	0.007	0.008	0.007	0.007	0.007	0.008	0.007	0.007	0.007	0.008	0.006	0.006	0.007
43	0.010	0.010	0.010	0.009	0.010	0.009	0.009	0.008	0.008	0.008	0.008	0.008	0.008	0.007	0.007	0.008	0.007	0.008	0.007	0.008
44	0.012	0.010	0.010	0.011	0.011	0.010	0.010	0.009	0.010	0.009	0.010	0.009	0.009	0.009	0.009	0.008	0.009	0.009	0.009	0.009
45	0.015	0.014	0.015	0.015	0.015	0.014	0.014	0.014	0.013	0.013	0.013	0.013	0.012	0.013	0.013	0.012	0.012	0.012	0.012	0.011
46	0.018	0.021	0.018	0.020	0.018	0.019	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.017	0.018	0.018	0.017
47	0.023	0.023	0.023	0.024	0.022	0.022	0.022	0.022	0.021	0.022	0.020	0.022	0.020	0.021	0.019	0.021	0.019	0.020	0.018	0.019
48	0.024	0.025	0.025	0.026	0.025	0.025	0.023	0.023	0.022	0.023	0.023	0.022	0.022	0.023	0.022	0.022	0.022	0.022	0.022	0.022
49	0.026	0.025	0.027	0.026	0.026	0.025	0.025	0.023	0.025	0.023	0.025	0.023	0.023	0.023	0.024	0.023	0.024	0.022	0.023	0.022
50	0.028	0.026	0.028	0.027	0.028	0.026	0.027	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.023	0.025	0.023	0.025	0.023
51	0.028	0.028	0.028	0.028	0.027	0.028	0.026	0.027	0.025	0.026	0.025	0.026	0.025	0.025	0.025	0.026	0.025	0.025	0.025	0.025
52	0.028	0.030	0.028	0.028	0.026	0.026	0.025	0.025	0.024	0.025	0.023	0.024	0.024	0.025	0.022	0.022	0.022	0.023	0.022	0.022
53	0.027	0.028	0.025	0.026	0.024	0.022	0.021	0.018	0.017	0.018	0.017	0.017	0.015	0.016	0.015	0.015	0.015	0.014	0.014	0.015
54	0.028	0.028	0.026	0.025	0.023	0.022	0.017	0.016	0.014	0.014	0.012	0.012	0.011	0.011	0.010	0.010	0.010	0.010	0.009	0.009
55	0.030	0.029	0.028	0.028	0.025	0.023	0.020	0.018	0.017	0.014	0.013	0.013	0.012	0.012	0.011	0.010	0.010	0.009	0.009	0.009
56	0.031	0.031	0.028	0.028	0.025	0.025	0.022	0.019	0.017	0.015	0.015	0.014	0.013	0.013	0.012	0.011	0.010	0.010	0.009	0.009
57	0.028	0.026	0.026	0.024	0.024	0.022	0.021	0.017	0.016	0.015	0.014	0.012	0.012	0.011	0.010	0.010	0.010	0.010	0.009	0.008
58	0.025	0.025	0.025	0.025	0.023	0.024	0.022	0.020	0.018	0.019	0.018	0.017	0.017	0.016	0.015	0.015	0.015	0.015	0.015	0.014
59	0.017	0.015	0.016	0.014	0.014	0.013	0.011	0.011	0.010	0.010	0.010	0.009	0.009	0.007	0.009	0.007	0.007	0.006	0.006	0.004
60	0.015	0.014	0.013	0.011	0.011	0.010	0.010	0.010	0.010	0.009	0.009	0.007	0.009	0.007	0.007	0.005	0.006	0.006	0.005	0.004
61	0.015	0.013	0.014	0.011	0.011	0.010	0.010	0.009	0.010	0.007	0.009	0.007	0.008	0.007	0.007	0.005	0.006	0.003	0.005	0.004
62	0.015	0.014	0.015	0.013	0.012	0.011	0.011	0.010	0.010	0.009	0.009	0.007	0.008	0.007	0.007	0.007	0.007	0.005	0.005	0.003
63	0.017	0.015	0.015	0.013	0.012	0.011	0.011	0.010	0.010	0.010	0.010	0.009	0.008	0.007	0.008	0.007	0.007	0.005	0.005	0.004

IR HEAT TRANSFER COEFFICIENT = H(,9TO)/HRFR
IR SCAN TIME 7.13 SEC
HRFR = 0.365E-01

GROUP 69

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.003	0.002	0.003	0.001	0.001	0.001	0.002	0.001	0.001	0.001
30	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
31	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
32	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
37	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.003	0.002	0.002	0.003	0.003	0.003	0.005	0.003	0.003	0.003
39	0.004	0.004	0.004	0.004	0.003	0.003	0.004	0.003	0.004	0.003
40	0.005	0.002	0.004	0.002	0.005	0.005	0.005	0.005	0.005	0.005
41	0.005	0.005	0.005	0.004	0.005	0.005	0.005	0.006	0.003	0.006
42	0.007	0.006	0.007	0.007	0.007	0.007	0.007	0.006	0.007	0.007
43	0.007	0.008	0.007	0.007	0.007	0.007	0.008	0.007	0.007	0.008
44	0.009	0.009	0.009	0.008	0.009	0.008	0.009	0.008	0.009	0.008
45	0.012	0.012	0.012	0.011	0.011	0.011	0.011	0.011	0.012	0.011
46	0.017	0.017	0.018	0.018	0.017	0.017	0.016	0.017	0.016	0.016
47	0.018	0.019	0.018	0.019	0.018	0.019	0.019	0.018	0.018	0.018
48	0.022	0.022	0.020	0.021	0.019	0.020	0.018	0.021	0.018	0.020
49	0.023	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.021
50	0.024	0.022	0.024	0.022	0.024	0.022	0.023	0.022	0.023	0.022
51	0.024	0.025	0.023	0.024	0.022	0.023	0.022	0.023	0.022	0.022
52	0.021	0.021	0.020	0.020	0.019	0.019	0.018	0.018	0.018	0.018
53	0.014	0.013	0.013	0.012	0.014	0.012	0.012	0.011	0.011	0.011
54	0.008	0.009	0.008	0.008	0.007	0.007	0.007	0.007	0.006	0.007
55	0.009	0.007	0.007	0.008	0.003	0.006	0.002	0.006	0.001	0.005
56	0.008	0.008	0.007	0.007	0.006	0.006	0.005	0.004	0.003	0.003
57	0.007	0.007	0.007	0.005	0.006	0.004	0.005	0.004	0.005	0.003
58	0.014	0.011	0.012	0.011	0.011	0.011	0.010	0.010	0.010	0.010
59	0.005	0.004	0.005	0.003	0.003	0.002	0.003	0.001	0.001	0.001
60	0.004	0.003	0.003	0.002	0.003	0.001	0.001	0.001	0.001	0.001
61	0.005	0.002	0.003	0.001	0.003	0.003	0.001	0.001	0.001	0.001
62	0.004	0.002	0.002	0.001	0.003	0.003	0.003	0.003	0.003	0.003
63	0.004	0.003	0.003	0.002	0.001	0.001	0.001	0.001	0.001	0.001

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 8,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 7.13 SEC
GROUP 69 HREF = 0.365E-01

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.006	0.006	0.007	0.008	0.008	0.008	0.009	0.010	0.011	0.012	0.013	0.013	0.017	0.027	0.086	0.151	0.183	0.201	0.214	0.224
65	0.005	0.006	0.006	0.007	0.007	0.008	0.009	0.009	0.010	0.010	0.011	0.013	0.017	0.033	0.096	0.153	0.179	0.195	0.207	0.217
66	0.003	0.005	0.003	0.003	0.006	0.004	0.007	0.006	0.010	0.008	0.011	0.011	0.015	0.041	0.110	0.157	0.179	0.193	0.204	0.214
67	0.001	0.001	0.001	0.001	0.002	0.002	0.004	0.004	0.006	0.007	0.009	0.010	0.017	0.061	0.127	0.162	0.180	0.192	0.202	0.211
68	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.003	0.004	0.007	0.009	0.020	0.078	0.136	0.164	0.180	0.190	0.199	0.207
69	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.003	0.004	0.007	0.009	0.033	0.096	0.142	0.163	0.177	0.187	0.195	0.199
70	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.003	0.004	0.007	0.011	0.048	0.110	0.146	0.163	0.176	0.186	0.192	0.197
71	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.004	0.003	0.006	0.010	0.058	0.117	0.148	0.165	0.177	0.186	0.191	0.197
72	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.003	0.003	0.007	0.015	0.067	0.121	0.149	0.165	0.177	0.186	0.190	0.196
73	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.003	0.003	0.003	0.004	0.017	0.070	0.122	0.147	0.162	0.173	0.180	0.184	0.192
74	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.005	0.025	0.082	0.127	0.147	0.160	0.169	0.177	0.183	0.189
75	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.007	0.041	0.100	0.135	0.151	0.161	0.170	0.180	0.187	0.192
76	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.010	0.057	0.114	0.140	0.152	0.162	0.171	0.179	0.184	0.190
77	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.002	0.021	0.081	0.126	0.143	0.153	0.161	0.169	0.174	0.180	0.186
78	0.001	0.001	0.010	0.010	0.003	0.003	0.003	0.003	0.003	0.002	0.033	0.096	0.132	0.145	0.154	0.160	0.166	0.171	0.176	0.182
79	0.001	0.010	0.021	0.010	0.011	0.013	0.012	0.007	0.003	0.005	0.044	0.104	0.134	0.145	0.153	0.160	0.167	0.172	0.176	0.181
80	0.001	0.018	0.025	0.005	0.007	0.012	0.013	0.014	0.015	0.012	0.054	0.111	0.136	0.146	0.153	0.159	0.165	0.171	0.177	0.183
81	0.015	0.039	0.054	0.030	0.015	0.011	0.004	0.011	0.022	0.023	0.065	0.116	0.138	0.146	0.153	0.158	0.163	0.168	0.174	0.179
82	0.033	0.041	0.061	0.065	0.042	0.028	0.010	0.001	0.004	0.022	0.077	0.124	0.141	0.149	0.154	0.159	0.163	0.167	0.171	0.177
83	0.042	0.047	0.066	0.072	0.048	0.033	0.016	0.004	0.002	0.033	0.097	0.132	0.145	0.151	0.157	0.161	0.165	0.169	0.173	0.176
84	0.043	0.044	0.052	0.060	0.043	0.030	0.013	0.005	0.010	0.060	0.125	0.146	0.148	0.153	0.159	0.164	0.167	0.172	0.176	0.180
85	0.027	0.028	0.033	0.038	0.036	0.028	0.019	0.022	0.030	0.042	0.065	0.080	0.083	0.098	0.117	0.135	0.147	0.153	0.165	0.194
86	0.018	0.022	0.029	0.033	0.033	0.030	0.027	0.028	0.031	0.031	0.030	0.033	0.033	0.033	0.033	0.036	0.036	0.038	0.041	0.050
87	0.010	0.011	0.015	0.019	0.019	0.019	0.019	0.025	0.031	0.029	0.028	0.030	0.028	0.030	0.029	0.031	0.030	0.031	0.031	0.033
88	0.005	0.003	0.004	0.007	0.008	0.010	0.013	0.020	0.028	0.028	0.026	0.027	0.025	0.027	0.025	0.026	0.025	0.026	0.025	0.028
89	0.001	0.001	0.001	0.001	0.005	0.009	0.012	0.017	0.025	0.027	0.027	0.027	0.026	0.025	0.026	0.025	0.025	0.024	0.025	0.025
90	0.002	0.002	0.002	0.002	0.003	0.005	0.007	0.012	0.022	0.027	0.026	0.026	0.025	0.025	0.025	0.025	0.024	0.025	0.024	0.024
91	0.001	0.001	0.001	0.001	0.001	0.003	0.005	0.009	0.021	0.025	0.026	0.025	0.025	0.025	0.025	0.024	0.023	0.022	0.023	0.022
92	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.007	0.019	0.025	0.025	0.025	0.025	0.024	0.025	0.023	0.025	0.023	0.023	0.022
93	0.001	0.001	0.001	0.001	0.004	0.002	0.008	0.008	0.023	0.028	0.028	0.028	0.027	0.026	0.027	0.026	0.025	0.025	0.022	0.022
94	0.011	0.010	0.009	0.009	0.009	0.009	0.010	0.013	0.022	0.027	0.025	0.028	0.030	0.031	0.030	0.029	0.027	0.025	0.022	0.022
95	0.019	0.018	0.017	0.018	0.018	0.018	0.017	0.018	0.025	0.030	0.028	0.029	0.031	0.033	0.033	0.033	0.031	0.029	0.025	0.020
96	0.028	0.026	0.028	0.029	0.030	0.025	0.022	0.022	0.031	0.034	0.033	0.033	0.036	0.036	0.037	0.038	0.036	0.033	0.027	0.022
97	0.029	0.028	0.030	0.030	0.031	0.028	0.024	0.022	0.028	0.031	0.031	0.033	0.037	0.039	0.041	0.040	0.039	0.033	0.028	0.023
98	0.033	0.033	0.031	0.032	0.032	0.031	0.024	0.023	0.028	0.029	0.025	0.029	0.033	0.038	0.040	0.040	0.038	0.034	0.029	0.028

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP; CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 8,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 7.13 SEC
GROUP 69 HRFR = 0.365E-01

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	0.235	0.245	0.255	0.266	0.281	0.305	0.326	0.345	0.367	0.384	0.399	0.411	0.423	0.431	0.439	0.446	0.455	0.463	0.470	0.476
65	0.228	0.237	0.247	0.259	0.276	0.297	0.316	0.332	0.350	0.371	0.385	0.398	0.411	0.424	0.431	0.442	0.449	0.460	0.471	0.482
66	0.223	0.231	0.241	0.254	0.270	0.288	0.305	0.320	0.340	0.359	0.374	0.387	0.399	0.411	0.420	0.431	0.443	0.453	0.463	0.474
67	0.221	0.228	0.239	0.252	0.267	0.283	0.296	0.311	0.329	0.347	0.362	0.375	0.386	0.396	0.407	0.416	0.421	0.428	0.435	0.444
68	0.214	0.221	0.232	0.243	0.256	0.269	0.281	0.298	0.316	0.332	0.347	0.359	0.370	0.379	0.385	0.390	0.395	0.400	0.406	0.412
69	0.205	0.214	0.223	0.233	0.245	0.258	0.271	0.288	0.304	0.320	0.336	0.348	0.360	0.368	0.374	0.380	0.386	0.390	0.396	0.407
70	0.205	0.214	0.222	0.232	0.245	0.257	0.271	0.287	0.304	0.319	0.333	0.344	0.353	0.358	0.362	0.367	0.373	0.380	0.389	0.397
71	0.205	0.212	0.221	0.236	0.250	0.262	0.274	0.288	0.305	0.321	0.332	0.342	0.351	0.355	0.359	0.363	0.367	0.368	0.369	0.372
72	0.205	0.213	0.221	0.233	0.246	0.256	0.269	0.285	0.302	0.316	0.325	0.334	0.342	0.345	0.348	0.350	0.353	0.355	0.357	0.360
73	0.202	0.210	0.218	0.225	0.233	0.244	0.254	0.269	0.286	0.299	0.308	0.317	0.324	0.328	0.332	0.336	0.341	0.343	0.344	0.346
74	0.197	0.204	0.208	0.215	0.224	0.235	0.247	0.262	0.277	0.288	0.295	0.302	0.308	0.314	0.316	0.317	0.319	0.320	0.322	0.324
75	0.195	0.199	0.206	0.213	0.224	0.234	0.244	0.257	0.272	0.284	0.291	0.298	0.304	0.306	0.307	0.307	0.307	0.309	0.310	0.312
76	0.195	0.200	0.206	0.214	0.223	0.233	0.243	0.254	0.267	0.280	0.287	0.292	0.298	0.300	0.301	0.301	0.301	0.303	0.306	0.310
77	0.194	0.202	0.208	0.215	0.225	0.233	0.243	0.251	0.262	0.276	0.284	0.289	0.294	0.297	0.300	0.302	0.304	0.305	0.307	0.311
78	0.191	0.198	0.202	0.208	0.217	0.227	0.236	0.246	0.257	0.270	0.279	0.287	0.292	0.295	0.297	0.301	0.305	0.308	0.312	0.315
79	0.186	0.191	0.196	0.201	0.209	0.218	0.229	0.241	0.254	0.266	0.277	0.284	0.289	0.292	0.295	0.297	0.301	0.305	0.309	0.311
80	0.188	0.193	0.199	0.205	0.213	0.222	0.233	0.245	0.257	0.268	0.277	0.283	0.288	0.290	0.293	0.296	0.300	0.302	0.305	0.308
81	0.184	0.191	0.196	0.201	0.209	0.218	0.230	0.244	0.256	0.267	0.278	0.287	0.294	0.295	0.298	0.300	0.300	0.302	0.305	0.306
82	0.182	0.188	0.194	0.199	0.206	0.215	0.224	0.236	0.250	0.264	0.276	0.283	0.290	0.294	0.297	0.299	0.299	0.301	0.304	0.306
83	0.180	0.184	0.190	0.198	0.205	0.211	0.220	0.232	0.245	0.258	0.270	0.281	0.285	0.289	0.292	0.294	0.295	0.298	0.300	0.302
84	0.182	0.185	0.188	0.193	0.200	0.209	0.219	0.229	0.240	0.252	0.262	0.271	0.276	0.282	0.286	0.289	0.290	0.292	0.294	0.295
85	0.202	0.196	0.201	0.204	0.204	0.207	0.214	0.224	0.234	0.245	0.254	0.262	0.268	0.271	0.273	0.277	0.278	0.280	0.280	0.282
86	0.062	0.070	0.095	0.124	0.125	0.125	0.130	0.130	0.132	0.135	0.144	0.148	0.153	0.163	0.184	0.202	0.197	0.193	0.193	0.194
87	0.033	0.034	0.035	0.036	0.036	0.036	0.037	0.036	0.036	0.036	0.036	0.038	0.038	0.039	0.040	0.041	0.042	0.042	0.043	0.043
88	0.028	0.031	0.031	0.032	0.033	0.033	0.033	0.033	0.033	0.032	0.031	0.031	0.032	0.033	0.033	0.033	0.033	0.034	0.034	0.035
89	0.026	0.025	0.028	0.027	0.029	0.029	0.031	0.030	0.030	0.028	0.029	0.028	0.030	0.029	0.031	0.030	0.030	0.030	0.032	0.031
90	0.023	0.025	0.025	0.027	0.025	0.027	0.026	0.027	0.026	0.028	0.027	0.028	0.028	0.028	0.028	0.028	0.028	0.029	0.029	0.028
91	0.023	0.023	0.025	0.025	0.025	0.025	0.025	0.025	0.027	0.028	0.031	0.051	0.077	0.066	0.040	0.031	0.028	0.028	0.028	0.028
92	0.022	0.022	0.022	0.022	0.025	0.023	0.024	0.024	0.025	0.025	0.034	0.087	0.140	0.126	0.072	0.039	0.031	0.027	0.027	0.026
93	0.019	0.020	0.019	0.022	0.021	0.023	0.022	0.025	0.024	0.026	0.024	0.029	0.038	0.038	0.027	0.027	0.025	0.025	0.025	0.025
94	0.020	0.020	0.020	0.023	0.024	0.025	0.025	0.027	0.027	0.028	0.028	0.027	0.025	0.025	0.023	0.025	0.022	0.024	0.021	0.024
95	0.018	0.019	0.022	0.024	0.024	0.025	0.025	0.028	0.028	0.029	0.028	0.028	0.026	0.025	0.024	0.024	0.023	0.023	0.023	0.024
96	0.020	0.022	0.023	0.024	0.027	0.027	0.029	0.029	0.031	0.030	0.032	0.031	0.031	0.026	0.025	0.022	0.024	0.022	0.023	0.022
97	0.023	0.022	0.025	0.025	0.028	0.028	0.030	0.031	0.031	0.031	0.033	0.033	0.032	0.030	0.028	0.025	0.024	0.022	0.023	0.022
98	0.028	0.028	0.028	0.030	0.028	0.030	0.030	0.030	0.030	0.031	0.031	0.031	0.030	0.030	0.028	0.026	0.024	0.024	0.023	0.023

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 7.13 SEC
HRFR = 0.365E-01

. GROUP 69

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	0.483	0.492	0.496	0.503	0.512	0.524	0.537	0.543	0.544	0.546	0.541	0.530	0.504	0.450	0.382	0.333	0.337	0.381	0.423	0.422
65	0.489	0.495	0.498	0.501	0.505	0.513	0.526	0.535	0.541	0.544	0.543	0.543	0.543	0.530	0.486	0.415	0.340	0.293	0.284	0.310
66	0.482	0.491	0.500	0.506	0.510	0.516	0.524	0.529	0.530	0.527	0.526	0.524	0.520	0.520	0.513	0.500	0.476	0.425	0.350	0.287
67	0.455	0.467	0.477	0.487	0.494	0.500	0.505	0.505	0.505	0.508	0.507	0.502	0.495	0.486	0.478	0.472	0.463	0.449	0.430	0.398
68	0.420	0.431	0.443	0.456	0.473	0.485	0.492	0.497	0.495	0.491	0.490	0.488	0.494	0.474	0.466	0.459	0.454	0.453	0.454	0.443
69	0.422	0.434	0.440	0.442	0.450	0.460	0.470	0.476	0.477	0.476	0.472	0.465	0.453	0.435	0.420	0.409	0.396	0.393	0.397	0.394
70	0.404	0.410	0.416	0.422	0.429	0.437	0.445	0.447	0.449	0.446	0.444	0.440	0.431	0.417	0.399	0.379	0.359	0.343	0.331	0.322
71	0.375	0.379	0.381	0.386	0.395	0.402	0.410	0.417	0.422	0.426	0.425	0.422	0.416	0.406	0.394	0.383	0.366	0.344	0.325	0.311
72	0.364	0.367	0.369	0.372	0.378	0.382	0.385	0.387	0.389	0.387	0.385	0.386	0.389	0.387	0.384	0.383	0.379	0.368	0.347	0.322
73	0.348	0.350	0.354	0.359	0.369	0.375	0.376	0.379	0.378	0.376	0.372	0.368	0.365	0.361	0.355	0.354	0.353	0.348	0.337	0.325
74	0.328	0.332	0.335	0.342	0.351	0.356	0.359	0.362	0.362	0.366	0.368	0.366	0.364	0.363	0.362	0.359	0.356	0.354	0.349	0.338
75	0.314	0.317	0.321	0.326	0.331	0.333	0.337	0.340	0.341	0.342	0.344	0.344	0.344	0.343	0.341	0.339	0.339	0.336	0.337	0.340
76	0.315	0.320	0.324	0.326	0.326	0.326	0.328	0.330	0.328	0.324	0.321	0.318	0.316	0.315	0.315	0.314	0.308	0.305	0.310	0.316
77	0.313	0.314	0.319	0.324	0.328	0.332	0.333	0.332	0.330	0.327	0.322	0.316	0.312	0.307	0.302	0.300	0.301	0.295	0.293	0.293
78	0.317	0.320	0.322	0.325	0.328	0.331	0.332	0.333	0.333	0.331	0.328	0.323	0.319	0.314	0.307	0.304	0.305	0.305	0.301	0.299
79	0.315	0.318	0.322	0.326	0.330	0.332	0.334	0.333	0.333	0.331	0.328	0.327	0.326	0.320	0.316	0.314	0.313	0.311	0.307	0.303
80	0.312	0.316	0.320	0.322	0.326	0.328	0.329	0.330	0.330	0.331	0.332	0.332	0.330	0.323	0.320	0.319	0.319	0.318	0.317	0.313
81	0.307	0.312	0.319	0.322	0.326	0.327	0.327	0.328	0.330	0.333	0.335	0.334	0.331	0.326	0.323	0.321	0.317	0.316	0.318	0.318
82	0.308	0.312	0.316	0.322	0.326	0.330	0.332	0.334	0.335	0.334	0.333	0.333	0.333	0.328	0.321	0.319	0.319	0.320	0.322	0.322
83	0.305	0.309	0.313	0.317	0.322	0.326	0.329	0.332	0.334	0.335	0.336	0.335	0.334	0.330	0.326	0.325	0.322	0.320	0.319	0.320
84	0.297	0.303	0.308	0.314	0.320	0.324	0.326	0.328	0.330	0.332	0.334	0.335	0.336	0.333	0.332	0.331	0.329	0.329	0.328	0.327
85	0.285	0.289	0.293	0.297	0.302	0.308	0.312	0.313	0.316	0.318	0.319	0.320	0.320	0.320	0.322	0.324	0.324	0.326	0.325	0.327
86	0.196	0.212	0.225	0.224	0.226	0.232	0.241	0.245	0.245	0.246	0.248	0.250	0.252	0.255	0.257	0.260	0.263	0.264	0.266	0.269
87	0.043	0.044	0.044	0.045	0.044	0.045	0.046	0.048	0.046	0.047	0.049	0.049	0.048	0.048	0.047	0.048	0.048	0.049	0.050	0.052
88	0.036	0.036	0.036	0.037	0.036	0.038	0.038	0.038	0.038	0.038	0.038	0.037	0.036	0.036	0.036	0.035	0.034	0.035	0.033	0.034
89	0.033	0.032	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.034	0.033	0.033	0.031	0.032	0.031	0.030	0.029	0.030	0.028
90	0.029	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.030	0.031	0.030	0.031	0.030	0.030	0.028	0.028	0.027	0.027	0.025	0.027
91	0.028	0.028	0.029	0.029	0.030	0.029	0.031	0.030	0.031	0.030	0.032	0.038	0.043	0.036	0.031	0.027	0.027	0.025	0.028	0.025
92	0.028	0.028	0.028	0.028	0.029	0.029	0.029	0.028	0.029	0.028	0.048	0.114	0.150	0.113	0.059	0.037	0.030	0.025	0.026	0.025
93	0.025	0.027	0.025	0.028	0.028	0.028	0.028	0.028	0.026	0.028	0.029	0.050	0.072	0.057	0.035	0.029	0.025	0.025	0.024	0.025
94	0.023	0.025	0.024	0.025	0.025	0.027	0.026	0.027	0.025	0.025	0.023	0.025	0.024	0.025	0.024	0.025	0.023	0.023	0.022	0.023
95	0.022	0.022	0.023	0.025	0.024	0.025	0.025	0.026	0.025	0.025	0.024	0.024	0.022	0.023	0.022	0.022	0.020	0.020	0.019	0.021
96	0.024	0.023	0.024	0.023	0.025	0.025	0.026	0.025	0.027	0.025	0.024	0.022	0.023	0.022	0.022	0.022	0.022	0.020	0.019	0.018
97	0.022	0.022	0.023	0.022	0.023	0.023	0.025	0.025	0.027	0.025	0.025	0.022	0.022	0.022	0.021	0.021	0.021	0.020	0.020	0.020
98	0.022	0.022	0.022	0.022	0.022	0.023	0.023	0.025	0.025	0.025	0.023	0.023	0.022	0.022	0.021	0.022	0.020	0.019	0.018	0.018

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 8,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 7.13 SEC
GROUP 69 HRFR = 0.365E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.375	0.381	0.448	0.404	0.225	0.104	0.061	0.039	0.032	0.028	0.026	0.024	0.024	0.022	0.022	0.022	0.021	0.018	0.018	0.018
65	0.346	0.347	0.347	0.373	0.390	0.288	0.141	0.073	0.045	0.033	0.028	0.025	0.025	0.024	0.022	0.022	0.021	0.021	0.018	0.019
66	0.264	0.271	0.295	0.314	0.338	0.383	0.338	0.192	0.090	0.053	0.035	0.028	0.025	0.024	0.022	0.022	0.020	0.019	0.018	0.018
67	0.355	0.309	0.283	0.278	0.283	0.301	0.349	0.348	0.225	0.105	0.057	0.036	0.028	0.022	0.023	0.019	0.019	0.017	0.019	0.018
68	0.414	0.379	0.353	0.335	0.318	0.305	0.303	0.327	0.350	0.266	0.134	0.066	0.040	0.028	0.023	0.020	0.018	0.018	0.017	0.015
69	0.390	0.386	0.370	0.353	0.354	0.359	0.351	0.334	0.342	0.376	0.323	0.181	0.084	0.048	0.030	0.022	0.018	0.017	0.017	0.014
70	0.318	0.319	0.326	0.336	0.345	0.359	0.379	0.392	0.396	0.411	0.462	0.440	0.267	0.119	0.062	0.034	0.022	0.019	0.015	0.015
71	0.301	0.293	0.291	0.294	0.303	0.316	0.335	0.352	0.364	0.371	0.368	0.436	0.466	0.335	0.161	0.076	0.042	0.024	0.019	0.016
72	0.296	0.271	0.253	0.242	0.238	0.238	0.243	0.255	0.272	0.291	0.310	0.334	0.378	0.437	0.389	0.221	0.099	0.050	0.029	0.018
73	0.310	0.297	0.282	0.264	0.244	0.227	0.217	0.215	0.220	0.230	0.245	0.259	0.276	0.309	0.365	0.392	0.283	0.136	0.062	0.034
74	0.327	0.311	0.290	0.268	0.247	0.236	0.229	0.225	0.218	0.215	0.216	0.224	0.232	0.241	0.262	0.297	0.324	0.254	0.122	0.054
75	0.343	0.342	0.339	0.333	0.323	0.308	0.286	0.260	0.236	0.221	0.219	0.221	0.225	0.229	0.232	0.234	0.208	0.136	0.072	0.040
76	0.319	0.320	0.321	0.321	0.321	0.322	0.325	0.328	0.326	0.314	0.293	0.268	0.243	0.229	0.231	0.244	0.218	0.135	0.070	0.046
77	0.291	0.288	0.287	0.286	0.288	0.292	0.296	0.302	0.308	0.313	0.313	0.315	0.312	0.302	0.286	0.270	0.261	0.233	0.158	0.081
78	0.296	0.299	0.282	0.276	0.271	0.268	0.264	0.262	0.264	0.268	0.270	0.276	0.284	0.291	0.295	0.292	0.281	0.269	0.250	0.185
79	0.301	0.299	0.295	0.292	0.289	0.284	0.279	0.272	0.269	0.265	0.259	0.254	0.254	0.255	0.256	0.258	0.260	0.258	0.254	0.247
80	0.309	0.305	0.302	0.299	0.296	0.294	0.292	0.290	0.286	0.282	0.276	0.270	0.265	0.262	0.260	0.260	0.263	0.264	0.258	0.250
81	0.318	0.315	0.311	0.309	0.307	0.304	0.301	0.297	0.295	0.292	0.290	0.287	0.287	0.286	0.282	0.277	0.276	0.273	0.267	0.261
82	0.321	0.318	0.316	0.314	0.312	0.310	0.308	0.306	0.304	0.302	0.300	0.299	0.297	0.294	0.291	0.291	0.298	0.303	0.298	0.289
83	0.321	0.322	0.323	0.323	0.322	0.320	0.318	0.315	0.312	0.310	0.309	0.308	0.308	0.311	0.312	0.311	0.309	0.304	0.295	0.284
84	0.327	0.327	0.328	0.328	0.329	0.328	0.327	0.326	0.325	0.326	0.327	0.327	0.328	0.330	0.330	0.329	0.328	0.326	0.324	0.319
85	0.330	0.331	0.331	0.332	0.333	0.333	0.333	0.333	0.332	0.332	0.332	0.330	0.330	0.331	0.331	0.333	0.332	0.330	0.328	0.327
86	0.270	0.273	0.279	0.283	0.285	0.287	0.290	0.295	0.301	0.309	0.318	0.328	0.339	0.346	0.350	0.353	0.351	0.349	0.346	0.343
87	0.053	0.056	0.059	0.065	0.068	0.070	0.073	0.079	0.087	0.100	0.113	0.127	0.145	0.164	0.178	0.185	0.188	0.190	0.194	0.201
88	0.033	0.035	0.033	0.035	0.033	0.035	0.033	0.033	0.033	0.034	0.031	0.033	0.033	0.034	0.036	0.038	0.037	0.038	0.036	0.036
89	0.028	0.028	0.029	0.028	0.029	0.028	0.028	0.027	0.028	0.027	0.027	0.025	0.025	0.025	0.027	0.026	0.028	0.026	0.028	0.025
90	0.026	0.027	0.026	0.026	0.025	0.026	0.025	0.025	0.024	0.025	0.023	0.023	0.022	0.022	0.022	0.025	0.025	0.025	0.024	0.023
91	0.025	0.023	0.025	0.024	0.025	0.023	0.025	0.023	0.024	0.024	0.027	0.024	0.022	0.020	0.022	0.028	0.028	0.023	0.022	0.022
92	0.025	0.024	0.024	0.023	0.024	0.023	0.024	0.022	0.027	0.060	0.110	0.107	0.063	0.034	0.022	0.019	0.020	0.021	0.018	0.022
93	0.023	0.023	0.022	0.023	0.022	0.023	0.022	0.023	0.023	0.035	0.066	0.069	0.043	0.025	0.019	0.018	0.018	0.018	0.018	0.018
94	0.022	0.022	0.022	0.022	0.022	0.022	0.021	0.021	0.018	0.020	0.021	0.019	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.017
95	0.019	0.020	0.019	0.019	0.018	0.019	0.018	0.018	0.017	0.018	0.017	0.018	0.018	0.018	0.017	0.018	0.018	0.018	0.018	0.017
96	0.019	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.017	0.017	0.015	0.016	0.018	0.020	0.019	0.019	0.018
97	0.019	0.018	0.018	0.018	0.019	0.018	0.018	0.018	0.018	0.018	0.018	0.017	0.015	0.015	0.016	0.019	0.022	0.022	0.023	0.022
98	0.019	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.017	0.017	0.016	0.017	0.018	0.033	0.041	0.037	0.032	0.030

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 8,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 7.13 SEC
GROUP 69 HRFR = 0.365E-01

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.017	0.017	0.016	0.014	0.015	0.013	0.012	0.011	0.010	0.010	0.009	0.009	0.009	0.007	0.008	0.008	0.007	0.005	0.006	0.005
65	0.018	0.017	0.017	0.018	0.015	0.015	0.012	0.015	0.011	0.009	0.010	0.010	0.011	0.009	0.007	0.004	0.008	0.005	0.004	0.004
66	0.018	0.016	0.015	0.014	0.015	0.012	0.012	0.011	0.010	0.010	0.009	0.008	0.008	0.007	0.007	0.007	0.005	0.005	0.003	0.003
67	0.016	0.015	0.014	0.013	0.012	0.011	0.010	0.010	0.010	0.009	0.008	0.007	0.006	0.006	0.006	0.004	0.004	0.003	0.003	0.001
68	0.015	0.012	0.012	0.010	0.010	0.009	0.008	0.006	0.008	0.005	0.007	0.005	0.006	0.003	0.003	0.001	0.003	0.001	0.001	0.001
69	0.014	0.011	0.011	0.010	0.010	0.009	0.009	0.007	0.007	0.006	0.006	0.005	0.004	0.003	0.003	0.002	0.001	0.001	0.001	0.001
70	0.015	0.013	0.011	0.011	0.010	0.010	0.009	0.007	0.007	0.006	0.006	0.004	0.005	0.003	0.003	0.002	0.001	0.001	0.001	0.001
71	0.014	0.013	0.012	0.011	0.010	0.010	0.010	0.008	0.007	0.006	0.006	0.004	0.004	0.003	0.004	0.002	0.001	0.001	0.001	0.001
72	0.016	0.014	0.013	0.011	0.010	0.010	0.009	0.007	0.008	0.007	0.006	0.005	0.005	0.003	0.003	0.004	0.002	0.002	0.002	0.002
73	0.019	0.015	0.013	0.012	0.010	0.010	0.009	0.009	0.007	0.007	0.006	0.005	0.004	0.003	0.003	0.001	0.001	0.001	0.001	0.001
74	0.029	0.018	0.014	0.012	0.011	0.010	0.010	0.009	0.007	0.008	0.007	0.006	0.004	0.004	0.003	0.003	0.001	0.001	0.001	0.001
75	0.024	0.015	0.014	0.011	0.010	0.009	0.010	0.008	0.008	0.006	0.007	0.004	0.005	0.003	0.004	0.003	0.003	0.001	0.002	0.001
76	0.034	0.022	0.017	0.015	0.012	0.010	0.010	0.009	0.009	0.007	0.007	0.005	0.006	0.004	0.004	0.002	0.002	0.002	0.002	0.002
77	0.049	0.037	0.028	0.020	0.013	0.011	0.010	0.009	0.008	0.007	0.007	0.006	0.006	0.003	0.002	0.002	0.001	0.001	0.001	0.001
78	0.101	0.055	0.039	0.031	0.025	0.018	0.011	0.009	0.008	0.007	0.006	0.005	0.004	0.003	0.002	0.001	0.001	0.001	0.001	0.001
79	0.203	0.122	0.064	0.042	0.032	0.028	0.024	0.018	0.012	0.009	0.006	0.004	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.001
80	0.244	0.226	0.162	0.085	0.049	0.035	0.030	0.028	0.026	0.025	0.022	0.015	0.012	0.010	0.009	0.007	0.008	0.007	0.007	0.006
81	0.255	0.247	0.232	0.184	0.108	0.055	0.036	0.025	0.024	0.022	0.022	0.020	0.018	0.017	0.016	0.010	0.008	0.005	0.003	0.003
82	0.273	0.256	0.236	0.216	0.184	0.122	0.063	0.038	0.025	0.023	0.019	0.019	0.017	0.017	0.017	0.017	0.017	0.016	0.015	0.012
83	0.277	0.272	0.266	0.252	0.227	0.191	0.133	0.071	0.039	0.026	0.022	0.018	0.018	0.018	0.017	0.011	0.015	0.010	0.014	0.010
84	0.311	0.298	0.290	0.265	0.248	0.224	0.192	0.143	0.082	0.042	0.025	0.020	0.018	0.017	0.017	0.015	0.014	0.012	0.012	0.011
85	0.324	0.319	0.314	0.311	0.307	0.286	0.253	0.212	0.153	0.087	0.043	0.025	0.018	0.016	0.015	0.014	0.013	0.011	0.011	0.010
86	0.336	0.328	0.318	0.307	0.297	0.282	0.261	0.234	0.193	0.139	0.079	0.039	0.022	0.015	0.013	0.012	0.011	0.010	0.010	0.009
87	0.199	0.191	0.188	0.196	0.207	0.202	0.183	0.158	0.129	0.098	0.069	0.039	0.020	0.012	0.010	0.009	0.007	0.007	0.007	0.007
88	0.033	0.032	0.028	0.028	0.030	0.034	0.033	0.032	0.028	0.025	0.022	0.016	0.012	0.010	0.006	0.007	0.006	0.006	0.005	0.005
89	0.025	0.022	0.021	0.018	0.017	0.017	0.015	0.014	0.013	0.011	0.010	0.009	0.008	0.008	0.007	0.006	0.006	0.005	0.006	0.004
90	0.023	0.023	0.019	0.015	0.014	0.012	0.011	0.010	0.010	0.009	0.009	0.007	0.007	0.007	0.003	0.005	0.002	0.003	0.001	0.003
91	0.027	0.028	0.020	0.013	0.011	0.011	0.010	0.009	0.008	0.007	0.008	0.007	0.007	0.005	0.005	0.004	0.004	0.003	0.003	0.002
92	0.012	0.018	0.013	0.011	0.011	0.010	0.007	0.009	0.008	0.007	0.003	0.006	0.004	0.006	0.002	0.004	0.006	0.003	0.002	0.002
93	0.017	0.015	0.012	0.010	0.010	0.009	0.008	0.007	0.007	0.006	0.006	0.005	0.004	0.004	0.003	0.003	0.002	0.002	0.002	0.001
94	0.017	0.015	0.012	0.009	0.009	0.008	0.007	0.007	0.007	0.006	0.005	0.005	0.003	0.003	0.002	0.002	0.002	0.002	0.001	0.001
95	0.017	0.015	0.013	0.010	0.008	0.007	0.007	0.007	0.007	0.006	0.005	0.003	0.003	0.002	0.002	0.002	0.001	0.001	0.001	0.001
96	0.018	0.017	0.014	0.009	0.008	0.005	0.007	0.004	0.006	0.005	0.005	0.003	0.004	0.003	0.003	0.002	0.002	0.001	0.001	0.001
97	0.022	0.022	0.017	0.011	0.008	0.007	0.008	0.005	0.005	0.005	0.005	0.001	0.003	0.003	0.003	0.003	0.001	0.001	0.001	0.001
98	0.031	0.034	0.030	0.017	0.009	0.007	0.007	0.007	0.005	0.004	0.004	0.004	0.003	0.002	0.001	0.001	0.001	0.001	0.001	0.001

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREFR
IR SCAN TIME 7.13 SEC
HREFR = 0.365E-01

GROUP 69

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.005	0.003	0.003	0.003	0.003	0.002	0.001	0.001	0.001	0.001
65	0.005	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002
66	0.003	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
67	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
68	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
69	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
70	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
71	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
72	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
73	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
74	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
75	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
76	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
77	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
78	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
79	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
80	0.007	0.005	0.007	0.003	0.004	0.001	0.002	0.001	0.001	0.001
81	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
82	0.010	0.008	0.005	0.003	0.003	0.003	0.003	0.003	0.003	0.003
83	0.013	0.010	0.012	0.007	0.010	0.005	0.007	0.002	0.002	0.002
84	0.010	0.010	0.010	0.010	0.010	0.009	0.009	0.009	0.009	0.008
85	0.010	0.010	0.010	0.010	0.009	0.009	0.009	0.008	0.009	0.007
86	0.010	0.009	0.008	0.008	0.008	0.008	0.007	0.007	0.007	0.007
87	0.007	0.006	0.005	0.006	0.005	0.005	0.005	0.005	0.005	0.004
88	0.005	0.005	0.004	0.004	0.004	0.004	0.003	0.003	0.002	0.003
89	0.005	0.003	0.004	0.002	0.003	0.002	0.003	0.002	0.003	0.002
90	0.001	0.003	0.001	0.001	0.001	0.002	0.002	0.001	0.001	0.001
91	0.002	0.002	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001
92	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
93	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
94	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
95	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
96	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001
97	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
98	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

GROUP	* * * * MODEL DESCRIPTION * * * * TITLE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
89	RS1 AFT	0.01	0.000	-0.06	30.06	0.053	23	20	42

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/F FT-1	HREF BTU/FT2-SEC-R	INITIAL TEMP DEG R
7.94	210.67	1277.67	93.89	0.0227	3772.	0.202E-04	0.756E-07	0.101E+07	0.206E-01	535.7

IR CAMERA INFORMATION

MOUNTING LOCATION	260
F STOP	1.8
LENS-DEG	15
SENSITIVITY	500.
BLACK LEVEL VOLTAGE	1.3421
LINE SCAN PHI	.90
MODEL EMISSIVITY	0.96
REF EMISSIVITY	0.94
WINDOW FACTOR	0.860

TIME RECORDS

LIFT OFF	0.00
CENTER LINE	1.00
IR SCAN TIME	19.61
DELTA TIME,SEC	19.05
PHOTO 1 TIME	2321
PHOTO 2 TIME	0
PHOTO 3 TIME	0
PHOTO 4 TIME	0

REFERENCE TARGET INFORMATION

TCR5	502.33
TCR6	-228.49

DIGITAL DATA AREA PRINTOUT LOCATION

LINE 29 THROUGH 98
POINT 1 THROUGH 110

NASA/RI OH90 TRANSITION TEST
V41B-P4A
AKU, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 89

IR SCAN TIME 19.05 SEC
INITIAL TEMP 535.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	1.028	1.027	1.027	1.024	1.025	1.028	1.022	1.025	1.022	1.025	1.024	1.018	1.022	1.025	1.021	1.019	1.021	1.021	1.021	1.021
30	1.028	1.030	1.028	1.027	1.025	1.024	1.025	1.022	1.024	1.022	1.022	1.022	1.022	1.024	1.021	1.021	1.022	1.019	1.019	
31	1.028	1.028	1.027	1.025	1.025	1.024	1.024	1.022	1.024	1.022	1.024	1.022	1.022	1.022	1.022	1.021	1.021	1.019	1.019	1.019
32	1.027	1.025	1.027	1.025	1.025	1.025	1.024	1.022	1.024	1.022	1.022	1.021	1.022	1.021	1.019	1.019	1.019	1.018	1.019	1.018
33	1.025	1.027	1.027	1.025	1.025	1.024	1.024	1.022	1.022	1.021	1.021	1.021	1.019	1.019	1.019	1.019	1.021	1.021	1.022	1.022
34	1.027	1.025	1.025	1.024	1.024	1.022	1.019	1.021	1.019	1.019	1.021	1.018	1.019	1.019	1.021	1.022	1.024	1.022	1.024	1.024
35	1.025	1.025	1.022	1.019	1.021	1.016	1.019	1.016	1.019	1.016	1.021	1.018	1.022	1.019	1.022	1.024	1.024	1.025	1.024	1.022
36	1.022	1.022	1.021	1.021	1.019	1.021	1.019	1.021	1.021	1.022	1.022	1.024	1.022	1.024	1.022	1.022	1.019	1.018	1.010	1.006
37	1.021	1.022	1.019	1.019	1.021	1.022	1.021	1.024	1.021	1.022	1.021	1.025	1.022	1.021	1.016	1.013	1.006	1.001	0.996	0.994
38	1.021	1.022	1.024	1.025	1.022	1.024	1.022	1.024	1.022	1.024	1.021	1.021	1.014	1.010	1.003	0.997	0.994	0.992	0.988	0.990
39	1.024	1.025	1.024	1.025	1.024	1.025	1.022	1.024	1.021	1.018	1.011	1.006	0.999	0.996	0.992	0.994	0.990	0.990	0.990	0.992
40	1.022	1.027	1.025	1.028	1.024	1.025	1.019	1.016	1.010	1.006	0.997	0.996	0.992	0.994	0.992	0.994	0.992	0.994	0.992	0.994
41	1.025	1.027	1.025	1.025	1.021	1.016	1.008	1.005	0.999	0.996	0.994	0.996	0.994	0.994	0.994	0.996	0.994	0.994	0.992	0.996
42	1.025	1.027	1.021	1.011	1.010	0.999	0.999	0.992	0.994	0.990	0.994	0.990	0.994	0.994	0.996	0.994	0.994	0.994	0.996	0.994
43	1.022	1.019	1.010	1.006	0.999	0.997	0.996	0.999	0.996	0.996	0.994	0.996	0.996	0.996	0.996	0.997	0.990	0.996	0.992	0.997
44	1.011	1.006	1.003	0.999	0.997	0.999	0.997	0.996	0.996	0.997	0.996	0.996	0.996	0.996	0.996	0.996	0.997	0.997	0.997	0.999
45	1.005	1.005	1.005	1.003	1.003	1.001	1.001	1.001	1.001	0.999	0.999	0.999	1.001	1.001	1.001	1.001	1.003	1.008	1.022	1.036
46	1.010	1.008	1.008	1.006	1.005	1.006	1.006	1.005	1.006	1.005	1.005	1.005	1.005	1.005	1.006	1.006	1.011	1.042	1.118	1.177
47	1.011	1.011	1.011	1.010	1.011	1.010	1.010	1.008	1.008	1.008	1.010	1.008	1.010	1.010	1.010	1.011	1.021	1.076	1.165	1.221
48	1.013	1.013	1.013	1.011	1.013	1.011	1.011	1.010	1.011	1.010	1.011	1.011	1.013	1.011	1.013	1.014	1.027	1.095	1.187	1.240
49	1.014	1.014	1.013	1.011	1.013	1.011	1.013	1.010	1.013	1.010	1.011	1.011	1.013	1.011	1.013	1.016	1.032	1.111	1.202	1.250
50	1.014	1.018	1.014	1.014	1.013	1.014	1.011	1.013	1.011	1.013	1.011	1.013	1.013	1.014	1.013	1.018	1.032	1.109	1.188	1.232
51	1.013	1.013	1.011	1.008	1.011	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.011	1.011	1.013	1.014	1.035	1.104	1.162	1.193
52	1.006	1.008	1.010	1.008	1.005	1.010	0.997	1.003	1.005	1.003	1.005	1.005	1.006	1.008	1.010	1.013	1.052	1.113	1.152	1.166
53	0.999	0.999	0.996	0.996	0.994	0.994	0.994	0.996	0.992	0.996	0.997	0.994	0.994	0.992	0.996	1.010	1.064	1.126	1.153	1.165
54	0.992	0.990	0.988	0.988	0.988	0.988	0.986	0.986	0.984	0.986	0.984	0.986	0.986	0.986	0.988	1.010	1.076	1.128	1.147	1.158
55	0.986	0.984	0.982	0.984	0.982	0.984	0.982	0.982	0.982	0.982	0.982	0.984	0.982	0.984	0.986	1.022	1.087	1.125	1.138	1.148
56	0.984	0.986	0.975	0.984	0.973	0.984	0.971	0.982	0.973	0.982	0.980	0.982	0.982	0.984	0.988	1.034	1.096	1.125	1.134	1.141
57	0.988	0.986	0.986	0.984	0.982	0.984	0.980	0.982	0.977	0.982	0.980	0.982	0.977	0.984	0.988	1.047	1.101	1.123	1.131	1.138
58	0.990	0.986	0.986	0.986	0.984	0.982	0.984	0.984	0.984	0.984	0.982	0.984	0.984	0.986	0.997	1.054	1.108	1.126	1.135	1.139
59	0.992	0.994	0.990	0.990	0.988	0.990	0.986	0.990	0.986	0.988	0.988	0.990	0.986	0.992	1.008	1.070	1.112	1.127	1.133	1.140
60	0.996	0.997	0.994	0.992	0.994	0.992	0.992	0.992	0.992	0.990	0.992	0.992	0.994	0.996	1.030	1.089	1.120	1.128	1.135	1.140
61	0.999	0.999	0.996	0.996	0.996	0.994	0.996	0.992	0.996	0.996	0.996	0.996	0.996	1.003	1.048	1.101	1.122	1.130	1.136	1.141
62	1.001	1.001	0.999	0.997	0.999	0.997	0.997	0.996	0.996	0.996	0.996	0.997	0.997	1.016	1.071	1.111	1.125	1.131	1.135	1.141
63	0.999	1.001	0.996	0.997	0.994	0.994	0.996	0.996	0.996	0.996	0.996	0.997	1.001	1.025	1.082	1.114	1.127	1.132	1.137	1.141

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 89

IR SCAN TIME 19.05 SEC
INITIAL TEMP 535.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	1.021	1.019	1.021	1.018	1.019	1.014	1.018	1.016	1.018	1.014	1.018	1.014	1.016	1.016	1.018	1.018	1.019	1.019	1.021	1.022
30	1.019	1.019	1.019	1.019	1.019	1.018	1.018	1.018	1.019	1.019	1.021	1.021	1.022	1.022	1.024	1.022	1.025	1.021	1.024	1.019
31	1.019	1.018	1.019	1.019	1.019	1.022	1.022	1.022	1.024	1.024	1.025	1.025	1.025	1.022	1.022	1.021	1.018	1.014	1.013	1.010
32	1.021	1.021	1.022	1.022	1.024	1.025	1.025	1.024	1.027	1.025	1.024	1.018	1.018	1.013	1.010	1.006	1.005	0.997	0.994	0.990
33	1.024	1.024	1.025	1.025	1.025	1.024	1.024	1.019	1.018	1.011	1.008	1.005	0.999	0.994	0.990	0.986	0.982	0.984	0.982	0.982
34	1.025	1.024	1.022	1.021	1.016	1.013	1.008	1.003	0.997	0.992	0.988	0.984	0.984	0.977	0.980	0.982	0.982	0.982	0.984	0.982
35	1.018	1.013	1.010	1.005	0.997	0.994	0.988	0.984	0.986	0.984	0.984	0.984	0.984	0.982	0.984	0.984	0.984	0.984	0.986	0.984
36	1.001	0.996	0.986	0.986	0.984	0.988	0.982	0.984	0.982	0.984	0.984	0.984	0.982	0.986	0.986	0.984	0.986	0.988	0.986	0.984
37	0.988	0.990	0.988	0.988	0.984	0.986	0.988	0.988	0.986	0.986	0.990	0.988	0.986	0.984	0.986	0.990	0.982	0.988	0.982	0.986
38	0.988	0.992	0.988	0.990	0.988	0.990	0.988	0.990	0.988	0.990	0.988	0.990	0.988	0.990	0.988	0.990	0.988	0.990	0.986	0.988
39	0.992	0.990	0.988	0.992	0.992	0.992	0.992	0.992	0.990	0.992	0.990	0.992	0.990	0.990	0.990	0.990	0.990	0.990	0.992	0.992
40	0.992	0.994	0.992	0.994	0.992	0.996	0.992	0.996	0.994	0.994	0.992	0.994	0.990	0.994	0.992	0.992	0.994	0.992	0.994	0.992
41	0.992	0.996	0.996	0.996	0.994	0.994	0.994	0.994	0.994	0.996	0.994	0.994	0.994	0.994	0.994	0.996	0.992	0.994	0.992	0.994
42	0.994	0.994	0.996	0.996	0.996	0.994	0.996	0.996	0.999	0.996	0.996	0.996	0.996	0.996	0.994	0.996	0.996	0.996	0.994	0.996
43	0.992	0.997	0.994	0.997	0.994	0.996	0.996	0.997	0.992	0.997	0.996	0.999	0.997	0.999	0.996	0.999	0.996	0.997	0.996	0.997
44	0.999	0.999	1.001	0.999	1.001	0.999	1.001	0.999	1.001	0.999	0.999	0.999	0.997	0.996	0.999	0.996	0.997	0.996	0.997	0.996
45	1.044	1.044	1.044	1.036	1.031	1.024	1.019	1.011	1.011	1.008	1.008	1.005	1.006	1.005	1.005	1.005	1.003	1.003	1.003	1.003
46	1.206	1.219	1.223	1.218	1.207	1.190	1.163	1.131	1.101	1.069	1.043	1.025	1.016	1.013	1.011	1.011	1.010	1.010	1.010	1.008
47	1.250	1.269	1.284	1.292	1.294	1.291	1.279	1.257	1.232	1.199	1.144	1.086	1.053	1.032	1.025	1.018	1.016	1.014	1.016	1.013
48	1.265	1.284	1.301	1.314	1.324	1.329	1.326	1.314	1.291	1.259	1.218	1.162	1.098	1.056	1.039	1.032	1.031	1.028	1.024	1.019
49	1.276	1.296	1.316	1.333	1.347	1.357	1.362	1.363	1.353	1.332	1.299	1.256	1.201	1.131	1.073	1.036	1.025	1.022	1.027	1.031
50	1.257	1.281	1.305	1.329	1.351	1.370	1.382	1.391	1.393	1.388	1.373	1.348	1.311	1.260	1.190	1.116	1.060	1.034	1.022	1.019
51	1.216	1.238	1.262	1.290	1.320	1.347	1.369	1.388	1.403	1.410	1.409	1.403	1.390	1.363	1.321	1.255	1.170	1.091	1.048	1.025
52	1.180	1.195	1.210	1.229	1.251	1.274	1.297	1.323	1.351	1.374	1.392	1.405	1.412	1.410	1.398	1.373	1.322	1.239	1.143	1.072
53	1.173	1.179	1.186	1.195	1.205	1.216	1.227	1.243	1.261	1.285	1.308	1.333	1.356	1.375	1.389	1.396	1.396	1.374	1.306	1.198
54	1.166	1.176	1.184	1.193	1.200	1.203	1.203	1.207	1.214	1.223	1.232	1.246	1.263	1.283	1.303	1.323	1.343	1.359	1.363	1.326
55	1.155	1.165	1.173	1.182	1.191	1.197	1.201	1.204	1.207	1.210	1.211	1.213	1.215	1.220	1.228	1.242	1.257	1.274	1.289	1.301
56	1.146	1.153	1.160	1.168	1.174	1.179	1.186	1.195	1.204	1.211	1.213	1.214	1.212	1.210	1.208	1.209	1.211	1.219	1.229	1.242
57	1.143	1.149	1.156	1.163	1.165	1.169	1.174	1.181	1.188	1.195	1.201	1.208	1.211	1.212	1.211	1.211	1.211	1.211	1.211	1.214
58	1.145	1.150	1.157	1.162	1.166	1.168	1.172	1.176	1.182	1.186	1.191	1.192	1.196	1.199	1.206	1.209	1.211	1.212	1.215	1.215
59	1.144	1.151	1.158	1.165	1.169	1.174	1.176	1.179	1.183	1.188	1.190	1.193	1.195	1.196	1.196	1.199	1.201	1.208	1.214	1.218
60	1.145	1.150	1.156	1.162	1.168	1.172	1.176	1.183	1.188	1.193	1.199	1.201	1.200	1.199	1.199	1.198	1.197	1.197	1.199	1.203
61	1.147	1.151	1.158	1.163	1.170	1.176	1.179	1.183	1.188	1.193	1.198	1.201	1.202	1.205	1.207	1.205	1.202	1.199	1.199	1.199
62	1.146	1.150	1.156	1.162	1.169	1.176	1.179	1.184	1.191	1.195	1.198	1.199	1.201	1.202	1.203	1.203	1.205	1.205	1.204	1.204
63	1.147	1.151	1.157	1.164	1.170	1.176	1.178	1.182	1.188	1.194	1.198	1.202	1.206	1.207	1.207	1.204	1.202	1.202	1.204	1.206

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 89

IR SCAN TIME 19.05 SEC
INITIAL TEMP 535.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	1.022	1.022	1.022	1.022	1.021	1.019	1.019	1.018	1.016	1.013	1.011	1.008	1.005	1.005	1.003	0.999	0.999	0.997	0.996	0.992
30	1.022	1.016	1.016	1.010	1.011	1.006	1.006	1.003	1.001	0.996	0.996	0.990	0.992	0.988	0.988	0.988	0.986	0.986	0.986	0.984
31	1.008	1.005	1.001	0.996	0.992	0.988	0.986	0.986	0.984	0.982	0.980	0.980	0.980	0.980	0.982	0.980	0.982	0.977	0.982	0.977
32	0.986	0.986	0.984	0.982	0.982	0.982	0.982	0.980	0.980	0.977	0.982	0.980	0.980	0.977	0.980	0.980	0.980	0.980	0.980	0.980
33	0.984	0.982	0.984	0.982	0.984	0.982	0.984	0.982	0.980	0.980	0.982	0.982	0.980	0.982	0.982	0.980	0.980	0.980	0.980	0.982
34	0.984	0.982	0.982	0.980	0.982	0.984	0.982	0.982	0.982	0.982	0.982	0.980	0.982	0.982	0.980	0.980	0.980	0.980	0.980	0.980
35	0.986	0.982	0.986	0.984	0.986	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.982	0.984	0.982	0.982	0.982	0.982	0.980	0.982
36	0.986	0.988	0.986	0.986	0.986	0.988	0.986	0.986	0.986	0.986	0.984	0.986	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.984
37	0.982	0.988	0.984	0.990	0.984	0.988	0.984	0.988	0.984	0.988	0.984	0.988	0.986	0.988	0.986	0.988	0.986	0.986	0.984	0.988
38	0.988	0.992	0.988	0.988	0.990	0.992	0.990	0.990	0.988	0.990	0.988	0.988	0.986	0.990	0.982	0.986	0.984	0.988	0.984	0.986
39	0.988	0.992	0.990	0.994	0.990	0.992	0.990	0.992	0.990	0.992	0.990	0.990	0.990	0.990	0.988	0.990	0.988	0.988	0.988	0.990
40	0.992	0.996	0.992	0.992	0.992	0.994	0.992	0.992	0.990	0.994	0.990	0.992	0.992	0.994	0.990	0.990	0.988	0.992	0.990	0.992
41	0.992	0.994	0.992	0.994	0.994	0.994	0.992	0.994	0.992	0.994	0.992	0.994	0.992	0.992	0.990	0.992	0.992	0.992	0.990	0.992
42	0.994	0.996	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.992	0.994	0.992	0.994	0.992	0.992	0.992	0.992	0.994	0.990	0.990
43	0.996	0.996	0.996	0.996	0.996	0.994	0.996	0.996	0.996	0.994	0.994	0.996	0.992	0.996	0.994	0.994	0.992	0.994	0.992	0.994
44	0.996	0.994	0.996	0.994	0.996	0.994	0.996	0.992	0.996	0.996	0.996	0.994	0.996	0.994	0.994	0.994	0.994	0.994	0.994	0.994
45	1.003	1.001	1.001	1.001	0.999	0.999	1.001	0.999	0.999	0.999	0.997	0.997	0.999	0.996	0.999	0.996	0.997	0.996	0.997	0.996
46	1.008	1.006	1.008	1.006	1.006	1.005	1.006	1.005	1.005	1.003	1.005	1.003	1.005	1.005	1.005	1.003	1.003	1.003	1.003	1.001
47	1.014	1.013	1.013	1.011	1.010	1.010	1.010	1.008	1.008	1.008	1.008	1.006	1.006	1.005	1.008	1.008	1.008	1.006	1.006	1.006
48	1.018	1.016	1.016	1.014	1.013	1.011	1.011	1.010	1.010	1.008	1.010	1.008	1.010	1.008	1.010	1.008	1.008	1.006	1.010	1.006
49	1.031	1.027	1.022	1.018	1.014	1.014	1.013	1.011	1.011	1.011	1.011	1.010	1.011	1.010	1.010	1.008	1.010	1.010	1.010	1.008
50	1.021	1.025	1.026	1.031	1.027	1.022	1.018	1.016	1.013	1.014	1.014	1.013	1.011	1.013	1.011	1.011	1.010	1.011	1.011	1.011
51	1.019	1.013	1.018	1.019	1.027	1.030	1.030	1.021	1.016	1.013	1.013	1.011	1.011	1.011	1.013	1.011	1.011	1.010	1.010	1.010
52	1.036	1.018	1.013	1.011	1.014	1.016	1.027	1.031	1.016	1.019	1.010	1.011	1.010	1.006	1.008	1.006	1.006	1.006	1.005	1.005
53	1.104	1.048	1.022	1.013	1.010	1.011	1.014	1.022	1.024	1.014	0.999	0.994	0.992	0.992	0.992	0.992	0.988	0.992	0.990	0.996
54	1.231	1.125	1.056	1.024	1.010	1.010	1.010	1.013	1.016	1.022	1.013	0.996	0.988	0.984	0.980	0.982	0.980	0.984	0.986	0.990
55	1.289	1.224	1.126	1.058	1.025	1.011	1.005	1.008	1.008	1.013	1.018	1.016	0.999	0.986	0.984	0.982	0.980	0.984	0.986	0.994
56	1.251	1.249	1.212	1.137	1.065	1.030	1.011	1.008	1.008	1.010	1.010	1.016	1.018	1.008	0.990	0.984	0.982	0.984	0.986	0.994
57	1.217	1.225	1.228	1.214	1.159	1.087	1.039	1.025	1.013	1.011	1.010	1.013	1.013	1.021	1.011	0.996	0.990	0.986	0.988	0.992
58	1.216	1.215	1.214	1.214	1.216	1.200	1.141	1.072	1.034	1.016	1.011	1.008	1.010	1.008	1.014	1.014	1.005	0.992	0.992	0.990
59	1.217	1.215	1.215	1.217	1.215	1.210	1.196	1.145	1.072	1.036	1.016	1.011	1.003	1.003	1.001	1.010	1.011	1.010	0.996	0.994
60	1.211	1.216	1.217	1.215	1.215	1.215	1.212	1.198	1.159	1.092	1.042	1.019	1.010	1.003	1.003	1.001	1.003	1.008	1.008	0.997
61	1.199	1.201	1.204	1.209	1.215	1.217	1.216	1.211	1.207	1.184	1.125	1.055	1.022	1.006	1.003	0.999	1.001	1.001	1.008	1.006
62	1.202	1.201	1.201	1.199	1.200	1.203	1.207	1.214	1.216	1.211	1.193	1.143	1.072	1.027	1.013	1.001	1.001	1.001	1.001	1.001
63	1.206	1.203	1.204	1.204	1.201	1.198	1.196	1.195	1.198	1.202	1.207	1.201	1.166	1.104	1.046	1.019	1.008	1.005	1.003	1.003

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 89

IR SCAN TIME 19.05 SEC
INITIAL TEMP 535.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.994	0.990	0.990	0.990	0.990	0.992	0.992	0.992	0.990	0.992	0.990	0.992	0.990	0.988	0.988	0.990	0.990	0.990	0.990	0.990
30	0.984	0.984	0.984	0.984	0.984	0.982	0.982	0.982	0.982	0.984	0.984	0.982	0.982	0.984	0.984	0.986	0.984	0.984	0.986	0.984
31	0.982	0.977	0.982	0.980	0.980	0.977	0.980	0.977	0.980	0.977	0.980	0.984	0.984	0.980	0.982	0.982	0.984	0.982	0.984	0.982
32	0.980	0.980	0.980	0.977	0.977	0.977	0.977	0.977	0.980	0.977	0.977	0.980	0.977	0.973	0.980	0.973	0.980	0.971	0.980	0.973
33	0.980	0.977	0.980	0.975	0.980	0.977	0.980	0.977	0.977	0.977	0.977	0.975	0.977	0.977	0.980	0.977	0.980	0.977	0.977	0.975
34	0.980	0.977	0.977	0.980	0.980	0.977	0.980	0.977	0.980	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.977
35	0.982	0.977	0.982	0.980	0.980	0.980	0.982	0.980	0.980	0.977	0.980	0.980	0.977	0.980	0.980	0.977	0.977	0.977	0.980	0.977
36	0.984	0.984	0.982	0.980	0.980	0.984	0.984	0.982	0.982	0.982	0.980	0.982	0.980	0.982	0.980	0.980	0.980	0.980	0.980	0.980
37	0.986	0.986	0.984	0.984	0.984	0.984	0.986	0.986	0.984	0.984	0.982	0.984	0.982	0.984	0.980	0.984	0.982	0.982	0.982	0.984
38	0.984	0.990	0.984	0.986	0.984	0.984	0.984	0.986	0.980	0.988	0.986	0.986	0.986	0.986	0.984	0.986	0.984	0.986	0.984	0.988
39	0.988	0.986	0.988	0.988	0.984	0.988	0.986	0.986	0.988	0.986	0.986	0.988	0.984	0.988	0.984	0.988	0.986	0.986	0.984	0.986
40	0.988	0.988	0.988	0.990	0.988	0.990	0.988	0.988	0.986	0.990	0.988	0.988	0.988	0.990	0.986	0.988	0.986	0.988	0.986	0.988
41	0.990	0.992	0.990	0.992	0.990	0.990	0.990	0.990	0.988	0.990	0.988	0.990	0.988	0.988	0.988	0.990	0.990	0.988	0.988	0.986
42	0.990	0.992	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.992	0.990	0.990	0.990	0.990	0.988	0.990	0.988	0.988
43	0.992	0.992	0.992	0.994	0.992	0.992	0.990	0.992	0.990	0.992	0.990	0.992	0.988	0.990	0.990	0.992	0.990	0.990	0.988	0.992
44	0.992	0.992	0.992	0.992	0.994	0.994	0.994	0.992	0.994	0.992	0.992	0.990	0.992	0.992	0.992	0.992	0.992	0.990	0.992	0.990
45	0.997	0.996	0.997	0.996	0.996	0.996	0.997	0.997	0.997	0.996	0.997	0.996	0.997	0.996	0.996	0.997	0.996	0.996	0.996	0.996
46	1.001	1.003	1.005	1.003	1.003	1.001	1.001	1.001	1.001	0.992	1.003	0.992	1.003	0.994	1.001	0.994	1.003	0.992	1.005	0.994
47	1.008	1.006	1.006	1.005	1.006	1.003	1.006	1.005	1.006	1.005	1.005	1.005	1.006	1.005	1.005	1.005	1.005	1.003	1.005	1.005
48	1.008	1.006	1.008	1.006	1.008	1.006	1.006	1.005	1.006	1.006	1.006	1.005	1.008	1.006	1.006	1.005	1.006	1.005	1.008	1.005
49	1.010	1.008	1.010	1.008	1.008	1.008	1.008	1.006	1.010	1.008	1.008	1.006	1.008	1.006	1.008	1.006	1.006	1.006	1.008	1.006
50	1.011	1.011	1.011	1.011	1.010	1.011	1.008	1.010	1.008	1.010	1.008	1.010	1.008	1.008	1.008	1.008	1.008	1.011	1.008	1.010
51	1.011	1.010	1.013	1.010	1.011	1.010	1.011	1.008	1.010	1.010	1.011	1.010	1.010	1.010	1.010	1.008	1.010	1.010	1.010	1.010
52	1.005	1.006	1.008	1.010	1.008	1.010	1.011	1.011	1.011	1.011	1.008	1.010	1.011	1.010	1.010	1.010	1.008	1.011	1.010	1.011
53	0.997	1.001	1.003	1.006	1.005	1.005	1.006	1.006	1.003	1.006	1.005	1.008	1.005	1.008	1.005	1.008	1.003	1.008	1.005	1.008
54	0.994	0.997	1.001	1.003	1.003	1.008	1.005	1.006	1.005	1.008	1.006	1.008	1.006	1.010	1.006	1.008	1.006	1.008	1.006	1.005
55	0.994	0.999	1.001	1.005	1.003	1.005	1.003	1.008	1.005	1.006	1.008	1.008	1.008	1.008	1.006	1.008	1.005	1.008	1.006	1.006
56	0.994	1.001	1.001	1.005	1.003	1.005	1.005	1.005	1.006	1.011	1.005	1.006	1.005	1.008	1.005	1.008	1.005	1.006	1.003	1.005
57	0.996	0.997	0.999	1.001	1.001	1.003	1.001	1.003	1.001	1.003	1.003	1.003	1.001	1.003	0.999	1.003	1.001	1.003	0.999	1.001
58	0.994	0.996	0.997	0.996	0.997	0.996	0.999	0.997	0.997	0.997	0.999	0.997	0.997	0.997	0.997	0.997	0.997	0.996	0.996	0.994
59	0.988	0.992	0.990	0.994	0.994	0.994	0.994	0.994	0.992	0.994	0.990	0.994	0.992	0.994	0.990	0.992	0.990	0.992	0.990	0.992
60	0.994	0.990	0.990	0.990	0.990	0.988	0.990	0.986	0.990	0.988	0.990	0.986	0.988	0.986	0.988	0.986	0.990	0.986	0.990	0.984
61	1.003	0.994	0.992	0.992	0.990	0.992	0.990	0.990	0.990	0.990	0.990	0.988	0.988	0.986	0.988	0.986	0.988	0.986	0.990	0.986
62	1.005	1.001	0.996	0.994	0.990	0.992	0.990	0.990	0.990	0.990	0.990	0.988	0.988	0.988	0.986	0.988	0.988	0.988	0.988	0.990
63	1.001	1.003	1.003	0.997	0.990	0.990	0.990	0.988	0.986	0.988	0.988	0.986	0.986	0.986	0.986	0.988	0.988	0.988	0.988	0.988

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NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 19.05 SEC
INITIAL TEMP 535.7 DEG. R

GROUP 89

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.990	0.990	0.990	0.988	0.990	0.990	0.988	0.988	0.988	0.988	0.986	0.988	0.986	0.986	0.986	0.984	0.984	0.984	0.986	0.984
30	0.984	0.984	0.984	0.984	0.984	0.986	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.982	0.982	0.982	0.982	0.980	0.980	0.977
31	0.982	0.982	0.984	0.982	0.984	0.984	0.984	0.984	0.982	0.982	0.982	0.982	0.982	0.984	0.982	0.980	0.977	0.977	0.980	0.977
32	0.980	0.973	0.982	0.975	0.982	0.975	0.982	0.977	0.980	0.982	0.980	0.980	0.980	0.980	0.977	0.977	0.980	0.977	0.977	0.977
33	0.980	0.977	0.980	0.977	0.977	0.980	0.977	0.980	0.977	0.977	0.977	0.975	0.977	0.973	0.977	0.971	0.980	0.973	0.975	0.973
34	0.977	0.975	0.977	0.975	0.977	0.977	0.975	0.977	0.977	0.975	0.975	0.975	0.977	0.975	0.975	0.973	0.975	0.975	0.975	0.973
35	0.977	0.975	0.982	0.977	0.975	0.977	0.977	0.980	0.975	0.975	0.975	0.973	0.977	0.975	0.975	0.975	0.977	0.975	0.975	0.977
36	0.980	0.982	0.980	0.980	0.977	0.980	0.977	0.982	0.977	0.977	0.977	0.980	0.977	0.975	0.975	0.977	0.977	0.980	0.977	0.980
37	0.980	0.982	0.980	0.984	0.980	0.980	0.977	0.982	0.980	0.980	0.977	0.982	0.977	0.982	0.980	0.980	0.980	0.982	0.977	0.982
38	0.984	0.986	0.982	0.984	0.982	0.980	0.982	0.982	0.982	0.984	0.982	0.982	0.982	0.984	0.982	0.984	0.982	0.982	0.982	0.984
39	0.982	0.986	0.982	0.986	0.982	0.984	0.980	0.980	0.984	0.984	0.984	0.984	0.982	0.986	0.984	0.986	0.984	0.984	0.982	0.984
40	0.986	0.986	0.984	0.986	0.986	0.986	0.986	0.986	0.986	0.984	0.982	0.986	0.980	0.984	0.980	0.984	0.980	0.986	0.982	0.986
41	0.988	0.988	0.986	0.988	0.986	0.988	0.986	0.988	0.986	0.984	0.984	0.988	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986
42	0.988	0.988	0.988	0.988	0.986	0.988	0.988	0.986	0.986	0.986	0.986	0.984	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986
43	0.990	0.990	0.988	0.990	0.990	0.988	0.988	0.990	0.986	0.988	0.986	0.988	0.986	0.988	0.988	0.988	0.988	0.988	0.988	0.988
44	0.992	0.992	0.992	0.992	0.990	0.990	0.992	0.990	0.988	0.990	0.990	0.990	0.988	0.986	0.990	0.990	0.990	0.990	0.990	0.990
45	0.996	0.992	0.999	0.999	0.996	0.996	0.996	0.996	0.994	0.996	0.996	0.996	0.996	0.996	0.994	0.996	0.994	0.996	0.994	0.996
46	1.005	0.997	1.003	0.997	1.005	1.003	1.003	1.003	1.003	1.001	1.003	1.001	1.003	1.001	1.001	1.001	1.001	1.001	1.001	1.001
47	1.005	1.006	1.006	1.006	1.006	1.005	1.006	1.005	1.006	1.003	1.006	1.001	1.006	1.001	1.005	1.003	1.005	1.003	1.005	1.003
48	1.008	1.006	1.008	1.008	1.008	1.006	1.008	1.006	1.008	1.006	1.008	1.005	1.006	1.006	1.006	1.005	1.006	1.005	1.006	1.005
49	1.008	1.008	1.011	1.010	1.010	1.008	1.008	1.008	1.008	1.008	1.006	1.006	1.008	1.006	1.008	1.006	1.008	1.006	1.008	1.006
50	1.008	1.011	1.010	1.010	1.010	1.011	1.008	1.010	1.011	1.010	1.010	1.008	1.008	1.010	1.008	1.010	1.008	1.010	1.008	1.010
51	1.010	1.008	1.010	1.008	1.010	1.008	1.010	1.006	1.008	1.006	1.006	1.006	1.006	1.005	1.006	1.006	1.006	1.006	1.006	1.005
52	1.010	1.010	1.008	1.008	1.006	1.006	1.003	1.005	1.001	1.003	1.001	1.001	1.001	1.001	0.999	1.001	0.999	0.999	0.997	0.999
53	1.003	1.005	1.003	1.005	0.999	0.999	0.996	0.994	0.992	0.992	0.990	0.990	0.988	0.990	0.988	0.990	0.986	0.990	0.988	0.990
54	1.003	1.005	1.001	1.001	0.996	0.996	0.988	0.988	0.982	0.988	0.980	0.982	0.980	0.982	0.980	0.982	0.977	0.982	0.977	0.980
55	1.001	1.003	0.999	1.001	0.996	0.994	0.988	0.986	0.984	0.982	0.980	0.980	0.977	0.980	0.977	0.980	0.977	0.975	0.975	0.980
56	1.001	1.003	0.999	1.001	0.996	0.994	0.990	0.988	0.984	0.984	0.980	0.980	0.977	0.980	0.977	0.977	0.975	0.980	0.975	0.975
57	0.997	0.999	0.997	0.997	0.994	0.992	0.990	0.990	0.984	0.984	0.980	0.984	0.980	0.980	0.980	0.980	0.977	0.977	0.977	0.980
58	0.996	0.996	0.996	0.992	0.994	0.992	0.990	0.988	0.986	0.986	0.986	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.984
59	0.990	0.992	0.990	0.992	0.990	0.990	0.988	0.988	0.988	0.988	0.986	0.988	0.986	0.986	0.988	0.984	0.988	0.986	0.986	0.986
60	0.990	0.988	0.992	0.988	0.990	0.988	0.986	0.988	0.988	0.986	0.988	0.986	0.986	0.986	0.988	0.986	0.988	0.988	0.988	0.988
61	0.988	0.986	0.988	0.986	0.988	0.988	0.988	0.984	0.986	0.984	0.984	0.984	0.986	0.984	0.986	0.984	0.986	0.984	0.988	0.988
62	0.986	0.990	0.988	0.986	0.988	0.986	0.990	0.986	0.988	0.986	0.986	0.984	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986
63	0.990	0.988	0.988	0.984	0.988	0.986	0.984	0.986	0.986	0.986	0.986	0.986	0.984	0.986	0.988	0.986	0.986	0.986	0.986	0.986

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 89

IR SCAN TIME 19.05 SEC
INITIAL TEMP 535.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.982	0.982	0.980	0.982	0.982	0.982	0.982	0.980	0.980	0.980
30	0.977	0.980	0.977	0.977	0.977	0.977	0.977	0.977	0.980	0.977
31	0.977	0.977	0.977	0.977	0.977	0.975	0.975	0.975	0.975	0.975
32	0.977	0.975	0.977	0.973	0.975	0.975	0.975	0.973	0.975	0.975
33	0.975	0.971	0.975	0.971	0.973	0.971	0.973	0.975	0.975	0.975
34	0.973	0.975	0.975	0.973	0.971	0.973	0.973	0.971	0.971	0.966
35	0.977	0.975	0.975	0.975	0.975	0.973	0.975	0.975	0.973	0.968
36	0.977	0.980	0.977	0.975	0.975	0.977	0.977	0.977	0.977	0.977
37	0.980	0.980	0.980	0.980	0.977	0.980	0.973	0.982	0.977	0.977
38	0.982	0.984	0.982	0.982	0.980	0.984	0.980	0.982	0.984	0.982
39	0.982	0.982	0.984	0.984	0.982	0.984	0.984	0.982	0.984	0.984
40	0.982	0.986	0.982	0.984	0.982	0.986	0.986	0.986	0.984	0.984
41	0.984	0.986	0.986	0.984	0.986	0.986	0.984	0.986	0.980	0.988
42	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.988	0.988
43	0.986	0.986	0.986	0.990	0.988	0.990	0.986	0.988	0.988	0.988
44	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.992	0.990
45	0.994	0.994	0.996	0.994	0.994	0.996	0.992	0.996	0.996	0.994
46	1.001	1.001	1.001	0.999	1.001	1.001	1.001	0.999	1.001	0.999
47	1.003	1.001	1.005	1.005	1.005	1.003	1.005	1.003	1.005	1.003
48	1.006	1.005	1.006	1.005	1.005	1.003	1.005	1.001	1.005	1.001
49	1.008	1.008	1.008	1.005	1.006	1.006	1.008	1.005	1.006	1.005
50	1.006	1.010	1.006	1.008	1.006	1.008	1.006	1.008	1.006	1.008
51	1.006	1.005	1.006	1.003	1.005	1.005	1.005	1.003	1.006	1.003
52	0.997	0.999	0.997	0.999	0.997	0.999	0.996	0.999	0.996	0.999
53	0.988	0.990	0.990	0.990	0.988	0.984	0.988	0.990	0.990	0.988
54	0.977	0.982	0.980	0.980	0.980	0.982	0.980	0.980	0.977	0.980
55	0.975	0.975	0.975	0.977	0.971	0.975	0.968	0.973	0.966	0.973
56	0.975	0.977	0.975	0.975	0.973	0.975	0.971	0.975	0.973	0.975
57	0.977	0.980	0.977	0.980	0.977	0.977	0.975	0.980	0.977	0.977
58	0.984	0.984	0.982	0.984	0.984	0.984	0.984	0.982	0.984	0.982
59	0.986	0.986	0.984	0.988	0.984	0.986	0.986	0.986	0.986	0.984
60	0.988	0.988	0.988	0.988	0.988	0.986	0.986	0.986	0.990	0.988
61	0.988	0.988	0.990	0.988	0.990	0.986	0.988	0.988	0.988	0.988
62	0.986	0.986	0.988	0.986	0.984	0.986	0.988	0.982	0.986	0.986
63	0.984	0.984	0.984	0.986	0.986	0.986	0.986	0.986	0.986	0.986

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 89

IR SCAN TIME 19.05 SEC
INITIAL TEMP 535.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.997	0.994	0.994	0.994	0.992	0.990	0.990	0.988	0.990	0.992	0.994	0.992	0.996	1.031	1.089	1.113	1.123	1.130	1.135	1.140
65	0.994	0.992	0.990	0.988	0.986	0.988	0.986	0.988	0.986	0.988	0.988	0.990	0.996	1.040	1.094	1.113	1.122	1.128	1.134	1.139
66	0.986	0.984	0.982	0.984	0.982	0.982	0.980	0.977	0.980	0.982	0.980	0.984	0.992	1.044	1.094	1.112	1.119	1.125	1.129	1.135
67	0.980	0.980	0.975	0.975	0.975	0.971	0.973	0.973	0.973	0.973	0.975	0.977	0.996	1.058	1.098	1.113	1.119	1.123	1.127	1.132
68	0.973	0.971	0.968	0.968	0.966	0.966	0.966	0.966	0.966	0.968	0.968	0.975	1.010	1.076	1.105	1.115	1.122	1.127	1.131	1.135
69	0.968	0.968	0.964	0.966	0.964	0.966	0.964	0.964	0.964	0.966	0.968	0.975	1.031	1.092	1.113	1.123	1.129	1.135	1.139	1.144
70	0.968	0.968	0.956	0.966	0.959	0.966	0.964	0.964	0.964	0.966	0.968	0.986	1.053	1.103	1.118	1.127	1.133	1.139	1.144	1.147
71	0.968	0.968	0.966	0.968	0.964	0.966	0.964	0.966	0.959	0.964	0.966	0.997	1.061	1.100	1.110	1.119	1.122	1.128	1.132	1.137
72	0.968	0.971	0.966	0.968	0.964	0.968	0.964	0.966	0.964	0.966	0.968	1.001	1.064	1.091	1.099	1.105	1.110	1.115	1.118	1.122
73	0.971	0.968	0.966	0.966	0.966	0.966	0.966	0.966	0.964	0.966	0.971	1.008	1.062	1.081	1.089	1.095	1.098	1.103	1.105	1.109
74	0.971	0.968	0.964	0.966	0.964	0.966	0.961	0.964	0.964	0.966	0.971	1.013	1.061	1.075	1.083	1.086	1.089	1.093	1.098	1.099
75	0.971	0.968	0.966	0.968	0.964	0.966	0.964	0.964	0.961	0.966	0.975	1.028	1.064	1.073	1.080	1.084	1.087	1.091	1.093	1.098
76	0.968	0.971	0.968	0.966	0.966	0.964	0.964	0.964	0.964	0.966	0.990	1.043	1.067	1.075	1.078	1.082	1.087	1.088	1.093	1.094
77	0.962	0.994	0.996	0.992	0.997	0.992	0.977	0.966	0.964	0.968	1.008	1.055	1.068	1.077	1.078	1.083	1.087	1.088	1.091	1.094
78	1.025	1.050	1.050	1.071	1.074	1.055	1.047	1.003	0.973	0.977	1.028	1.063	1.071	1.078	1.079	1.084	1.087	1.089	1.092	1.095
79	1.050	1.044	1.030	1.075	1.087	1.063	1.067	1.067	1.011	1.003	1.049	1.068	1.073	1.076	1.081	1.085	1.089	1.091	1.096	1.097
80	1.058	1.061	1.035	1.055	1.070	1.085	1.076	1.074	1.052	1.030	1.058	1.069	1.076	1.076	1.079	1.085	1.087	1.092	1.094	1.098
81	1.056	1.072	1.067	1.059	1.053	1.061	1.087	1.073	1.056	1.056	1.065	1.071	1.074	1.075	1.077	1.084	1.086	1.090	1.093	1.098
82	1.063	1.075	1.079	1.068	1.054	1.042	1.034	1.039	1.049	1.060	1.067	1.072	1.074	1.078	1.076	1.080	1.084	1.088	1.091	1.097
83	1.082	1.085	1.080	1.075	1.060	1.048	1.025	1.011	1.021	1.048	1.069	1.077	1.077	1.078	1.080	1.083	1.085	1.089	1.091	1.095
84	1.088	1.073	1.077	1.069	1.055	1.039	1.014	0.999	1.013	1.047	1.084	1.097	1.100	1.100	1.098	1.095	1.093	1.092	1.091	1.088
85	1.067	1.064	1.074	1.080	1.060	1.031	1.021	1.019	1.025	1.022	1.031	1.034	1.039	1.043	1.050	1.056	1.060	1.064	1.067	1.073
86	1.032	1.048	1.063	1.065	1.049	1.028	1.025	1.024	1.024	1.016	1.018	1.018	1.018	1.016	1.016	1.016	1.016	1.016	1.013	1.013
87	1.010	1.014	1.021	1.022	1.018	1.014	1.016	1.024	1.024	1.018	1.016	1.016	1.014	1.014	1.016	1.011	1.013	1.011	1.014	1.014
88	1.001	0.997	0.996	0.999	1.001	1.005	1.011	1.022	1.027	1.018	1.016	1.011	1.014	1.013	1.011	1.011	1.010	1.010	1.010	1.011
89	0.988	0.984	0.984	0.992	0.997	1.001	1.010	1.018	1.022	1.019	1.018	1.016	1.014	1.013	1.013	1.011	1.010	1.008	1.010	1.010
90	0.980	0.977	0.982	0.986	0.996	0.999	1.003	1.013	1.021	1.022	1.019	1.018	1.016	1.016	1.013	1.011	1.010	1.011	1.010	1.011
91	0.977	0.977	0.977	0.984	0.990	0.990	1.001	1.008	1.014	1.018	1.019	1.018	1.016	1.016	1.014	1.014	1.014	1.011	1.011	1.008
92	0.977	0.964	0.973	0.984	0.988	0.992	0.990	1.005	1.013	1.018	1.014	1.016	1.014	1.018	1.014	1.014	1.013	1.016	1.010	1.011
93	0.988	0.982	0.984	0.988	0.992	0.996	0.997	1.005	1.014	1.018	1.016	1.019	1.016	1.018	1.016	1.016	1.014	1.011	1.010	1.010
94	1.010	1.008	1.003	1.006	1.005	1.008	1.006	1.013	1.016	1.018	1.016	1.019	1.021	1.022	1.021	1.021	1.014	1.014	1.010	1.008
95	1.021	1.021	1.019	1.021	1.016	1.019	1.016	1.021	1.024	1.024	1.019	1.024	1.025	1.027	1.027	1.027	1.022	1.019	1.011	1.008
96	1.031	1.031	1.030	1.031	1.027	1.027	1.022	1.027	1.030	1.031	1.027	1.030	1.028	1.031	1.031	1.032	1.028	1.025	1.013	1.008
97	1.035	1.034	1.034	1.034	1.032	1.030	1.025	1.027	1.028	1.027	1.027	1.032	1.034	1.035	1.036	1.038	1.032	1.025	1.016	1.011
98	1.040	1.038	1.036	1.034	1.032	1.030	1.025	1.027	1.028	1.022	1.022	1.027	1.032	1.036	1.039	1.038	1.035	1.027	1.021	1.019

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 89

IR SCAN TIME 19.05 SEC
INITIAL TEMP 535.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	1.145	1.148	1.155	1.162	1.170	1.175	1.178	1.182	1.188	1.193	1.197	1.200	1.202	1.203	1.204	1.204	1.207	1.210	1.211	1.211
65	1.143	1.148	1.153	1.161	1.168	1.173	1.176	1.176	1.185	1.188	1.195	1.193	1.199	1.200	1.201	1.198	1.201	1.201	1.204	1.201
66	1.139	1.144	1.150	1.157	1.162	1.166	1.170	1.174	1.177	1.183	1.186	1.189	1.193	1.196	1.196	1.198	1.201	1.203	1.202	1.202
67	1.136	1.141	1.148	1.153	1.159	1.163	1.168	1.173	1.177	1.180	1.185	1.191	1.198	1.201	1.202	1.203	1.207	1.210	1.212	1.212
68	1.141	1.148	1.155	1.162	1.166	1.172	1.177	1.183	1.189	1.193	1.194	1.199	1.204	1.207	1.208	1.213	1.217	1.221	1.222	1.223
69	1.150	1.158	1.162	1.168	1.174	1.179	1.184	1.189	1.195	1.201	1.204	1.205	1.207	1.211	1.212	1.213	1.212	1.212	1.211	1.214
70	1.152	1.161	1.165	1.170	1.175	1.181	1.184	1.187	1.191	1.194	1.198	1.201	1.202	1.202	1.201	1.202	1.203	1.205	1.206	1.206
71	1.142	1.149	1.153	1.158	1.162	1.168	1.172	1.176	1.179	1.184	1.187	1.192	1.194	1.196	1.196	1.198	1.199	1.199	1.199	1.200
72	1.126	1.133	1.135	1.139	1.142	1.148	1.150	1.155	1.157	1.162	1.165	1.169	1.173	1.175	1.175	1.177	1.181	1.185	1.185	1.188
73	1.112	1.116	1.119	1.122	1.125	1.129	1.133	1.137	1.139	1.141	1.143	1.146	1.147	1.148	1.147	1.150	1.150	1.155	1.158	1.163
74	1.102	1.107	1.110	1.111	1.114	1.116	1.121	1.123	1.126	1.128	1.128	1.130	1.133	1.135	1.135	1.135	1.135	1.135	1.137	1.139
75	1.098	1.101	1.104	1.108	1.111	1.112	1.116	1.122	1.122	1.123	1.122	1.125	1.126	1.129	1.130	1.130	1.128	1.130	1.130	1.131
76	1.097	1.098	1.102	1.106	1.109	1.112	1.113	1.117	1.119	1.121	1.122	1.123	1.125	1.126	1.128	1.127	1.127	1.128	1.128	1.128
77	1.098	1.099	1.101	1.105	1.109	1.112	1.112	1.116	1.119	1.119	1.122	1.122	1.122	1.123	1.125	1.125	1.125	1.125	1.126	1.128
78	1.098	1.099	1.104	1.105	1.110	1.113	1.116	1.119	1.120	1.122	1.122	1.122	1.122	1.122	1.125	1.125	1.122	1.123	1.125	1.127
79	1.100	1.103	1.104	1.109	1.110	1.113	1.116	1.118	1.121	1.122	1.123	1.122	1.123	1.121	1.123	1.125	1.125	1.125	1.125	1.125
80	1.100	1.104	1.107	1.110	1.112	1.116	1.117	1.120	1.121	1.122	1.122	1.123	1.123	1.125	1.125	1.126	1.127	1.127	1.127	1.128
81	1.102	1.105	1.108	1.112	1.113	1.116	1.118	1.121	1.122	1.123	1.122	1.125	1.123	1.123	1.125	1.127	1.128	1.130	1.130	1.131
82	1.100	1.104	1.109	1.112	1.116	1.119	1.121	1.123	1.125	1.126	1.127	1.128	1.128	1.128	1.130	1.130	1.132	1.133	1.133	1.134
83	1.097	1.102	1.107	1.112	1.116	1.120	1.123	1.125	1.127	1.128	1.130	1.133	1.133	1.134	1.134	1.135	1.135	1.138	1.138	1.141
84	1.088	1.090	1.096	1.098	1.103	1.108	1.113	1.121	1.126	1.128	1.130	1.130	1.130	1.132	1.133	1.134	1.135	1.135	1.137	1.139
85	1.073	1.076	1.078	1.083	1.089	1.091	1.099	1.107	1.115	1.121	1.125	1.127	1.129	1.132	1.135	1.138	1.140	1.141	1.143	1.145
86	1.014	1.013	1.019	1.018	1.024	1.022	1.024	1.024	1.027	1.027	1.031	1.031	1.035	1.035	1.039	1.040	1.043	1.046	1.049	1.054
87	1.014	1.013	1.013	1.011	1.011	1.013	1.013	1.008	1.011	1.011	1.013	1.011	1.011	1.011	1.011	1.010	1.011	1.011	1.011	1.013
88	1.013	1.013	1.013	1.013	1.014	1.014	1.013	1.011	1.011	1.011	1.011	1.011	1.011	1.010	1.011	1.010	1.010	1.010	1.010	1.010
89	1.010	1.010	1.011	1.013	1.013	1.013	1.013	1.013	1.013	1.013	1.014	1.011	1.011	1.011	1.011	1.011	1.011	1.010	1.011	1.010
90	1.010	1.013	1.011	1.013	1.011	1.013	1.011	1.013	1.011	1.014	1.013	1.014	1.014	1.014	1.011	1.011	1.011	1.011	1.013	1.013
91	1.008	1.010	1.013	1.008	1.016	1.013	1.011	1.013	1.013	1.014	1.014	1.028	1.042	1.035	1.021	1.013	1.010	1.010	1.010	1.010
92	1.010	1.011	1.010	1.010	1.010	1.013	1.011	1.013	1.011	1.014	1.019	1.042	1.065	1.056	1.028	1.016	1.011	1.011	1.010	1.011
93	1.003	1.008	1.005	1.010	1.006	1.010	1.008	1.014	1.013	1.016	1.011	1.014	1.014	1.016	1.011	1.011	1.010	1.011	1.010	1.013
94	1.003	1.006	1.005	1.011	1.011	1.014	1.016	1.018	1.019	1.024	1.019	1.019	1.014	1.013	1.008	1.010	1.005	1.008	1.006	1.010
95	1.003	1.008	1.010	1.014	1.016	1.018	1.018	1.022	1.025	1.025	1.022	1.022	1.018	1.014	1.011	1.011	1.008	1.006	1.005	1.006
96	1.005	1.010	1.011	1.016	1.018	1.022	1.024	1.027	1.027	1.027	1.027	1.027	1.024	1.022	1.014	1.014	1.010	1.008	1.005	1.006
97	1.010	1.013	1.016	1.021	1.022	1.025	1.025	1.028	1.027	1.030	1.028	1.030	1.027	1.025	1.021	1.019	1.013	1.011	1.008	1.008
98	1.019	1.021	1.022	1.021	1.022	1.024	1.025	1.024	1.025	1.024	1.025	1.025	1.025	1.024	1.022	1.019	1.018	1.011	1.010	1.008

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 89

IR SCAN TIME 19.05 SEC
INITIAL TEMP 535.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	1.208	1.203	1.202	1.203	1.204	1.205	1.201	1.196	1.192	1.190	1.189	1.187	1.184	1.170	1.118	1.053	1.021	1.008	1.005	0.999
65	1.201	1.200	1.204	1.202	1.202	1.200	1.197	1.194	1.191	1.189	1.188	1.186	1.182	1.174	1.160	1.121	1.063	1.025	1.013	1.008
66	1.201	1.199	1.200	1.203	1.202	1.201	1.200	1.201	1.199	1.198	1.194	1.193	1.190	1.190	1.185	1.175	1.148	1.098	1.046	1.019
67	1.214	1.215	1.215	1.219	1.224	1.224	1.221	1.220	1.219	1.221	1.222	1.220	1.219	1.217	1.213	1.208	1.201	1.186	1.143	1.076
68	1.224	1.228	1.231	1.230	1.230	1.230	1.230	1.230	1.230	1.231	1.231	1.228	1.227	1.226	1.225	1.225	1.221	1.212	1.195	1.156
69	1.215	1.217	1.218	1.220	1.220	1.218	1.219	1.221	1.223	1.224	1.227	1.229	1.230	1.227	1.226	1.228	1.227	1.225	1.221	1.212
70	1.206	1.207	1.206	1.205	1.206	1.208	1.210	1.210	1.209	1.212	1.215	1.219	1.223	1.225	1.223	1.227	1.231	1.232	1.231	1.230
71	1.201	1.202	1.204	1.206	1.205	1.204	1.204	1.204	1.203	1.207	1.210	1.212	1.215	1.217	1.218	1.222	1.227	1.229	1.230	1.231
72	1.188	1.192	1.192	1.194	1.197	1.199	1.198	1.200	1.203	1.205	1.206	1.207	1.207	1.208	1.207	1.207	1.207	1.207	1.208	1.207
73	1.165	1.167	1.169	1.173	1.175	1.177	1.180	1.185	1.185	1.186	1.186	1.189	1.191	1.192	1.190	1.189	1.190	1.193	1.194	1.195
74	1.141	1.143	1.146	1.147	1.148	1.150	1.152	1.155	1.158	1.160	1.163	1.164	1.166	1.166	1.166	1.167	1.170	1.175	1.176	1.177
75	1.133	1.133	1.134	1.136	1.135	1.135	1.134	1.135	1.134	1.136	1.138	1.141	1.140	1.142	1.143	1.146	1.146	1.148	1.150	1.155
76	1.130	1.130	1.131	1.133	1.133	1.133	1.132	1.131	1.130	1.130	1.130	1.130	1.130	1.131	1.133	1.135	1.136	1.136	1.138	1.137
77	1.128	1.128	1.129	1.128	1.130	1.130	1.130	1.130	1.129	1.128	1.128	1.128	1.130	1.131	1.133	1.133	1.134	1.135	1.136	1.137
78	1.128	1.128	1.128	1.128	1.128	1.128	1.127	1.126	1.127	1.127	1.128	1.129	1.130	1.131	1.133	1.135	1.135	1.135	1.137	1.139
79	1.127	1.128	1.130	1.129	1.129	1.129	1.130	1.127	1.128	1.126	1.127	1.128	1.129	1.129	1.131	1.133	1.135	1.137	1.140	1.141
80	1.129	1.130	1.129	1.130	1.130	1.132	1.130	1.131	1.130	1.132	1.131	1.133	1.130	1.133	1.133	1.134	1.134	1.137	1.139	1.141
81	1.131	1.133	1.134	1.134	1.134	1.134	1.134	1.135	1.135	1.135	1.135	1.137	1.136	1.137	1.137	1.139	1.139	1.140	1.141	1.141
82	1.135	1.135	1.136	1.137	1.137	1.137	1.137	1.137	1.137	1.136	1.137	1.137	1.138	1.138	1.140	1.141	1.142	1.142	1.144	1.144
83	1.141	1.144	1.145	1.145	1.145	1.145	1.144	1.144	1.143	1.143	1.141	1.141	1.138	1.138	1.138	1.141	1.141	1.142	1.142	1.143
84	1.141	1.143	1.145	1.146	1.147	1.148	1.148	1.148	1.148	1.150	1.150	1.150	1.148	1.148	1.148	1.148	1.147	1.147	1.147	1.147
85	1.146	1.147	1.148	1.149	1.149	1.148	1.147	1.145	1.145	1.143	1.143	1.141	1.141	1.142	1.143	1.144	1.146	1.147	1.148	1.150
86	1.058	1.062	1.064	1.070	1.075	1.074	1.076	1.077	1.079	1.080	1.084	1.085	1.087	1.088	1.091	1.091	1.092	1.093	1.097	1.098
87	1.014	1.011	1.013	1.011	1.013	1.011	1.013	1.011	1.013	1.010	1.013	1.010	1.011	1.010	1.011	1.011	1.011	1.011	1.013	1.011
88	1.011	1.011	1.011	1.010	1.005	1.008	1.008	1.008	1.008	1.010	1.008	1.008	1.006	1.006	1.006	1.005	1.005	1.001	1.005	0.999
89	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.006	1.008	1.008	1.008	1.006	1.006	1.005	1.006	1.005	1.005	1.003
90	1.011	1.010	1.011	1.011	1.010	1.011	1.008	1.010	1.008	1.010	1.008	1.008	1.008	1.008	1.006	1.006	1.005	1.006	1.001	1.001
91	1.010	1.010	1.010	1.010	1.010	1.010	1.011	1.011	1.011	1.010	1.010	1.014	1.016	1.013	1.006	1.006	1.005	1.001	0.999	1.001
92	1.010	1.011	1.010	1.011	1.010	1.011	1.010	1.011	1.010	1.011	1.016	1.038	1.052	1.039	1.018	1.008	1.001	1.003	0.999	1.003
93	1.011	1.013	1.011	1.013	1.011	1.011	1.010	1.011	1.010	1.010	1.010	1.016	1.019	1.014	1.010	1.006	1.005	1.005	1.001	1.003
94	1.010	1.011	1.010	1.016	1.008	1.013	1.010	1.011	1.008	1.011	1.008	1.010	1.005	1.010	1.006	1.006	1.003	1.005	1.003	1.003
95	1.005	1.010	1.008	1.011	1.010	1.013	1.011	1.013	1.011	1.010	1.008	1.006	1.008	1.008	1.006	1.010	1.005	1.006	0.999	1.003
96	1.005	1.008	1.006	1.008	1.010	1.010	1.008	1.011	1.008	1.010	1.008	1.008	1.005	1.008	1.006	1.008	1.005	1.008	1.005	1.006
97	1.005	1.006	1.005	1.006	1.005	1.010	1.008	1.011	1.010	1.010	1.008	1.010	1.008	1.010	1.006	1.008	1.006	1.008	1.005	1.006
98	1.006	1.005	1.005	1.005	1.006	1.006	1.010	1.008	1.011	1.010	1.011	1.010	1.008	1.008	1.008	1.008	1.006	1.005	1.006	1.005

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 19.05 SEC
INITIAL TEMP 535.7 DEG. R

GROUP 89

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.999	0.997	1.003	1.003	0.996	0.990	0.986	0.986	0.984	0.984	0.984	0.984	0.980	0.984	0.986	0.984	0.984	0.986	0.984	0.986
65	1.003	0.999	0.999	0.999	1.005	0.999	0.992	0.984	0.984	0.980	0.982	0.980	0.980	0.980	0.982	0.980	0.982	0.980	0.982	0.982
66	1.006	1.001	0.999	0.997	0.996	1.001	0.999	0.990	0.980	0.977	0.973	0.975	0.971	0.975	0.971	0.975	0.973	0.975	0.975	0.975
67	1.030	1.013	1.003	0.994	0.997	0.992	0.999	0.996	0.990	0.973	0.973	0.966	0.968	0.964	0.966	0.964	0.968	0.966	0.968	0.971
68	1.089	1.038	1.013	1.003	0.996	0.997	0.996	0.997	0.997	0.990	0.973	0.966	0.961	0.961	0.961	0.961	0.961	0.961	0.961	0.961
69	1.184	1.127	1.059	1.022	1.005	0.999	0.997	0.997	0.994	0.996	0.990	0.977	0.961	0.961	0.956	0.956	0.953	0.956	0.953	0.956
70	1.226	1.211	1.159	1.083	1.030	1.011	0.999	0.999	0.996	0.994	0.994	0.994	0.977	0.964	0.956	0.953	0.953	0.953	0.951	0.953
71	1.230	1.226	1.212	1.171	1.098	1.039	1.014	1.005	0.996	0.996	0.992	0.994	0.994	0.982	0.968	0.959	0.953	0.951	0.951	0.953
72	1.206	1.204	1.201	1.194	1.170	1.116	1.050	1.018	1.001	0.997	0.992	0.992	0.990	0.992	0.984	0.968	0.959	0.956	0.953	0.953
73	1.194	1.192	1.190	1.189	1.185	1.174	1.136	1.074	1.025	1.006	0.996	0.994	0.990	0.990	0.988	0.986	0.973	0.961	0.956	0.953
74	1.178	1.177	1.180	1.179	1.181	1.179	1.176	1.152	1.102	1.040	1.013	0.994	0.992	0.986	0.990	0.984	0.990	0.982	0.968	0.959
75	1.154	1.156	1.159	1.162	1.164	1.165	1.165	1.164	1.152	1.115	1.056	1.018	0.999	0.994	0.990	0.992	0.988	0.988	0.986	0.977
76	1.139	1.141	1.142	1.143	1.146	1.148	1.150	1.150	1.149	1.143	1.116	1.068	1.021	1.003	0.996	0.992	0.992	0.992	0.988	0.988
77	1.137	1.137	1.139	1.140	1.143	1.145	1.145	1.145	1.145	1.143	1.139	1.123	1.083	1.032	1.006	0.996	0.990	0.988	0.990	0.988
78	1.141	1.143	1.145	1.147	1.149	1.150	1.148	1.148	1.148	1.148	1.147	1.145	1.135	1.100	1.048	1.014	0.999	0.994	0.988	0.988
79	1.143	1.145	1.147	1.148	1.150	1.148	1.152	1.155	1.153	1.153	1.153	1.153	1.152	1.147	1.122	1.072	1.027	1.006	0.994	0.992
80	1.142	1.145	1.146	1.147	1.146	1.147	1.149	1.150	1.151	1.152	1.152	1.153	1.153	1.156	1.152	1.139	1.101	1.048	1.010	0.992
81	1.140	1.144	1.143	1.147	1.148	1.151	1.150	1.152	1.152	1.153	1.151	1.151	1.150	1.152	1.152	1.154	1.147	1.122	1.071	1.024
82	1.144	1.143	1.145	1.146	1.147	1.148	1.147	1.148	1.150	1.152	1.152	1.153	1.153	1.153	1.153	1.155	1.157	1.152	1.136	1.094
83	1.142	1.144	1.145	1.147	1.145	1.146	1.146	1.146	1.147	1.148	1.150	1.155	1.156	1.156	1.156	1.156	1.155	1.153	1.150	1.141
84	1.146	1.145	1.145	1.144	1.145	1.145	1.145	1.146	1.147	1.148	1.150	1.151	1.153	1.156	1.158	1.159	1.159	1.158	1.155	1.150
85	1.151	1.152	1.152	1.153	1.153	1.153	1.153	1.155	1.153	1.153	1.153	1.153	1.153	1.153	1.156	1.158	1.160	1.158	1.157	1.156
86	1.100	1.102	1.105	1.108	1.113	1.119	1.122	1.125	1.128	1.130	1.135	1.137	1.140	1.142	1.145	1.146	1.145	1.144	1.144	1.143
87	1.011	1.011	1.011	1.011	1.014	1.014	1.018	1.018	1.018	1.014	1.016	1.022	1.030	1.034	1.039	1.035	1.035	1.031	1.032	1.030
88	1.005	0.997	1.005	0.999	1.005	1.003	1.005	1.003	1.005	0.999	1.003	1.001	1.008	1.010	1.013	1.011	1.011	1.010	1.008	1.006
89	0.996	0.999	0.999	0.996	0.997	0.999	1.001	1.001	1.001	0.997	0.997	0.997	0.999	0.999	1.003	1.005	1.008	1.008	1.008	1.006
90	0.997	1.001	0.999	1.001	0.999	1.001	0.997	1.001	1.001	1.003	1.001	0.999	1.001	1.001	1.001	1.008	1.008	1.010	1.006	1.010
91	1.003	1.003	1.003	1.001	1.003	1.001	1.003	1.001	1.003	1.001	1.005	1.003	1.003	0.999	1.001	1.006	1.008	1.008	1.008	1.008
92	1.001	1.003	1.001	1.003	1.001	1.005	1.001	0.999	1.001	1.018	1.038	1.040	1.022	1.008	1.003	1.003	1.003	1.008	1.008	1.006
93	0.999	0.999	0.999	1.001	1.001	1.003	1.001	1.003	1.001	1.008	1.018	1.019	1.010	1.005	1.001	1.006	1.005	1.008	1.006	1.008
94	0.999	1.003	0.999	1.001	0.999	0.999	0.999	1.003	1.001	1.006	1.001	1.005	1.003	1.005	1.005	1.006	1.010	1.011	1.011	1.010
95	0.997	1.003	0.997	1.001	0.996	0.999	0.997	0.999	0.996	0.999	0.997	1.005	1.003	1.005	1.005	1.010	1.010	1.013	1.013	1.014
96	1.001	1.003	1.001	1.001	0.999	1.003	0.999	1.001	0.999	1.001	0.999	0.999	0.997	1.001	0.999	1.006	1.008	1.014	1.013	1.016
97	1.003	1.005	1.005	1.005	1.003	1.005	1.003	1.005	1.001	1.001	1.001	1.003	1.001	1.003	1.001	1.008	1.010	1.013	1.013	1.016
98	1.006	1.003	1.003	1.001	1.003	1.003	1.005	1.003	1.003	1.003	1.003	1.001	1.003	1.001	1.006	1.011	1.019	1.019	1.021	1.021

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 89

IR SCAN TIME 19.05 SEC
INITIAL TEMP 535.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.986	0.986	0.986	0.986	0.986	0.984	0.982	0.984	0.982	0.986	0.982	0.980	0.982	0.982	0.982	0.984	0.982	0.984	0.982	0.984
65	0.984	0.982	0.982	0.986	0.982	0.980	0.977	0.980	0.977	0.977	0.980	0.977	0.980	0.977	0.977	0.977	0.980	0.980	0.980	0.977
66	0.975	0.975	0.973	0.975	0.975	0.975	0.973	0.973	0.973	0.973	0.975	0.973	0.973	0.973	0.971	0.971	0.968	0.971	0.971	0.971
67	0.968	0.968	0.968	0.968	0.966	0.968	0.966	0.966	0.968	0.966	0.966	0.966	0.966	0.961	0.966	0.966	0.966	0.966	0.964	0.964
68	0.961	0.961	0.956	0.961	0.959	0.961	0.956	0.959	0.953	0.959	0.953	0.959	0.956	0.959	0.956	0.959	0.956	0.961	0.956	0.959
69	0.953	0.956	0.953	0.956	0.953	0.953	0.951	0.953	0.956	0.953	0.951	0.951	0.951	0.953	0.951	0.956	0.953	0.951	0.951	0.953
70	0.953	0.953	0.951	0.953	0.951	0.953	0.951	0.953	0.951	0.951	0.948	0.951	0.951	0.951	0.951	0.951	0.951	0.951	0.951	0.951
71	0.951	0.951	0.951	0.953	0.951	0.951	0.951	0.951	0.951	0.951	0.951	0.951	0.951	0.951	0.948	0.951	0.951	0.951	0.948	0.951
72	0.951	0.953	0.953	0.951	0.951	0.953	0.951	0.951	0.948	0.953	0.951	0.951	0.948	0.953	0.948	0.942	0.951	0.951	0.948	0.948
73	0.953	0.951	0.951	0.953	0.951	0.953	0.951	0.951	0.951	0.951	0.951	0.951	0.948	0.951	0.948	0.951	0.948	0.948	0.948	0.951
74	0.956	0.953	0.953	0.951	0.951	0.951	0.951	0.951	0.951	0.951	0.951	0.948	0.951	0.951	0.951	0.951	0.951	0.951	0.948	0.948
75	0.956	0.956	0.948	0.953	0.945	0.951	0.945	0.951	0.945	0.948	0.945	0.948	0.945	0.948	0.945	0.951	0.948	0.951	0.951	0.951
76	0.988	0.977	0.961	0.956	0.953	0.951	0.951	0.951	0.951	0.951	0.951	0.951	0.948	0.951	0.951	0.951	0.948	0.948	0.951	0.948
77	0.990	0.990	0.986	0.973	0.964	0.953	0.953	0.953	0.948	0.951	0.951	0.951	0.948	0.951	0.951	0.951	0.951	0.951	0.951	0.951
78	0.988	0.988	0.988	0.990	0.986	0.977	0.966	0.961	0.956	0.953	0.953	0.953	0.951	0.951	0.951	0.951	0.951	0.951	0.951	0.951
79	0.990	0.990	0.990	0.994	0.994	0.988	0.986	0.982	0.968	0.964	0.959	0.956	0.953	0.953	0.951	0.956	0.951	0.953	0.951	0.953
80	0.990	0.988	0.988	0.988	0.990	0.990	0.988	0.988	0.988	0.986	0.982	0.973	0.968	0.966	0.959	0.956	0.953	0.956	0.953	0.956
81	0.999	0.990	0.990	0.992	0.990	0.988	0.986	0.988	0.986	0.988	0.988	0.990	0.988	0.986	0.984	0.980	0.975	0.973	0.968	0.966
82	1.043	1.010	0.994	0.990	0.986	0.986	0.986	0.984	0.986	0.984	0.988	0.986	0.988	0.990	0.988	0.988	0.988	0.990	0.988	0.984
83	1.112	1.064	1.024	1.005	0.992	0.990	0.988	0.988	0.986	0.986	0.986	0.990	0.988	0.988	0.988	0.990	0.982	0.988	0.982	0.988
84	1.144	1.124	1.081	1.032	1.008	0.996	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.990	0.990	0.990	0.990	0.988	0.988	0.986
85	1.153	1.148	1.135	1.098	1.048	1.014	0.997	0.994	0.992	0.994	0.996	0.997	0.996	0.996	0.996	0.992	0.994	0.992	0.992	0.990
86	1.141	1.138	1.134	1.122	1.093	1.049	1.013	0.999	0.996	0.996	0.999	0.999	0.999	0.997	0.997	0.996	0.996	0.996	0.994	0.996
87	1.030	1.027	1.027	1.025	1.024	1.016	1.010	1.005	1.006	1.005	1.005	0.999	0.997	0.996	0.994	0.994	0.996	0.996	0.996	0.996
88	1.006	0.999	1.001	0.994	0.996	0.997	0.997	0.999	1.005	1.003	1.001	0.996	0.997	0.994	0.996	0.996	0.996	0.996	0.996	0.996
89	1.006	1.001	0.999	0.996	0.994	0.994	0.994	0.990	0.994	0.994	0.994	0.996	0.994	0.994	0.994	0.996	0.994	0.994	0.997	0.996
90	1.010	1.013	1.005	1.001	0.996	0.997	0.996	0.994	0.994	0.994	0.992	0.994	0.994	0.992	0.990	0.994	0.992	0.994	0.990	0.996
91	1.010	1.010	1.005	0.997	0.997	0.994	0.994	0.996	0.992	0.994	0.996	0.996	0.994	0.994	0.994	0.994	0.994	0.996	0.994	0.996
92	1.006	1.006	0.999	0.997	0.994	0.996	0.994	0.994	0.992	0.994	0.992	0.996	0.992	1.001	0.990	0.994	0.990	0.994	0.992	0.994
93	1.003	1.003	0.999	0.999	0.994	0.994	0.994	0.992	0.992	0.992	0.992	0.994	0.990	0.992	0.992	0.996	0.994	0.996	0.992	0.996
94	1.010	1.008	1.001	0.999	0.994	0.996	0.994	0.994	0.994	0.992	0.992	0.994	0.994	0.996	0.992	0.996	0.994	0.996	0.996	0.997
95	1.013	1.011	1.006	1.003	0.999	0.999	0.997	0.999	0.996	0.996	0.996	0.999	0.996	0.997	0.996	0.997	0.996	0.997	0.997	0.999
96	1.014	1.016	1.008	1.005	0.999	1.001	0.997	0.999	0.997	1.001	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	1.001
97	1.014	1.014	1.008	1.006	1.001	1.001	0.999	1.001	0.996	0.999	0.997	1.001	0.996	1.001	0.996	0.999	0.996	0.999	0.996	0.999
98	1.021	1.021	1.016	1.008	1.005	0.999	0.999	1.001	1.001	1.003	1.001	0.999	0.999	0.997	1.001	0.999	0.999	0.999	0.997	0.996

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 89

IR SCAN TIME 19.05 SEC
INITIAL TEMP 535.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.982	0.982	0.984	0.980	0.982	0.980	0.984	0.980	0.982	0.984
65	0.977	0.977	0.977	0.977	0.977	0.980	0.980	0.977	0.980	0.977
66	0.971	0.971	0.971	0.971	0.971	0.971	0.968	0.971	0.971	0.971
67	0.966	0.964	0.966	0.966	0.966	0.966	0.966	0.964	0.964	0.968
68	0.959	0.959	0.959	0.961	0.959	0.961	0.956	0.959	0.959	0.959
69	0.942	0.953	0.945	0.956	0.945	0.953	0.948	0.953	0.948	0.953
70	0.948	0.951	0.951	0.951	0.948	0.951	0.951	0.951	0.951	0.951
71	0.951	0.948	0.948	0.948	0.951	0.951	0.948	0.951	0.948	0.948
72	0.948	0.951	0.948	0.948	0.948	0.951	0.948	0.951	0.948	0.948
73	0.948	0.948	0.948	0.945	0.948	0.948	0.945	0.951	0.948	0.948
74	0.951	0.948	0.951	0.948	0.948	0.951	0.948	0.948	0.948	0.948
75	0.948	0.951	0.948	0.951	0.948	0.951	0.945	0.951	0.948	0.951
76	0.951	0.948	0.951	0.945	0.948	0.945	0.948	0.942	0.951	0.945
77	0.951	0.951	0.951	0.951	0.948	0.948	0.948	0.951	0.948	0.951
78	0.951	0.951	0.951	0.951	0.953	0.951	0.948	0.951	0.951	0.951
79	0.951	0.948	0.951	0.953	0.951	0.951	0.951	0.951	0.953	0.948
80	0.951	0.953	0.953	0.956	0.953	0.956	0.951	0.953	0.953	0.953
81	0.961	0.959	0.956	0.956	0.953	0.953	0.953	0.953	0.951	0.953
82	0.984	0.980	0.975	0.971	0.968	0.964	0.964	0.961	0.959	0.961
83	0.964	0.968	0.982	0.986	0.980	0.986	0.977	0.982	0.973	0.975
84	0.988	0.986	0.988	0.988	0.988	0.990	0.986	0.986	0.986	0.988
85	0.990	0.990	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988
86	0.994	0.994	0.994	0.992	0.992	0.990	0.990	0.990	0.992	0.990
87	0.996	0.994	0.994	0.996	0.994	0.994	0.994	0.996	0.994	0.994
88	0.996	0.996	0.996	0.992	0.997	0.997	0.999	0.997	0.999	0.997
89	0.996	0.996	0.996	0.988	0.996	0.994	0.999	0.997	0.997	0.999
90	0.994	0.996	0.992	0.996	0.994	0.997	0.992	0.996	0.996	0.999
91	0.994	0.996	0.994	0.996	0.996	0.994	0.994	0.997	0.996	0.996
92	0.992	0.992	0.992	0.992	0.994	0.996	0.994	0.994	0.994	1.008
93	0.994	0.996	0.994	0.999	0.996	0.996	0.994	0.997	0.994	0.999
94	0.996	0.999	0.997	0.999	0.996	0.999	0.997	0.997	0.997	0.999
95	0.997	0.999	0.997	0.999	0.997	0.999	0.997	0.999	0.997	0.999
96	0.999	1.001	0.999	0.999	0.997	1.003	0.999	1.001	0.999	1.003
97	0.997	0.999	0.996	0.999	0.996	0.999	0.997	1.003	0.999	1.001
98	0.997	0.997	0.996	0.997	0.997	0.997	0.997	0.999	0.999	0.999

NASA/R1 OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 19.05 SEC
HREF = 0.206E-01

GROUP 89

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	0.013	0.012	0.012	0.011	0.012	0.013	0.010	0.012	0.010	0.012	0.011	0.008	0.010	0.012	0.010	0.009	0.010	0.010	0.010	0.010
30	0.013	0.014	0.013	0.012	0.012	0.011	0.012	0.010	0.011	0.010	0.010	0.010	0.010	0.010	0.011	0.010	0.010	0.010	0.009	0.009
31	0.013	0.013	0.012	0.012	0.012	0.011	0.011	0.010	0.011	0.010	0.011	0.010	0.010	0.010	0.010	0.010	0.010	0.009	0.009	0.009
32	0.012	0.012	0.012	0.012	0.012	0.012	0.011	0.010	0.011	0.010	0.010	0.010	0.010	0.010	0.009	0.009	0.009	0.008	0.009	0.008
33	0.012	0.012	0.012	0.012	0.012	0.011	0.011	0.010	0.010	0.010	0.010	0.010	0.009	0.009	0.009	0.009	0.010	0.010	0.010	0.010
34	0.012	0.012	0.012	0.011	0.011	0.010	0.009	0.010	0.009	0.009	0.010	0.008	0.009	0.009	0.010	0.010	0.011	0.010	0.011	0.011
35	0.012	0.012	0.010	0.009	0.010	0.007	0.009	0.007	0.009	0.007	0.010	0.008	0.010	0.009	0.010	0.011	0.011	0.012	0.011	0.010
36	0.010	0.010	0.010	0.010	0.009	0.010	0.009	0.010	0.010	0.010	0.010	0.011	0.010	0.011	0.010	0.010	0.009	0.008	0.004	0.003
37	0.010	0.010	0.009	0.009	0.010	0.010	0.010	0.011	0.010	0.010	0.010	0.012	0.010	0.010	0.007	0.006	0.003	0.000	0.000	0.000
38	0.010	0.010	0.011	0.012	0.010	0.011	0.010	0.011	0.010	0.011	0.010	0.010	0.007	0.004	0.001	0.001	0.001	0.001	0.001	0.001
39	0.011	0.012	0.011	0.012	0.011	0.012	0.010	0.011	0.010	0.008	0.005	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
40	0.010	0.012	0.012	0.013	0.011	0.012	0.009	0.007	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
41	0.012	0.012	0.012	0.012	0.010	0.007	0.004	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
42	0.012	0.012	0.010	0.005	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
43	0.010	0.009	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
44	0.005	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
45	0.002	0.002	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.004	0.010	0.017
46	0.004	0.004	0.004	0.003	0.002	0.003	0.003	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.005	0.020	0.059	0.093
47	0.005	0.005	0.005	0.004	0.005	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.005	0.010	0.037	0.085	0.120
48	0.006	0.006	0.006	0.005	0.006	0.005	0.005	0.004	0.005	0.004	0.005	0.005	0.006	0.005	0.006	0.007	0.012	0.046	0.098	0.132
49	0.007	0.007	0.006	0.005	0.006	0.005	0.006	0.004	0.006	0.004	0.005	0.005	0.006	0.005	0.006	0.007	0.015	0.055	0.108	0.139
50	0.007	0.008	0.007	0.007	0.006	0.007	0.005	0.006	0.005	0.006	0.005	0.006	0.006	0.007	0.006	0.008	0.015	0.054	0.099	0.127
51	0.006	0.006	0.005	0.004	0.005	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.005	0.005	0.006	0.007	0.016	0.051	0.084	0.102
52	0.003	0.004	0.004	0.004	0.002	0.004	0.004	0.001	0.002	0.001	0.002	0.002	0.003	0.004	0.004	0.006	0.025	0.056	0.078	0.086
53	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.031	0.063	0.079	0.085
54	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.004	0.037	0.064	0.075	0.081
55	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.010	0.042	0.063	0.070	0.075
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.016	0.047	0.062	0.068	0.072
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.022	0.050	0.062	0.066	0.070
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.026	0.053	0.063	0.068	0.071
59	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.004	0.033	0.056	0.064	0.067	0.071
60	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.014	0.043	0.060	0.064	0.068	0.071
61	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.001	0.023	0.050	0.061	0.066	0.069	0.071
62	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.034	0.055	0.062	0.066	0.068	0.071
63	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.012	0.040	0.057	0.064	0.066	0.069	0.072

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 19.05 SEC
HREF = 0.206E-01

GROUP 89

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	0.010	0.009	0.010	0.008	0.009	0.007	0.008	0.007	0.008	0.007	0.008	0.007	0.007	0.007	0.008	0.008	0.009	0.009	0.010	0.010
30	0.009	0.009	0.009	0.009	0.009	0.008	0.008	0.008	0.009	0.009	0.010	0.010	0.010	0.010	0.011	0.010	0.012	0.010	0.011	0.009
31	0.009	0.008	0.009	0.009	0.009	0.010	0.010	0.010	0.011	0.011	0.012	0.012	0.012	0.010	0.010	0.010	0.008	0.007	0.006	0.004
32	0.010	0.010	0.010	0.010	0.011	0.012	0.012	0.011	0.012	0.012	0.011	0.008	0.008	0.006	0.004	0.003	0.002	0.002	0.002	0.002
33	0.011	0.011	0.012	0.012	0.012	0.011	0.011	0.009	0.008	0.005	0.004	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
34	0.012	0.011	0.010	0.010	0.007	0.006	0.004	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.008	0.006	0.004	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
40	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
41	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
42	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
43	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
44	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.021	0.021	0.021	0.017	0.014	0.011	0.009	0.005	0.005	0.004	0.004	0.002	0.003	0.002	0.002	0.002	0.001	0.001	0.001	0.001
46	0.110	0.118	0.121	0.117	0.111	0.100	0.084	0.066	0.050	0.033	0.020	0.012	0.007	0.006	0.005	0.005	0.004	0.004	0.004	0.004
47	0.139	0.152	0.162	0.168	0.170	0.168	0.159	0.144	0.127	0.106	0.073	0.042	0.025	0.015	0.012	0.008	0.007	0.007	0.007	0.006
48	0.149	0.162	0.175	0.185	0.192	0.196	0.194	0.185	0.168	0.145	0.117	0.083	0.048	0.027	0.018	0.015	0.014	0.013	0.011	0.009
49	0.157	0.171	0.186	0.200	0.211	0.219	0.224	0.224	0.216	0.199	0.174	0.143	0.107	0.066	0.035	0.017	0.012	0.010	0.012	0.014
50	0.144	0.160	0.178	0.196	0.215	0.230	0.241	0.249	0.250	0.246	0.233	0.211	0.182	0.146	0.100	0.057	0.029	0.016	0.010	0.009
51	0.116	0.131	0.147	0.167	0.189	0.211	0.229	0.246	0.260	0.266	0.265	0.259	0.248	0.224	0.190	0.142	0.088	0.045	0.023	0.012
52	0.094	0.103	0.113	0.125	0.140	0.155	0.172	0.192	0.214	0.233	0.250	0.262	0.268	0.266	0.255	0.233	0.191	0.131	0.072	0.035
53	0.090	0.093	0.098	0.103	0.110	0.117	0.123	0.134	0.147	0.163	0.180	0.200	0.218	0.235	0.246	0.254	0.253	0.234	0.179	0.105
54	0.086	0.092	0.096	0.102	0.106	0.108	0.108	0.111	0.115	0.121	0.127	0.136	0.147	0.162	0.177	0.192	0.208	0.221	0.224	0.194
55	0.080	0.085	0.090	0.096	0.101	0.104	0.107	0.109	0.111	0.113	0.113	0.114	0.116	0.119	0.124	0.133	0.144	0.155	0.166	0.175
56	0.074	0.079	0.082	0.087	0.090	0.094	0.098	0.103	0.109	0.114	0.115	0.115	0.114	0.113	0.111	0.112	0.113	0.118	0.125	0.133
57	0.072	0.076	0.080	0.084	0.085	0.088	0.090	0.095	0.099	0.103	0.107	0.112	0.113	0.114	0.113	0.113	0.113	0.113	0.114	0.115
58	0.074	0.076	0.081	0.083	0.086	0.087	0.089	0.092	0.095	0.098	0.101	0.102	0.104	0.106	0.110	0.112	0.114	0.114	0.116	0.116
59	0.073	0.077	0.081	0.085	0.088	0.090	0.092	0.094	0.096	0.099	0.100	0.102	0.103	0.104	0.104	0.106	0.107	0.111	0.115	0.118
60	0.074	0.076	0.080	0.083	0.087	0.089	0.092	0.096	0.099	0.102	0.106	0.107	0.106	0.106	0.106	0.105	0.104	0.104	0.106	0.108
61	0.075	0.077	0.081	0.084	0.088	0.092	0.093	0.096	0.099	0.102	0.105	0.107	0.108	0.110	0.110	0.110	0.108	0.106	0.106	0.106
62	0.074	0.077	0.080	0.083	0.088	0.092	0.094	0.096	0.101	0.103	0.105	0.106	0.107	0.108	0.108	0.108	0.109	0.109	0.109	0.109
63	0.075	0.077	0.081	0.084	0.088	0.092	0.093	0.095	0.099	0.103	0.105	0.108	0.110	0.111	0.111	0.109	0.108	0.108	0.109	0.110

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREFR
IR SCAN TIME 19.05 SEC
GROUP 89 HREFR = 0.206E-01

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	0.010	0.010	0.010	0.010	0.010	0.009	0.009	0.008	0.007	0.006	0.005	0.004	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001
30	0.010	0.007	0.007	0.004	0.005	0.003	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
33	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
40	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
41	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
42	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
43	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
46	0.004	0.003	0.004	0.003	0.003	0.002	0.003	0.002	0.002	0.001	0.002	0.001	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.000
47	0.007	0.006	0.006	0.005	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.003	0.003	0.002	0.004	0.004	0.004	0.003	0.003	0.003
48	0.008	0.007	0.007	0.007	0.006	0.005	0.005	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.003	0.004	0.003
49	0.014	0.012	0.010	0.008	0.007	0.007	0.006	0.005	0.005	0.005	0.005	0.004	0.005	0.004	0.004	0.004	0.004	0.004	0.004	0.004
50	0.010	0.012	0.013	0.014	0.012	0.010	0.008	0.007	0.006	0.007	0.007	0.006	0.005	0.006	0.005	0.005	0.004	0.005	0.005	0.005
51	0.009	0.006	0.008	0.009	0.012	0.014	0.014	0.010	0.007	0.006	0.006	0.005	0.005	0.005	0.006	0.005	0.005	0.004	0.004	0.004
52	0.017	0.008	0.006	0.005	0.007	0.007	0.012	0.014	0.007	0.009	0.004	0.005	0.004	0.003	0.004	0.003	0.003	0.003	0.002	0.002
53	0.051	0.023	0.010	0.006	0.004	0.005	0.007	0.010	0.011	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
54	0.126	0.063	0.027	0.011	0.004	0.004	0.004	0.006	0.007	0.010	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
55	0.166	0.122	0.063	0.027	0.012	0.005	0.002	0.004	0.004	0.006	0.006	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
56	0.140	0.138	0.114	0.069	0.031	0.014	0.005	0.004	0.004	0.004	0.004	0.007	0.008	0.004	0.004	0.004	0.004	0.004	0.004	0.004
57	0.117	0.122	0.124	0.115	0.082	0.042	0.018	0.012	0.006	0.005	0.004	0.006	0.006	0.010	0.005	0.005	0.005	0.005	0.005	0.005
58	0.116	0.116	0.115	0.115	0.117	0.106	0.072	0.035	0.016	0.007	0.005	0.004	0.004	0.004	0.007	0.007	0.002	0.002	0.002	0.002
59	0.117	0.116	0.116	0.117	0.116	0.113	0.104	0.074	0.035	0.017	0.007	0.005	0.001	0.001	0.000	0.004	0.005	0.004	0.004	0.004
60	0.113	0.117	0.117	0.116	0.116	0.116	0.114	0.105	0.082	0.045	0.020	0.009	0.004	0.001	0.001	0.000	0.001	0.004	0.004	0.004
61	0.106	0.107	0.109	0.112	0.116	0.117	0.116	0.114	0.110	0.097	0.062	0.026	0.010	0.003	0.001	0.001	0.000	0.000	0.004	0.003
62	0.108	0.107	0.107	0.106	0.106	0.108	0.111	0.115	0.117	0.114	0.102	0.072	0.035	0.012	0.006	0.000	0.000	0.000	0.000	0.000
63	0.110	0.108	0.109	0.109	0.107	0.105	0.104	0.103	0.105	0.108	0.110	0.107	0.087	0.051	0.022	0.009	0.004	0.002	0.001	0.001

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 19.05 SEC
GROUP 89 HREF = 0.206E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
33	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
40	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
41	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
42	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
43	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
46	0.000	0.001	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.002	0.002
47	0.004	0.003	0.003	0.002	0.003	0.001	0.003	0.002	0.003	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.001	0.002	0.002
48	0.004	0.003	0.004	0.003	0.004	0.003	0.003	0.002	0.003	0.003	0.003	0.002	0.004	0.003	0.003	0.002	0.003	0.002	0.004	0.002
49	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.003	0.004	0.004	0.004	0.003	0.004	0.003	0.004	0.003	0.003	0.003	0.004	0.003
50	0.005	0.005	0.005	0.005	0.004	0.005	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.005	0.004	0.004
51	0.005	0.004	0.006	0.004	0.005	0.004	0.005	0.004	0.004	0.004	0.005	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
52	0.002	0.003	0.004	0.004	0.004	0.004	0.005	0.005	0.005	0.005	0.004	0.004	0.005	0.004	0.004	0.004	0.004	0.005	0.004	0.005
53	0.007	0.000	0.001	0.003	0.002	0.002	0.003	0.003	0.001	0.003	0.002	0.004	0.002	0.004	0.002	0.004	0.001	0.004	0.002	0.004
54	0.006	0.006	0.000	0.001	0.001	0.004	0.002	0.003	0.002	0.004	0.003	0.004	0.003	0.004	0.003	0.004	0.003	0.004	0.003	0.002
55	0.007	0.007	0.000	0.002	0.001	0.002	0.001	0.004	0.002	0.004	0.004	0.004	0.004	0.003	0.004	0.002	0.004	0.003	0.003	0.003
56	0.004	0.000	0.000	0.002	0.001	0.002	0.002	0.002	0.003	0.005	0.002	0.003	0.002	0.004	0.002	0.004	0.002	0.003	0.001	0.002
57	0.005	0.005	0.005	0.000	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000	0.001	0.001	0.001	0.000	0.001	0.001	0.000
58	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
59	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
60	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
61	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
62	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
63	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 19.05 SEC
HREF = 0.206E-01

GROUP 89

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
33	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
40	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
41	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
42	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
43	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
46	0.002	0.002	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
47	0.002	0.003	0.003	0.003	0.003	0.002	0.003	0.002	0.003	0.001	0.003	0.000	0.003	0.000	0.002	0.001	0.002	0.001	0.002	0.001
48	0.004	0.003	0.004	0.004	0.004	0.003	0.004	0.003	0.004	0.003	0.004	0.002	0.003	0.003	0.003	0.002	0.003	0.002	0.003	0.002
49	0.004	0.004	0.005	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.003	0.003	0.004	0.003	0.004	0.003	0.004	0.003	0.004	0.003
50	0.004	0.005	0.004	0.004	0.004	0.005	0.004	0.004	0.005	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
51	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.003	0.004	0.003	0.003	0.003	0.003	0.002	0.003	0.003	0.003	0.003	0.003	0.002
52	0.004	0.004	0.004	0.004	0.003	0.003	0.001	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
53	0.001	0.002	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
54	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
55	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
59	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
60	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
61	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
62	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
63	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 19.05 SEC
GROUP 89 HREF = 0.206E-01

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
33	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
40	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
41	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
42	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
43	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
46	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
47	0.001	0.000	0.002	0.002	0.002	0.001	0.002	0.001	0.002	0.001
48	0.003	0.002	0.003	0.002	0.002	0.001	0.002	0.000	0.002	0.000
49	0.004	0.004	0.004	0.002	0.003	0.003	0.004	0.002	0.003	0.002
50	0.003	0.004	0.003	0.004	0.003	0.004	0.003	0.004	0.003	0.004
51	0.003	0.002	0.003	0.001	0.002	0.002	0.002	0.001	0.003	0.001
52	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
53	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
55	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
59	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
60	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
61	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
62	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
63	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 19.05 SEC
GROUP 89 HREF = 0.206E-01

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.014	0.044	0.056	0.062	0.065	0.068	0.071
65	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.019	0.046	0.056	0.061	0.064	0.068	0.070
66	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.021	0.046	0.055	0.059	0.062	0.065	0.068
67	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.027	0.048	0.056	0.059	0.062	0.064	0.066
68	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.004	0.037	0.052	0.057	0.061	0.064	0.066	0.068
69	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.014	0.045	0.056	0.062	0.065	0.068	0.071	0.073
70	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.025	0.051	0.059	0.064	0.067	0.071	0.073	0.075
71	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.029	0.049	0.055	0.060	0.061	0.064	0.066	0.069
72	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.000	0.031	0.045	0.049	0.052	0.055	0.057	0.059	0.061
73	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.030	0.039	0.043	0.046	0.048	0.051	0.052	0.054
74	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.006	0.029	0.036	0.040	0.042	0.044	0.046	0.048	0.049
75	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.013	0.031	0.035	0.039	0.041	0.042	0.045	0.046	0.048
76	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.020	0.032	0.036	0.038	0.040	0.042	0.043	0.046	0.046
77	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.004	0.026	0.032	0.037	0.038	0.040	0.042	0.043	0.045	0.046
78	0.012	0.024	0.024	0.034	0.036	0.026	0.022	0.001	0.001	0.001	0.013	0.030	0.034	0.038	0.038	0.041	0.042	0.043	0.045	0.046
79	0.024	0.021	0.014	0.036	0.042	0.030	0.032	0.032	0.005	0.001	0.023	0.032	0.035	0.037	0.039	0.041	0.044	0.045	0.047	0.047
80	0.027	0.029	0.016	0.026	0.033	0.041	0.037	0.036	0.025	0.014	0.027	0.033	0.037	0.037	0.038	0.041	0.042	0.045	0.046	0.048
81	0.027	0.035	0.032	0.028	0.025	0.029	0.042	0.035	0.027	0.027	0.031	0.034	0.036	0.036	0.037	0.041	0.042	0.044	0.046	0.048
82	0.030	0.036	0.038	0.032	0.026	0.020	0.016	0.018	0.023	0.029	0.032	0.035	0.036	0.038	0.037	0.039	0.041	0.043	0.045	0.047
83	0.040	0.041	0.039	0.036	0.029	0.023	0.012	0.005	0.010	0.023	0.033	0.037	0.037	0.038	0.039	0.040	0.041	0.043	0.045	0.046
84	0.043	0.035	0.037	0.033	0.026	0.018	0.007	0.007	0.006	0.022	0.041	0.047	0.049	0.049	0.048	0.046	0.046	0.045	0.045	0.043
85	0.032	0.031	0.036	0.039	0.029	0.014	0.010	0.009	0.012	0.010	0.014	0.016	0.018	0.020	0.024	0.027	0.029	0.031	0.032	0.035
86	0.015	0.023	0.030	0.031	0.023	0.013	0.012	0.011	0.011	0.007	0.008	0.008	0.008	0.007	0.007	0.007	0.007	0.007	0.006	0.006
87	0.004	0.007	0.010	0.010	0.008	0.007	0.007	0.011	0.011	0.008	0.007	0.007	0.007	0.007	0.007	0.005	0.006	0.005	0.007	0.007
88	0.000	0.000	0.000	0.000	0.000	0.002	0.005	0.010	0.012	0.008	0.007	0.005	0.007	0.006	0.005	0.005	0.004	0.004	0.004	0.005
89	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.008	0.010	0.009	0.008	0.007	0.007	0.006	0.006	0.005	0.004	0.004	0.004	0.004
90	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.006	0.010	0.010	0.009	0.008	0.007	0.007	0.006	0.005	0.004	0.005	0.004	0.005
91	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.007	0.008	0.009	0.008	0.007	0.007	0.007	0.007	0.007	0.005	0.005	0.004
92	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.006	0.008	0.007	0.007	0.007	0.008	0.007	0.007	0.006	0.007	0.004	0.005
93	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.002	0.007	0.008	0.007	0.009	0.007	0.008	0.007	0.007	0.007	0.005	0.004	0.004
94	0.004	0.004	0.001	0.003	0.002	0.004	0.003	0.006	0.007	0.008	0.007	0.009	0.010	0.010	0.010	0.010	0.007	0.007	0.004	0.004
95	0.010	0.010	0.009	0.010	0.007	0.009	0.007	0.010	0.011	0.011	0.009	0.011	0.012	0.012	0.012	0.012	0.010	0.009	0.005	0.004
96	0.014	0.014	0.014	0.014	0.012	0.012	0.010	0.012	0.014	0.014	0.012	0.014	0.013	0.014	0.014	0.015	0.013	0.012	0.006	0.004
97	0.016	0.016	0.016	0.016	0.015	0.014	0.012	0.012	0.013	0.012	0.012	0.015	0.016	0.016	0.017	0.018	0.015	0.012	0.007	0.005
98	0.019	0.018	0.017	0.016	0.015	0.014	0.012	0.012	0.013	0.010	0.010	0.012	0.015	0.017	0.018	0.018	0.016	0.012	0.010	0.009

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 19.05 SEC
GROUP 89 HREF = 0.206E-01

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	0.074	0.076	0.080	0.083	0.088	0.091	0.093	0.095	0.099	0.102	0.104	0.106	0.108	0.108	0.109	0.109	0.110	0.112	0.114	0.113
65	0.073	0.075	0.078	0.083	0.087	0.090	0.092	0.092	0.097	0.099	0.103	0.102	0.106	0.106	0.107	0.105	0.107	0.107	0.109	0.107
66	0.071	0.073	0.076	0.081	0.083	0.086	0.088	0.090	0.093	0.096	0.098	0.100	0.102	0.104	0.104	0.105	0.107	0.108	0.108	0.108
67	0.069	0.072	0.075	0.079	0.082	0.084	0.087	0.090	0.093	0.094	0.097	0.101	0.105	0.107	0.108	0.108	0.110	0.113	0.114	0.114
68	0.071	0.076	0.079	0.083	0.086	0.089	0.092	0.096	0.100	0.102	0.103	0.106	0.109	0.110	0.112	0.114	0.117	0.120	0.120	0.121
69	0.076	0.081	0.083	0.087	0.090	0.094	0.097	0.100	0.103	0.107	0.109	0.110	0.110	0.113	0.114	0.114	0.114	0.114	0.113	0.115
70	0.078	0.083	0.085	0.088	0.091	0.095	0.097	0.099	0.101	0.103	0.105	0.107	0.108	0.108	0.107	0.108	0.108	0.110	0.110	0.110
71	0.072	0.076	0.078	0.081	0.083	0.087	0.089	0.092	0.094	0.096	0.099	0.101	0.103	0.104	0.104	0.105	0.106	0.106	0.106	0.106
72	0.063	0.067	0.068	0.071	0.072	0.075	0.076	0.080	0.081	0.084	0.085	0.088	0.090	0.091	0.091	0.093	0.095	0.097	0.097	0.099
73	0.055	0.058	0.060	0.061	0.062	0.065	0.067	0.069	0.071	0.072	0.073	0.074	0.075	0.075	0.075	0.076	0.077	0.079	0.081	0.084
74	0.050	0.053	0.055	0.055	0.057	0.058	0.060	0.062	0.063	0.064	0.064	0.066	0.067	0.068	0.068	0.068	0.068	0.068	0.069	0.071
75	0.048	0.050	0.051	0.054	0.055	0.056	0.058	0.061	0.061	0.062	0.061	0.062	0.063	0.065	0.065	0.065	0.064	0.065	0.066	0.066
76	0.047	0.048	0.050	0.052	0.054	0.055	0.056	0.058	0.060	0.060	0.061	0.062	0.062	0.063	0.064	0.064	0.064	0.064	0.064	0.064
77	0.048	0.049	0.050	0.052	0.054	0.055	0.056	0.057	0.059	0.060	0.061	0.061	0.061	0.062	0.063	0.062	0.062	0.062	0.063	0.064
78	0.048	0.049	0.051	0.052	0.055	0.056	0.058	0.059	0.060	0.061	0.061	0.061	0.061	0.061	0.062	0.062	0.061	0.062	0.062	0.064
79	0.049	0.051	0.051	0.054	0.055	0.056	0.057	0.059	0.060	0.061	0.062	0.061	0.062	0.060	0.062	0.063	0.063	0.063	0.062	0.063
80	0.049	0.051	0.053	0.055	0.055	0.057	0.058	0.060	0.060	0.061	0.061	0.062	0.062	0.062	0.062	0.063	0.064	0.064	0.064	0.064
81	0.050	0.052	0.054	0.055	0.056	0.058	0.059	0.060	0.061	0.062	0.061	0.062	0.062	0.062	0.062	0.064	0.064	0.065	0.065	0.066
82	0.049	0.051	0.054	0.055	0.057	0.059	0.060	0.062	0.062	0.063	0.064	0.064	0.064	0.064	0.065	0.066	0.066	0.067	0.067	0.068
83	0.047	0.050	0.053	0.055	0.058	0.060	0.062	0.063	0.064	0.064	0.065	0.067	0.067	0.068	0.068	0.068	0.068	0.070	0.070	0.072
84	0.043	0.044	0.047	0.048	0.051	0.053	0.056	0.060	0.063	0.064	0.065	0.065	0.066	0.066	0.067	0.068	0.068	0.068	0.069	0.071
85	0.035	0.037	0.038	0.040	0.043	0.045	0.049	0.053	0.057	0.060	0.062	0.064	0.065	0.066	0.068	0.070	0.071	0.072	0.073	0.074
86	0.007	0.006	0.009	0.008	0.011	0.010	0.011	0.011	0.012	0.012	0.014	0.014	0.016	0.016	0.018	0.019	0.020	0.022	0.023	0.026
87	0.007	0.006	0.006	0.005	0.005	0.006	0.006	0.004	0.005	0.005	0.006	0.005	0.005	0.005	0.005	0.004	0.005	0.005	0.005	0.006
88	0.006	0.006	0.006	0.006	0.007	0.007	0.006	0.005	0.005	0.005	0.005	0.005	0.005	0.004	0.005	0.004	0.004	0.004	0.004	0.004
89	0.004	0.004	0.005	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.007	0.005	0.005	0.005	0.005	0.005	0.005	0.004	0.005	0.004
90	0.004	0.006	0.005	0.006	0.005	0.006	0.005	0.006	0.005	0.007	0.006	0.007	0.007	0.007	0.005	0.005	0.005	0.005	0.006	0.006
91	0.004	0.004	0.006	0.004	0.007	0.006	0.005	0.006	0.006	0.007	0.007	0.013	0.020	0.016	0.010	0.006	0.004	0.004	0.004	0.004
92	0.004	0.005	0.004	0.004	0.004	0.006	0.005	0.006	0.005	0.007	0.009	0.020	0.031	0.027	0.013	0.007	0.005	0.005	0.004	0.005
93	0.001	0.004	0.002	0.004	0.003	0.004	0.004	0.007	0.006	0.007	0.005	0.007	0.007	0.007	0.005	0.005	0.004	0.005	0.004	0.006
94	0.001	0.003	0.002	0.005	0.005	0.007	0.007	0.008	0.009	0.011	0.009	0.009	0.007	0.006	0.004	0.004	0.002	0.004	0.003	0.004
95	0.001	0.004	0.004	0.007	0.007	0.008	0.008	0.010	0.012	0.012	0.010	0.010	0.008	0.007	0.005	0.005	0.004	0.003	0.002	0.003
96	0.002	0.004	0.005	0.007	0.008	0.010	0.011	0.012	0.012	0.012	0.012	0.012	0.011	0.010	0.007	0.007	0.004	0.004	0.002	0.003
97	0.004	0.006	0.007	0.010	0.010	0.012	0.012	0.013	0.012	0.014	0.013	0.014	0.012	0.012	0.010	0.009	0.006	0.005	0.004	0.004
98	0.009	0.010	0.010	0.010	0.010	0.011	0.012	0.011	0.012	0.011	0.012	0.012	0.012	0.011	0.010	0.009	0.008	0.005	0.004	0.004

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 19.05 SEC
GROUP 89 HREF = 0.206E-01

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	0.111	0.108	0.108	0.108	0.109	0.110	0.107	0.104	0.101	0.100	0.100	0.098	0.097	0.088	0.059	0.025	0.010	0.004	0.002	0.002
65	0.107	0.106	0.109	0.108	0.108	0.106	0.105	0.103	0.101	0.100	0.099	0.098	0.096	0.091	0.082	0.060	0.030	0.012	0.006	0.004
66	0.107	0.106	0.106	0.108	0.108	0.107	0.106	0.107	0.106	0.105	0.103	0.102	0.100	0.100	0.097	0.091	0.075	0.048	0.022	0.009
67	0.115	0.116	0.116	0.119	0.122	0.122	0.120	0.119	0.119	0.119	0.120	0.119	0.118	0.117	0.114	0.111	0.107	0.098	0.072	0.037
68	0.122	0.124	0.126	0.126	0.126	0.125	0.126	0.126	0.126	0.126	0.126	0.124	0.123	0.123	0.122	0.122	0.119	0.114	0.103	0.080
69	0.116	0.117	0.118	0.119	0.119	0.118	0.118	0.120	0.121	0.122	0.123	0.125	0.125	0.123	0.123	0.124	0.124	0.122	0.120	0.114
70	0.110	0.111	0.110	0.110	0.110	0.112	0.112	0.112	0.112	0.114	0.116	0.118	0.121	0.122	0.121	0.123	0.126	0.127	0.126	0.126
71	0.107	0.108	0.109	0.110	0.110	0.109	0.109	0.109	0.108	0.110	0.113	0.114	0.116	0.117	0.117	0.120	0.123	0.125	0.126	0.126
72	0.099	0.102	0.102	0.103	0.105	0.106	0.105	0.106	0.108	0.109	0.110	0.110	0.111	0.112	0.111	0.111	0.110	0.111	0.111	0.111
73	0.085	0.086	0.088	0.090	0.091	0.093	0.094	0.097	0.097	0.098	0.098	0.100	0.101	0.102	0.100	0.100	0.100	0.102	0.103	0.103
74	0.072	0.073	0.074	0.075	0.076	0.077	0.078	0.079	0.081	0.082	0.084	0.085	0.086	0.086	0.086	0.086	0.088	0.091	0.092	0.093
75	0.067	0.067	0.068	0.069	0.068	0.068	0.068	0.068	0.068	0.069	0.070	0.071	0.071	0.072	0.072	0.074	0.074	0.075	0.077	0.079
76	0.065	0.066	0.066	0.067	0.067	0.066	0.066	0.066	0.066	0.065	0.065	0.066	0.065	0.066	0.067	0.068	0.069	0.069	0.070	0.069
77	0.064	0.064	0.065	0.064	0.065	0.065	0.065	0.065	0.065	0.064	0.064	0.064	0.066	0.066	0.067	0.068	0.068	0.068	0.069	0.069
78	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.063	0.064	0.064	0.064	0.065	0.065	0.066	0.067	0.068	0.068	0.068	0.069	0.071
79	0.064	0.064	0.065	0.065	0.065	0.065	0.065	0.064	0.064	0.063	0.064	0.064	0.065	0.065	0.066	0.067	0.068	0.069	0.071	0.072
80	0.065	0.066	0.065	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.067	0.066	0.067	0.067	0.068	0.068	0.069	0.070	0.071
81	0.066	0.067	0.068	0.068	0.068	0.068	0.068	0.068	0.068	0.068	0.068	0.069	0.069	0.069	0.069	0.071	0.071	0.071	0.071	0.072
82	0.068	0.068	0.069	0.069	0.069	0.069	0.069	0.069	0.069	0.069	0.069	0.069	0.070	0.070	0.071	0.071	0.072	0.072	0.073	0.073
83	0.072	0.073	0.074	0.074	0.074	0.074	0.073	0.073	0.072	0.072	0.071	0.071	0.070	0.070	0.070	0.071	0.071	0.072	0.072	0.072
84	0.072	0.073	0.074	0.074	0.075	0.075	0.076	0.076	0.076	0.076	0.076	0.076	0.076	0.076	0.075	0.075	0.075	0.075	0.075	0.075
85	0.074	0.075	0.075	0.076	0.076	0.075	0.075	0.074	0.074	0.072	0.072	0.072	0.072	0.072	0.072	0.073	0.074	0.075	0.076	0.077
86	0.027	0.030	0.031	0.033	0.036	0.036	0.037	0.037	0.038	0.039	0.041	0.041	0.042	0.043	0.045	0.045	0.045	0.046	0.047	0.048
87	0.007	0.005	0.006	0.005	0.006	0.005	0.006	0.005	0.006	0.004	0.006	0.004	0.005	0.004	0.005	0.005	0.005	0.005	0.006	0.005
88	0.005	0.005	0.005	0.004	0.002	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.003	0.003	0.003	0.002	0.002	0.000	0.002	0.002
89	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.003	0.004	0.004	0.004	0.003	0.003	0.002	0.003	0.002	0.002	0.001
90	0.005	0.004	0.005	0.005	0.004	0.005	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.003	0.003	0.002	0.003	0.000	0.000
91	0.004	0.004	0.004	0.004	0.004	0.004	0.005	0.005	0.005	0.004	0.004	0.007	0.007	0.006	0.004	0.003	0.002	0.000	0.000	0.000
92	0.004	0.005	0.004	0.005	0.004	0.005	0.004	0.005	0.004	0.005	0.007	0.018	0.025	0.018	0.008	0.004	0.000	0.001	0.001	0.001
93	0.005	0.006	0.005	0.006	0.005	0.005	0.004	0.005	0.004	0.004	0.004	0.007	0.009	0.007	0.004	0.003	0.002	0.002	0.000	0.001
94	0.004	0.005	0.004	0.007	0.004	0.006	0.004	0.005	0.004	0.005	0.004	0.004	0.002	0.004	0.003	0.003	0.001	0.002	0.001	0.001
95	0.002	0.004	0.004	0.005	0.004	0.006	0.005	0.006	0.005	0.004	0.004	0.003	0.004	0.004	0.003	0.004	0.002	0.003	0.003	0.001
96	0.002	0.004	0.003	0.004	0.004	0.004	0.004	0.005	0.004	0.004	0.004	0.004	0.002	0.004	0.003	0.004	0.002	0.004	0.002	0.003
97	0.002	0.003	0.002	0.003	0.002	0.004	0.004	0.005	0.004	0.004	0.004	0.004	0.004	0.004	0.003	0.004	0.003	0.004	0.002	0.003
98	0.003	0.002	0.002	0.002	0.003	0.003	0.004	0.004	0.005	0.004	0.005	0.004	0.004	0.004	0.004	0.004	0.003	0.002	0.003	0.002

NASA/KI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
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MAR 9,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 19.05 SEC
GROUP 89 HREF = 0.206E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
65	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
66	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
67	0.014	0.006	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
68	0.043	0.018	0.006	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
69	0.096	0.064	0.028	0.010	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
70	0.123	0.113	0.082	0.040	0.014	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
71	0.125	0.123	0.114	0.089	0.048	0.018	0.007	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
72	0.110	0.109	0.107	0.103	0.088	0.058	0.024	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73	0.103	0.101	0.100	0.100	0.097	0.091	0.069	0.036	0.012	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
74	0.093	0.092	0.094	0.093	0.095	0.094	0.092	0.078	0.050	0.019	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
75	0.079	0.080	0.082	0.084	0.084	0.085	0.085	0.084	0.078	0.057	0.027	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
76	0.071	0.072	0.072	0.073	0.074	0.076	0.076	0.076	0.076	0.072	0.058	0.032	0.010	0.001	0.001	0.001	0.001	0.001	0.001	0.001
77	0.069	0.069	0.071	0.071	0.073	0.074	0.074	0.074	0.074	0.072	0.071	0.062	0.040	0.015	0.003	0.003	0.003	0.003	0.003	0.003
78	0.072	0.073	0.074	0.075	0.076	0.076	0.076	0.076	0.075	0.075	0.075	0.074	0.068	0.049	0.023	0.007	0.007	0.007	0.007	0.007
79	0.073	0.074	0.075	0.076	0.076	0.076	0.078	0.079	0.079	0.078	0.078	0.079	0.078	0.075	0.061	0.035	0.012	0.003	0.003	0.003
80	0.072	0.074	0.074	0.075	0.074	0.075	0.076	0.077	0.077	0.078	0.078	0.078	0.078	0.080	0.078	0.071	0.050	0.023	0.004	0.004
81	0.071	0.073	0.073	0.075	0.076	0.077	0.077	0.078	0.078	0.078	0.077	0.077	0.077	0.078	0.078	0.079	0.075	0.061	0.034	0.011
82	0.073	0.073	0.074	0.074	0.075	0.075	0.075	0.076	0.077	0.078	0.078	0.078	0.078	0.078	0.079	0.079	0.081	0.078	0.069	0.046
83	0.072	0.073	0.074	0.075	0.074	0.074	0.074	0.074	0.075	0.076	0.077	0.079	0.080	0.080	0.080	0.080	0.079	0.078	0.076	0.071
84	0.074	0.074	0.074	0.073	0.074	0.074	0.074	0.074	0.075	0.076	0.076	0.077	0.079	0.080	0.081	0.082	0.082	0.081	0.079	0.077
85	0.077	0.078	0.078	0.078	0.079	0.078	0.079	0.079	0.079	0.078	0.078	0.078	0.078	0.079	0.080	0.081	0.082	0.081	0.081	0.080
86	0.049	0.050	0.052	0.054	0.056	0.059	0.061	0.062	0.064	0.066	0.068	0.069	0.071	0.072	0.074	0.074	0.074	0.073	0.073	0.072
87	0.005	0.005	0.005	0.005	0.007	0.007	0.008	0.008	0.008	0.007	0.007	0.010	0.014	0.016	0.018	0.016	0.016	0.014	0.015	0.014
88	0.002	0.002	0.002	0.002	0.002	0.001	0.002	0.001	0.002	0.002	0.001	0.000	0.004	0.004	0.006	0.005	0.005	0.004	0.004	0.003
89	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.002	0.004	0.004	0.004	0.003
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.003	0.004
91	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.001	0.001	0.001	0.000	0.003	0.004	0.004	0.004	0.004
92	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.000	0.000	0.008	0.018	0.019	0.010	0.004	0.001	0.001	0.001	0.004	0.004	0.003
93	0.001	0.001	0.001	0.000	0.000	0.001	0.000	0.001	0.000	0.004	0.008	0.009	0.004	0.002	0.000	0.003	0.002	0.004	0.003	0.004
94	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.000	0.003	0.000	0.002	0.001	0.002	0.002	0.003	0.004	0.005	0.005	0.004
95	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.001	0.002	0.002	0.004	0.004	0.006	0.006	0.007
96	0.000	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.004	0.007	0.006	0.007
97	0.001	0.002	0.002	0.002	0.001	0.002	0.001	0.002	0.000	0.000	0.000	0.001	0.000	0.001	0.000	0.004	0.004	0.006	0.006	0.007
98	0.003	0.001	0.001	0.000	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.000	0.001	0.000	0.003	0.005	0.009	0.009	0.010	0.010

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 19.05 SEC
GROUP 89 HREF = 0.206E-01

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
65	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
66	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
67	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
68	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
69	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
70	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
71	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
72	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
74	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
75	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
76	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
77	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
78	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
79	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
80	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
81	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
82	0.020	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
83	0.056	0.031	0.011	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
84	0.073	0.062	0.039	0.015	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
85	0.078	0.076	0.068	0.048	0.023	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
86	0.072	0.070	0.068	0.061	0.046	0.023	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
87	0.014	0.012	0.012	0.012	0.011	0.007	0.004	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
88	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
89	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.004	0.006	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91	0.004	0.004	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
92	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000
93	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
94	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	0.006	0.005	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
96	0.007	0.007	0.004	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97	0.007	0.007	0.004	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
98	0.010	0.010	0.007	0.004	0.002	0.002	0.002	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

NASA/RI 0H90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 19.05 SEC
HREF = 0.206E-01

GROUP 89

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
65	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
66	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
67	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
68	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
69	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
70	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
71	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
72	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
74	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
75	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
76	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
77	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
78	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
79	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
80	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
81	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
82	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
83	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
84	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
85	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
86	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
87	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
88	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
89	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
92	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004
93	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
94	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
96	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.001
97	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000
98	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

GROUP	* * * * TITLE TYPE	MODEL DESCRIPTION * * * * GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
90	RSI AFT	0.01	0.000	-0.06	30.06	0.053	23	28	29

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/F FT-1	HRFR BTU/FT2-SEC-R	INITIAL TEMP DEG R
7.94	212.38	1275.67	93.74	0.0228	3769.	0.204E-04	0.755E-07	0.102E+07	0.207E-01	537.7

IR CAMERA INFORMATION

MOUNTING LOCATION	260
F STOP	1.8
LENS-DEG	15
SENSITIVITY	500.
BLACK LEVEL VOLTAGE	1.3421
LINE SCAN PHI	90
MODEL EMISSIVITY	0.96
REF EMISSIVITY	0.94
WINDOW FACTOR	0.860

TIME RECORDS

LIFT OFF	0.00
CENTER LINE	1.00
IR SCAN TIME	21.46
DELTA TIME,SEC	20.90
PHOTO 1 TIME	2329
PHOTO 2 TIME	0
PHOTO 3 TIME	0
PHOTO 4 TIME	0

REFERENCE TARGET INFORMATION

TCR5	502.33
TCR6	-228.49

DIGITAL DATA AREA PRINTOUT LOCATION

LINE 29 THROUGH 98
POINT 1 THROUGH 110

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 90

IR SCAN TIME 20.90 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	1.021	1.023	1.021	1.018	1.020	1.021	1.020	1.020	1.018	1.021	1.018	1.014	1.017	1.020	1.017	1.015	1.017	1.015	1.017	1.014
30	1.023	1.023	1.021	1.021	1.023	1.018	1.020	1.015	1.018	1.017	1.018	1.017	1.017	1.017	1.017	1.015	1.015	1.014	1.015	1.014
31	1.023	1.021	1.020	1.020	1.018	1.018	1.018	1.017	1.018	1.017	1.018	1.017	1.015	1.014	1.015	1.014	1.015	1.014	1.014	1.012
32	1.021	1.023	1.020	1.021	1.020	1.021	1.018	1.018	1.015	1.017	1.015	1.015	1.014	1.015	1.014	1.015	1.014	1.015	1.015	1.018
33	1.021	1.020	1.020	1.018	1.017	1.017	1.015	1.014	1.014	1.012	1.014	1.015	1.014	1.012	1.014	1.015	1.017	1.017	1.018	1.017
34	1.020	1.020	1.018	1.017	1.015	1.014	1.014	1.012	1.012	1.012	1.012	1.012	1.014	1.015	1.014	1.015	1.017	1.018	1.018	1.018
35	1.018	1.015	1.015	1.011	1.014	1.009	1.012	1.011	1.014	1.012	1.015	1.014	1.017	1.014	1.017	1.017	1.017	1.014	1.011	1.004
36	1.015	1.015	1.015	1.014	1.014	1.014	1.015	1.015	1.017	1.017	1.017	1.018	1.015	1.015	1.014	1.009	1.006	0.999	0.994	0.986
37	1.015	1.014	1.017	1.017	1.017	1.017	1.017	1.017	1.017	1.017	1.018	1.017	1.012	1.007	1.002	0.995	0.990	0.986	0.986	0.984
38	1.018	1.018	1.018	1.018	1.017	1.018	1.018	1.018	1.018	1.014	1.011	1.006	1.001	0.994	0.988	0.986	0.986	0.984	0.986	0.986
39	1.018	1.020	1.018	1.021	1.018	1.018	1.017	1.014	1.007	1.004	0.995	0.994	0.986	0.986	0.986	0.988	0.984	0.986	0.986	0.988
40	1.021	1.021	1.021	1.018	1.017	1.012	1.007	1.001	0.995	0.990	0.990	0.988	0.988	0.988	0.990	0.988	0.988	0.986	0.988	0.988
41	1.020	1.023	1.015	1.014	1.006	1.001	0.994	0.992	0.988	0.988	0.986	0.990	0.988	0.990	0.988	0.990	0.988	0.990	0.988	0.990
42	1.018	1.015	1.001	1.001	0.988	0.994	0.984	0.992	0.986	0.990	0.986	0.990	0.984	0.990	0.988	0.990	0.990	0.992	0.990	0.992
43	1.009	1.004	0.995	0.995	0.994	0.994	0.990	0.994	0.990	0.992	0.990	0.992	0.992	0.992	0.990	0.992	0.988	0.994	0.990	0.994
44	1.001	0.999	0.997	0.999	0.995	0.997	0.995	0.995	0.994	0.995	0.995	0.995	0.992	0.997	0.995	0.997	0.995	1.001	1.006	1.014
45	1.004	1.004	1.002	1.004	1.001	1.002	1.001	1.001	0.999	0.999	0.997	1.004	0.999	1.001	1.001	1.004	1.006	1.033	1.096	1.147
46	1.007	1.006	1.006	1.007	1.004	1.006	1.004	1.004	1.002	1.004	1.002	1.004	1.004	1.006	1.004	1.007	1.014	1.067	1.163	1.229
47	1.009	1.007	1.007	1.007	1.011	1.006	1.007	1.006	1.011	1.006	1.006	1.006	1.006	1.007	1.009	1.009	1.020	1.084	1.186	1.248
48	1.009	1.009	1.009	1.007	1.009	1.007	1.007	1.007	1.006	1.007	1.007	1.007	1.007	1.009	1.009	1.011	1.028	1.111	1.213	1.266
49	1.009	1.011	1.002	1.011	1.004	1.009	1.002	1.007	1.004	1.007	1.004	1.009	1.007	1.009	1.009	1.012	1.042	1.136	1.217	1.260
50	1.007	1.007	1.006	1.007	1.004	1.007	1.004	1.006	1.004	1.006	1.006	1.006	1.006	1.007	1.004	1.012	1.044	1.130	1.190	1.222
51	1.004	1.004	1.002	1.002	1.001	1.002	0.999	1.002	0.999	1.002	0.999	1.004	1.001	1.002	1.004	1.014	1.064	1.136	1.174	1.193
52	0.995	0.994	0.994	0.992	0.990	0.992	0.988	0.992	0.992	0.992	0.986	0.992	0.992	0.994	0.994	1.017	1.091	1.156	1.181	1.193
53	0.988	0.988	0.986	0.984	0.984	0.982	0.984	0.982	0.982	0.982	0.982	0.982	0.984	0.984	0.986	1.011	1.088	1.149	1.173	1.185
54	0.984	0.982	0.980	0.978	0.978	0.976	0.976	0.976	0.976	0.976	0.978	0.978	0.980	0.980	0.982	1.017	1.094	1.140	1.156	1.167
55	0.980	0.978	0.978	0.976	0.976	0.976	0.974	0.978	0.974	0.976	0.976	0.976	0.978	0.978	0.984	1.026	1.100	1.135	1.147	1.155
56	0.980	0.972	0.980	0.969	0.978	0.969	0.978	0.967	0.976	0.976	0.978	0.976	0.978	0.980	0.992	1.045	1.111	1.136	1.146	1.152
57	0.982	0.982	0.980	0.980	0.978	0.980	0.976	0.978	0.976	0.976	0.976	0.980	0.974	0.982	0.995	1.068	1.121	1.140	1.147	1.154
58	0.986	0.984	0.982	0.982	0.982	0.984	0.980	0.982	0.982	0.982	0.982	0.982	0.982	0.988	1.012	1.083	1.126	1.142	1.149	1.155
59	0.988	0.988	0.988	0.988	0.986	0.986	0.986	0.988	0.986	0.988	0.986	0.988	0.988	0.992	1.030	1.102	1.132	1.142	1.149	1.155
60	0.992	0.992	0.990	0.992	0.990	0.992	0.990	0.990	0.990	0.992	0.990	0.992	0.992	1.004	1.055	1.113	1.135	1.144	1.150	1.155
61	0.997	0.995	0.995	0.992	0.994	0.992	0.992	0.992	0.992	0.992	0.992	0.995	0.994	1.007	1.071	1.120	1.136	1.144	1.149	1.155
62	0.995	0.999	0.995	0.997	0.992	0.994	0.994	0.994	0.994	0.994	0.995	0.994	0.997	1.021	1.083	1.123	1.136	1.144	1.149	1.155
63	0.995	0.994	0.994	0.990	0.990	0.988	0.990	0.990	0.992	0.992	0.992	0.992	0.995	1.026	1.091	1.124	1.136	1.143	1.149	1.154

NASA/RI OH90 TRANSITION TEST
V41b-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 20.90 SEC
INITIAL TEMP 537.7 DEG. R

GROUP 90

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	1.015	1.012	1.015	1.011	1.014	1.007	1.014	1.011	1.012	1.012	1.014	1.012	1.017	1.015	1.018	1.020	1.021	1.018	1.020	1.017
30	1.014	1.014	1.014	1.014	1.014	1.014	1.015	1.015	1.018	1.018	1.020	1.018	1.021	1.020	1.018	1.017	1.015	1.011	1.011	1.004
31	1.012	1.014	1.015	1.017	1.018	1.018	1.018	1.020	1.020	1.020	1.020	1.015	1.014	1.009	1.007	1.004	1.001	0.997	0.994	0.990
32	1.017	1.020	1.017	1.018	1.018	1.021	1.018	1.017	1.012	1.011	1.006	1.004	1.001	0.995	0.990	0.986	0.982	0.978	0.976	0.976
33	1.018	1.020	1.018	1.017	1.014	1.007	1.004	0.999	0.995	0.992	0.986	0.980	0.978	0.976	0.974	0.972	0.976	0.976	0.974	0.976
34	1.015	1.011	1.006	1.001	0.995	0.990	0.982	0.980	0.978	0.976	0.974	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976
35	1.001	0.994	0.988	0.982	0.980	0.978	0.980	0.978	0.980	0.978	0.980	0.978	0.978	0.978	0.978	0.978	0.980	0.978	0.980	0.978
36	0.984	0.978	0.980	0.976	0.980	0.978	0.980	0.978	0.980	0.978	0.980	0.978	0.980	0.982	0.982	0.982	0.982	0.984	0.982	0.982
37	0.982	0.984	0.982	0.982	0.984	0.982	0.982	0.984	0.982	0.982	0.982	0.984	0.982	0.982	0.980	0.974	0.984	0.974	0.984	0.976
38	0.984	0.984	0.984	0.984	0.986	0.984	0.986	0.986	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.986	0.984	0.984	0.984
39	0.986	0.988	0.986	0.988	0.986	0.988	0.986	0.988	0.986	0.986	0.986	0.988	0.986	0.988	0.986	0.988	0.986	0.986	0.988	0.986
40	0.988	0.990	0.988	0.988	0.988	0.990	0.990	0.988	0.990	0.990	0.990	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988
41	0.988	0.990	0.990	0.990	0.990	0.990	0.990	0.992	0.988	0.992	0.988	0.990	0.988	0.990	0.988	0.992	0.988	0.990	0.988	0.990
42	0.992	0.992	0.992	0.994	0.992	0.994	0.990	0.992	0.992	0.994	0.990	0.992	0.990	0.992	0.992	0.992	0.990	0.992	0.990	0.990
43	0.988	0.995	0.990	0.997	0.994	0.997	0.994	0.995	0.992	0.994	0.992	0.994	0.995	0.994	0.992	0.995	0.992	0.994	0.992	0.995
44	1.017	1.017	1.014	1.012	1.009	1.007	1.004	1.002	1.001	1.004	0.997	0.999	0.997	0.999	0.994	0.999	0.994	0.999	0.994	0.997
45	1.168	1.176	1.173	1.164	1.146	1.125	1.099	1.073	1.051	1.034	1.020	1.012	1.007	1.007	1.006	1.007	1.004	1.002	1.001	1.004
46	1.261	1.280	1.294	1.300	1.299	1.294	1.280	1.254	1.225	1.186	1.126	1.072	1.038	1.024	1.015	1.011	1.007	1.009	1.007	1.007
47	1.276	1.296	1.312	1.325	1.333	1.336	1.331	1.317	1.293	1.261	1.218	1.158	1.093	1.051	1.035	1.031	1.024	1.020	1.015	1.015
48	1.293	1.312	1.332	1.348	1.361	1.369	1.372	1.370	1.357	1.331	1.296	1.251	1.191	1.119	1.063	1.033	1.023	1.021	1.026	1.026
49	1.285	1.309	1.332	1.354	1.373	1.388	1.399	1.404	1.403	1.393	1.372	1.339	1.295	1.237	1.161	1.089	1.044	1.024	1.017	1.017
50	1.246	1.270	1.294	1.322	1.352	1.377	1.395	1.411	1.421	1.423	1.418	1.407	1.387	1.352	1.298	1.221	1.133	1.069	1.034	1.021
51	1.207	1.222	1.239	1.260	1.283	1.308	1.331	1.357	1.383	1.402	1.415	1.424	1.424	1.417	1.397	1.361	1.294	1.201	1.108	1.054
52	1.198	1.204	1.209	1.219	1.229	1.241	1.254	1.271	1.293	1.317	1.342	1.366	1.387	1.402	1.410	1.410	1.399	1.358	1.266	1.154
53	1.196	1.204	1.212	1.219	1.223	1.223	1.221	1.224	1.233	1.242	1.254	1.270	1.290	1.311	1.332	1.352	1.370	1.381	1.373	1.316
54	1.177	1.187	1.197	1.208	1.219	1.224	1.227	1.226	1.226	1.226	1.224	1.225	1.229	1.236	1.248	1.262	1.280	1.298	1.314	1.324
55	1.163	1.170	1.177	1.185	1.193	1.198	1.207	1.215	1.225	1.232	1.233	1.230	1.226	1.221	1.218	1.219	1.221	1.231	1.244	1.256
56	1.158	1.164	1.171	1.176	1.181	1.183	1.188	1.195	1.204	1.212	1.220	1.226	1.229	1.226	1.224	1.221	1.219	1.218	1.219	1.222
57	1.158	1.165	1.172	1.177	1.178	1.182	1.183	1.190	1.195	1.200	1.203	1.207	1.211	1.218	1.222	1.225	1.224	1.224	1.223	1.223
58	1.160	1.168	1.174	1.179	1.183	1.185	1.187	1.190	1.194	1.199	1.201	1.203	1.203	1.207	1.207	1.213	1.219	1.225	1.228	1.228
59	1.159	1.165	1.172	1.178	1.183	1.187	1.190	1.196	1.200	1.204	1.206	1.209	1.208	1.207	1.207	1.207	1.206	1.208	1.214	1.222
60	1.159	1.165	1.171	1.177	1.183	1.188	1.190	1.195	1.200	1.205	1.210	1.213	1.212	1.214	1.214	1.212	1.208	1.207	1.207	1.208
61	1.160	1.165	1.170	1.177	1.183	1.190	1.192	1.197	1.201	1.205	1.208	1.209	1.210	1.213	1.213	1.215	1.214	1.214	1.211	1.211
62	1.160	1.166	1.169	1.176	1.182	1.189	1.190	1.194	1.200	1.206	1.208	1.212	1.214	1.215	1.215	1.214	1.211	1.211	1.212	1.215
63	1.159	1.163	1.169	1.175	1.182	1.187	1.190	1.193	1.198	1.203	1.207	1.210	1.213	1.214	1.216	1.216	1.215	1.217	1.219	1.218

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 90

IR SCAN TIME 20.90 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	1.018	1.015	1.014	1.011	1.009	1.006	1.004	1.002	0.999	0.995	0.994	0.992	0.986	0.986	0.986	0.984	0.982	0.982	0.982	0.980
30	1.006	0.999	0.999	0.992	0.994	0.986	0.986	0.980	0.976	0.974	0.978	0.974	0.976	0.976	0.976	0.976	0.976	0.976	0.974	0.974
31	0.984	0.982	0.980	0.978	0.976	0.976	0.978	0.976	0.974	0.974	0.974	0.976	0.974	0.972	0.974	0.972	0.974	0.972	0.974	0.967
32	0.978	0.978	0.978	0.976	0.976	0.978	0.976	0.978	0.976	0.976	0.976	0.976	0.974	0.976	0.974	0.974	0.974	0.976	0.974	0.976
33	0.978	0.976	0.978	0.976	0.978	0.974	0.976	0.976	0.974	0.976	0.974	0.976	0.974	0.976	0.974	0.974	0.974	0.974	0.976	0.972
34	0.976	0.976	0.976	0.976	0.976	0.978	0.978	0.976	0.976	0.974	0.976	0.976	0.976	0.974	0.976	0.976	0.974	0.972	0.974	0.974
35	0.980	0.980	0.980	0.980	0.978	0.980	0.978	0.978	0.978	0.978	0.978	0.980	0.978	0.976	0.978	0.976	0.976	0.976	0.978	0.976
36	0.980	0.980	0.982	0.982	0.982	0.982	0.982	0.980	0.982	0.980	0.982	0.982	0.982	0.980	0.980	0.980	0.978	0.980	0.978	0.980
37	0.984	0.976	0.986	0.976	0.984	0.978	0.984	0.978	0.982	0.976	0.988	0.982	0.982	0.984	0.982	0.982	0.982	0.980	0.982	0.982
38	0.984	0.986	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.982	0.982	0.982	0.982	0.980	0.984	0.982	0.980	0.980	0.982	0.980
39	0.986	0.988	0.984	0.990	0.984	0.986	0.984	0.988	0.984	0.984	0.982	0.986	0.982	0.984	0.984	0.986	0.982	0.982	0.982	0.984
40	0.986	0.988	0.988	0.988	0.988	0.988	0.986	0.986	0.986	0.984	0.986	0.986	0.986	0.986	0.986	0.984	0.986	0.984	0.984	0.984
41	0.988	0.990	0.986	0.986	0.988	0.988	0.988	0.990	0.986	0.986	0.986	0.988	0.986	0.988	0.984	0.988	0.984	0.986	0.986	0.986
42	0.990	0.992	0.988	0.990	0.986	0.992	0.986	0.990	0.988	0.990	0.986	0.988	0.986	0.990	0.986	0.988	0.986	0.988	0.986	0.986
43	0.990	0.994	0.990	0.992	0.990	0.990	0.990	0.992	0.990	0.992	0.990	0.990	0.990	0.988	0.990	0.990	0.988	0.990	0.992	0.990
44	0.992	0.997	0.994	0.995	0.992	0.995	0.992	0.994	0.992	0.995	0.994	0.995	0.994	0.997	0.992	0.994	0.992	0.994	0.992	0.992
45	1.001	1.002	1.001	1.002	0.999	1.001	0.999	1.002	0.997	0.999	0.997	0.997	0.995	0.999	0.995	0.997	0.994	0.995	0.994	0.997
46	1.007	1.006	1.006	1.007	1.004	1.009	1.004	1.004	1.004	1.006	0.992	1.002	1.002	1.001	1.002	0.999	1.001	1.004	1.007	1.004
47	1.011	1.012	1.009	1.011	1.007	1.007	1.006	1.007	1.004	1.006	1.002	1.004	1.004	1.004	1.002	1.004	1.001	1.002	1.002	1.002
48	1.024	1.020	1.015	1.014	1.012	1.009	1.007	1.004	1.006	1.006	1.006	1.004	1.004	1.004	1.006	1.004	1.004	1.004	1.004	1.002
49	1.018	1.023	1.024	1.024	1.017	1.012	1.009	1.011	1.007	1.007	1.006	1.007	1.004	1.006	1.004	1.007	1.004	1.004	1.004	1.006
50	1.012	1.012	1.012	1.018	1.024	1.027	1.020	1.012	1.009	1.009	1.007	1.007	1.006	1.007	1.006	1.006	1.004	1.006	1.004	1.006
51	1.021	1.012	1.007	1.011	1.009	1.015	1.021	1.021	1.011	1.007	1.002	1.004	1.001	1.002	1.001	1.002	1.001	1.002	1.001	1.002
52	1.075	1.035	1.012	1.009	1.007	1.009	1.011	1.018	1.015	1.006	0.992	0.992	0.986	0.988	0.984	0.988	0.984	0.990	0.986	0.992
53	1.207	1.105	1.045	1.017	1.007	1.004	1.007	1.009	1.014	1.015	1.004	0.988	0.982	0.978	0.978	0.976	0.978	0.980	0.980	0.984
54	1.300	1.220	1.117	1.050	1.018	1.004	1.004	1.002	1.006	1.009	1.014	1.007	0.992	0.982	0.978	0.976	0.976	0.976	0.980	0.984
55	1.266	1.260	1.216	1.132	1.058	1.023	1.007	1.001	1.004	1.002	1.006	1.011	1.012	0.997	0.982	0.978	0.978	0.976	0.982	0.984
56	1.229	1.236	1.235	1.208	1.142	1.069	1.030	1.014	1.009	1.006	1.006	1.007	1.011	1.014	1.004	0.984	0.982	0.980	0.986	0.988
57	1.222	1.222	1.221	1.223	1.219	1.178	1.105	1.049	1.021	1.009	1.004	1.006	1.002	1.007	1.015	1.007	0.992	0.990	0.986	0.990
58	1.225	1.224	1.223	1.221	1.218	1.213	1.182	1.110	1.048	1.024	1.009	1.006	1.001	1.002	1.001	1.009	1.006	0.999	0.990	0.988
59	1.228	1.228	1.224	1.223	1.224	1.221	1.210	1.180	1.118	1.054	1.021	1.011	1.001	0.999	0.995	0.997	1.001	1.006	0.997	0.994
60	1.210	1.215	1.221	1.225	1.225	1.223	1.219	1.215	1.197	1.147	1.074	1.030	1.009	1.002	0.995	0.997	0.995	1.002	1.001	1.001
61	1.208	1.209	1.208	1.210	1.213	1.219	1.224	1.225	1.219	1.207	1.170	1.099	1.037	1.014	1.001	0.999	0.995	0.994	0.995	1.002
62	1.214	1.213	1.210	1.208	1.205	1.206	1.206	1.209	1.215	1.221	1.217	1.191	1.128	1.058	1.021	1.007	0.997	0.999	0.997	0.997
63	1.216	1.210	1.211	1.213	1.213	1.211	1.207	1.201	1.199	1.198	1.199	1.199	1.197	1.169	1.102	1.039	1.014	1.006	0.999	0.995

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 20.90 SEC
GROUP 90 INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.980	0.978	0.980	0.978	0.978	0.978	0.978	0.974	0.974	0.976	0.980	0.978	0.978	0.978	0.978	0.978	0.980	0.980	0.980	0.978
30	0.976	0.978	0.976	0.974	0.976	0.974	0.974	0.976	0.974	0.976	0.974	0.976	0.976	0.976	0.976	0.978	0.978	0.976	0.978	0.976
31	0.974	0.969	0.974	0.972	0.974	0.969	0.972	0.969	0.972	0.969	0.972	0.974	0.972	0.972	0.974	0.974	0.974	0.972	0.974	0.974
32	0.974	0.976	0.974	0.974	0.974	0.974	0.974	0.969	0.972	0.974	0.972	0.972	0.972	0.974	0.965	0.974	0.967	0.976	0.967	0.974
33	0.974	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.969	0.972	0.974	0.972	0.972	0.969	0.972	0.972	0.972	0.972
34	0.974	0.974	0.974	0.974	0.972	0.972	0.972	0.974	0.974	0.972	0.972	0.972	0.974	0.972	0.972	0.972	0.972	0.969	0.969	0.972
35	0.976	0.978	0.976	0.974	0.976	0.976	0.974	0.976	0.974	0.974	0.974	0.976	0.974	0.974	0.974	0.974	0.972	0.974	0.974	0.974
36	0.978	0.980	0.978	0.978	0.978	0.978	0.978	0.976	0.976	0.974	0.976	0.976	0.978	0.976	0.976	0.974	0.974	0.976	0.976	0.974
37	0.982	0.980	0.980	0.980	0.982	0.980	0.980	0.980	0.980	0.978	0.980	0.978	0.980	0.978	0.980	0.978	0.978	0.978	0.978	0.978
38	0.982	0.980	0.982	0.980	0.982	0.978	0.982	0.978	0.982	0.980	0.982	0.980	0.978	0.980	0.980	0.980	0.978	0.978	0.978	0.978
39	0.982	0.984	0.982	0.984	0.982	0.982	0.982	0.984	0.982	0.982	0.982	0.982	0.978	0.982	0.978	0.982	0.976	0.980	0.976	0.982
40	0.986	0.984	0.982	0.984	0.986	0.984	0.984	0.982	0.982	0.984	0.982	0.982	0.982	0.982	0.984	0.982	0.982	0.982	0.982	0.982
41	0.984	0.984	0.986	0.986	0.984	0.984	0.984	0.988	0.982	0.986	0.980	0.986	0.982	0.984	0.982	0.984	0.982	0.984	0.982	0.984
42	0.986	0.988	0.986	0.986	0.984	0.986	0.984	0.986	0.984	0.986	0.984	0.984	0.982	0.986	0.982	0.984	0.984	0.984	0.982	0.984
43	0.988	0.990	0.988	0.988	0.988	0.988	0.988	0.988	0.986	0.988	0.986	0.988	0.986	0.986	0.986	0.988	0.986	0.986	0.984	0.986
44	0.992	0.992	0.992	0.992	0.990	0.992	0.988	0.992	0.992	0.994	0.992	0.990	0.992	0.992	0.990	0.992	0.990	0.990	0.990	0.990
45	0.995	0.997	0.995	0.999	0.994	0.995	0.994	0.997	0.995	0.997	0.994	0.997	0.994	0.995	0.994	0.995	0.995	0.997	0.994	0.997
46	1.002	1.001	1.001	1.001	1.001	1.006	0.999	0.995	1.001	0.999	1.001	0.999	1.001	0.997	0.997	1.001	1.001	1.001	0.999	0.999
47	1.001	1.002	1.001	1.002	1.001	1.002	1.001	1.002	0.999	1.001	0.999	1.002	0.999	1.001	0.999	1.001	0.999	0.999	0.999	1.004
48	1.004	1.002	1.004	1.002	1.002	1.002	1.002	1.001	1.002	1.002	1.002	1.001	1.002	1.001	1.002	1.001	1.002	1.001	1.002	1.002
49	1.004	1.004	1.002	1.004	1.004	1.004	1.002	1.006	1.002	1.004	1.001	1.002	1.001	1.002	1.002	1.004	1.002	1.004	1.002	1.004
50	1.004	1.006	1.002	1.006	1.002	1.006	1.002	1.004	1.004	1.004	1.002	1.004	1.004	1.004	1.004	1.004	1.002	1.004	1.002	1.004
51	1.001	1.004	1.002	1.006	1.004	1.004	1.004	1.006	1.004	1.004	1.006	1.006	1.004	1.004	1.004	1.006	1.002	1.004	1.002	1.004
52	0.994	0.997	0.997	1.001	0.997	1.004	1.002	1.004	1.002	1.004	1.002	1.004	1.001	1.006	1.001	1.004	1.001	1.004	1.001	1.002
53	0.988	0.992	0.995	0.997	0.999	0.997	0.999	0.997	1.001	0.997	1.001	1.001	1.002	0.999	1.001	0.999	1.002	0.997	0.999	0.995
54	0.990	0.992	0.995	0.995	0.997	0.999	1.001	0.999	1.001	1.001	1.002	1.001	1.002	1.001	1.001	0.999	1.001	0.999	0.999	0.995
55	0.990	0.992	0.995	0.995	0.997	0.997	0.999	0.997	1.001	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.997	0.997	0.997
56	0.992	0.992	0.995	0.995	0.995	0.995	0.997	0.995	0.997	0.995	0.999	0.997	0.997	0.997	0.997	0.992	0.997	0.995	0.997	0.994
57	0.988	0.992	0.992	0.990	0.990	0.992	0.992	0.995	0.992	0.994	0.992	0.994	0.992	0.994	0.992	0.994	0.990	0.992	0.992	0.992
58	0.992	0.990	0.990	0.990	0.988	0.990	0.988	0.990	0.990	0.990	0.986	0.992	0.988	0.994	0.988	0.988	0.984	0.988	0.988	0.988
59	0.986	0.986	0.986	0.992	0.988	0.990	0.988	0.990	0.988	0.988	0.986	0.988	0.986	0.986	0.984	0.986	0.984	0.986	0.986	0.988
60	0.990	0.990	0.988	0.988	0.986	0.990	0.984	0.988	0.984	0.988	0.982	0.986	0.982	0.986	0.980	0.986	0.984	0.986	0.984	0.984
61	0.999	0.995	0.990	0.990	0.986	0.988	0.988	0.990	0.982	0.986	0.984	0.984	0.984	0.984	0.992	0.986	0.984	0.986	0.986	0.986
62	0.997	1.001	0.994	0.992	0.988	0.988	0.986	0.986	0.986	0.986	0.984	0.984	0.982	0.984	0.984	0.984	0.986	0.984	0.984	0.986
63	0.995	0.995	0.997	0.995	0.992	0.986	0.986	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.980	0.982	0.982	0.984	0.982	0.982

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 90

IR SCAN TIME 20.90 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.978	0.978	0.980	0.980	0.978	0.980	0.980	0.978	0.978	0.980	0.978	0.978	0.978	0.976	0.980	0.976	0.976	0.980	0.976	0.976
30	0.978	0.978	0.978	0.978	0.978	0.978	0.978	0.976	0.976	0.978	0.976	0.976	0.974	0.976	0.976	0.974	0.974	0.974	0.972	0.972
31	0.976	0.972	0.974	0.974	0.974	0.974	0.976	0.974	0.974	0.974	0.976	0.974	0.974	0.974	0.972	0.972	0.972	0.972	0.969	0.969
32	0.969	0.976	0.967	0.969	0.967	0.974	0.967	0.974	0.969	0.974	0.974	0.974	0.972	0.974	0.974	0.972	0.969	0.972	0.969	0.967
33	0.969	0.969	0.969	0.972	0.972	0.972	0.972	0.969	0.967	0.969	0.969	0.967	0.969	0.967	0.967	0.965	0.969	0.965	0.967	0.967
34	0.967	0.969	0.972	0.965	0.969	0.969	0.969	0.969	0.969	0.969	0.967	0.967	0.969	0.969	0.967	0.969	0.969	0.967	0.969	0.967
35	0.974	0.972	0.972	0.972	0.972	0.972	0.972	0.969	0.972	0.972	0.972	0.969	0.972	0.972	0.972	0.972	0.972	0.969	0.972	0.969
36	0.976	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.972	0.974	0.972	0.972	0.974	0.974	0.974	0.974	0.974	0.972
37	0.978	0.976	0.978	0.978	0.976	0.976	0.976	0.976	0.976	0.976	0.978	0.974	0.976	0.974	0.974	0.974	0.976	0.974	0.976	0.976
38	0.978	0.976	0.978	0.978	0.978	0.978	0.978	0.976	0.978	0.976	0.978	0.978	0.978	0.978	0.976	0.976	0.978	0.978	0.978	0.978
39	0.978	0.980	0.976	0.982	0.976	0.978	0.976	0.980	0.978	0.978	0.980	0.980	0.978	0.978	0.978	0.980	0.976	0.980	0.978	0.980
40	0.982	0.982	0.982	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.976	0.980	0.976	0.978	0.974	0.978	0.978	0.980	0.976
41	0.982	0.982	0.982	0.984	0.980	0.982	0.980	0.984	0.980	0.982	0.980	0.982	0.980	0.980	0.980	0.982	0.980	0.982	0.980	0.982
42	0.980	0.984	0.982	0.984	0.982	0.984	0.982	0.984	0.984	0.984	0.980	0.982	0.980	0.984	0.980	0.982	0.980	0.984	0.980	0.982
43	0.984	0.986	0.986	0.986	0.984	0.984	0.986	0.986	0.982	0.984	0.984	0.986	0.982	0.988	0.984	0.986	0.986	0.986	0.984	0.984
44	0.990	0.992	0.990	0.990	0.988	0.992	0.990	0.990	0.988	0.988	0.988	0.988	0.988	0.988	0.992	0.988	0.988	0.990	0.990	0.988	0.988
45	0.995	0.995	0.995	0.997	0.995	0.997	0.994	0.997	0.994	0.995	0.994	0.995	0.994	0.994	0.995	0.997	0.995	0.995	0.994	0.995
46	1.001	1.002	1.002	0.995	1.001	0.999	1.002	0.995	0.999	1.001	0.995	0.999	1.001	0.999	0.999	0.997	0.999	0.997	0.999	0.999
47	1.001	1.002	1.001	1.002	1.001	1.002	0.999	1.002	0.997	1.001	0.997	1.001	0.995	1.001	0.995	1.001	0.997	1.001	0.997	1.001
48	1.002	1.002	1.006	1.002	1.004	1.004	1.002	1.001	1.002	1.001	1.001	1.001	1.001	0.999	1.002	1.001	1.001	1.001	1.001	1.001
49	1.001	1.002	1.002	1.004	1.001	1.004	1.001	1.004	1.001	1.002	1.001	1.004	1.001	1.004	1.002	1.002	1.001	1.001	1.001	1.002
50	1.002	1.004	1.002	1.004	1.002	1.004	1.002	1.001	1.001	1.002	1.001	1.001	1.001	1.001	0.999	1.001	0.999	1.001	0.997	1.001
51	1.001	1.004	1.001	1.004	0.999	1.001	0.997	0.999	0.995	0.997	0.995	0.997	0.995	0.995	0.994	0.997	0.994	0.995	0.994	0.997
52	1.001	1.002	0.999	0.997	0.995	0.995	0.990	0.990	0.988	0.988	0.984	0.988	0.986	0.986	0.986	0.986	0.986	0.988	0.984	0.986
53	0.999	0.995	0.997	0.994	0.992	0.988	0.986	0.982	0.982	0.978	0.978	0.978	0.978	0.976	0.978	0.976	0.976	0.976	0.974	0.978
54	0.997	0.995	0.997	0.992	0.990	0.986	0.982	0.978	0.976	0.974	0.974	0.972	0.972	0.969	0.974	0.969	0.972	0.967	0.969	0.969
55	0.995	0.995	0.994	0.992	0.990	0.986	0.982	0.980	0.978	0.974	0.974	0.972	0.972	0.972	0.972	0.972	0.969	0.967	0.967	0.969
56	0.995	0.992	0.995	0.992	0.988	0.986	0.984	0.980	0.980	0.978	0.978	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.972
57	0.992	0.994	0.990	0.992	0.988	0.988	0.986	0.986	0.982	0.982	0.982	0.980	0.976	0.978	0.980	0.982	0.978	0.982	0.976	0.980
58	0.986	0.986	0.986	0.986	0.984	0.986	0.984	0.984	0.982	0.980	0.980	0.980	0.980	0.982	0.980	0.982	0.980	0.982	0.978	0.980
59	0.986	0.986	0.988	0.986	0.984	0.984	0.984	0.986	0.982	0.984	0.984	0.984	0.984	0.984	0.982	0.984	0.982	0.984	0.982	0.984
60	0.984	0.988	0.984	0.988	0.986	0.988	0.984	0.988	0.984	0.984	0.982	0.984	0.982	0.986	0.982	0.984	0.984	0.986	0.980	0.984
61	0.988	0.986	0.984	0.986	0.982	0.984	0.982	0.986	0.980	0.984	0.982	0.984	0.980	0.982	0.982	0.984	0.980	0.984	0.982	0.986
62	0.986	0.986	0.986	0.984	0.984	0.986	0.984	0.982	0.982	0.984	0.982	0.982	0.984	0.986	0.982	0.982	0.982	0.984	0.982	0.984
63	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.984	0.982	0.980	0.980	0.980	0.980	0.980	0.980	0.978	0.980	0.980	0.980	0.980

NASA/RI UH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
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VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 90

IR SCAN TIME 20.90 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.974	0.974	0.974	0.974	0.974	0.972	0.972	0.972	0.974	0.972
30	0.972	0.972	0.969	0.972	0.972	0.972	0.972	0.972	0.969	0.969
31	0.969	0.967	0.969	0.969	0.969	0.969	0.969	0.969	0.967	0.967
32	0.969	0.969	0.969	0.969	0.969	0.969	0.969	0.969	0.967	0.969
33	0.967	0.967	0.965	0.965	0.967	0.965	0.967	0.967	0.967	0.967
34	0.967	0.967	0.967	0.967	0.967	0.967	0.967	0.967	0.967	0.962
35	0.972	0.972	0.972	0.969	0.969	0.969	0.969	0.969	0.969	0.969
36	0.974	0.974	0.974	0.974	0.972	0.972	0.974	0.974	0.972	0.969
37	0.976	0.974	0.976	0.976	0.976	0.976	0.976	0.974	0.976	0.974
38	0.976	0.976	0.978	0.978	0.976	0.976	0.976	0.976	0.976	0.976
39	0.978	0.978	0.978	0.978	0.978	0.980	0.978	0.976	0.978	0.980
40	0.980	0.974	0.978	0.976	0.978	0.978	0.980	0.980	0.980	0.980
41	0.980	0.980	0.980	0.982	0.978	0.982	0.980	0.984	0.974	0.984
42	0.982	0.982	0.982	0.982	0.978	0.982	0.980	0.984	0.982	0.982
43	0.984	0.986	0.984	0.986	0.984	0.986	0.984	0.986	0.984	0.986
44	0.988	0.990	0.990	0.990	0.988	0.990	0.988	0.990	0.988	0.990
45	0.992	0.994	0.992	0.994	0.992	0.994	0.992	0.994	0.994	0.994
46	0.997	1.001	0.997	0.997	0.999	0.999	0.997	0.997	0.997	0.997
47	0.997	0.999	0.995	1.002	0.999	1.001	0.999	1.001	0.997	0.999
48	1.001	1.001	0.999	0.999	0.999	0.997	1.002	0.997	1.001	0.997
49	1.001	1.006	1.001	1.002	1.001	1.001	0.999	1.002	0.999	1.001
50	0.999	1.001	0.999	1.001	0.997	1.001	0.997	0.997	0.997	0.999
51	0.994	0.995	0.995	0.995	0.992	0.995	0.992	0.995	0.992	0.992
52	0.982	0.986	0.984	0.986	0.982	0.984	0.982	0.984	0.982	0.984
53	0.976	0.974	0.976	0.976	0.976	0.976	0.976	0.974	0.976	0.974
54	0.969	0.969	0.969	0.969	0.969	0.969	0.967	0.967	0.967	0.969
55	0.967	0.969	0.967	0.960	0.969	0.958	0.967	0.956	0.967	0.960
56	0.974	0.972	0.967	0.972	0.972	0.969	0.972	0.969	0.969	0.967
57	0.978	0.980	0.976	0.978	0.978	0.978	0.976	0.980	0.976	0.978
58	0.976	0.984	0.978	0.984	0.980	0.980	0.978	0.980	0.980	0.982
59	0.982	0.982	0.982	0.984	0.982	0.984	0.986	0.984	0.982	0.984
60	0.984	0.986	0.984	0.986	0.984	0.986	0.984	0.984	0.984	0.986
61	0.982	0.986	0.984	0.986	0.990	0.986	0.982	0.986	0.982	0.986
62	0.982	0.984	0.980	0.982	0.980	0.982	0.980	0.982	0.982	0.986
63	0.978	0.980	0.980	0.980	0.980	0.980	0.980	0.978	0.978	0.980

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 90

IR SCAN TIME 20.90 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.990	0.992	0.988	0.992	0.986	0.988	0.986	0.990	0.986	0.988	0.984	0.990	0.992	1.039	1.099	1.125	1.132	1.142	1.147	1.153
65	0.984	0.984	0.982	0.982	0.982	0.980	0.982	0.980	0.980	0.980	0.982	0.984	0.995	1.057	1.109	1.125	1.132	1.139	1.144	1.149
66	0.976	0.978	0.974	0.972	0.972	0.972	0.969	0.969	0.969	0.972	0.974	0.976	1.002	1.072	1.111	1.123	1.131	1.136	1.141	1.145
67	0.969	0.972	0.967	0.965	0.962	0.965	0.965	0.965	0.965	0.965	0.967	0.974	1.018	1.086	1.117	1.127	1.133	1.138	1.143	1.147
68	0.965	0.967	0.962	0.962	0.962	0.960	0.962	0.962	0.962	0.962	0.965	0.976	1.039	1.102	1.123	1.132	1.140	1.144	1.149	1.155
69	0.965	0.962	0.962	0.962	0.962	0.962	0.960	0.960	0.962	0.962	0.962	0.965	0.982	1.056	1.112	1.130	1.138	1.145	1.151	1.156	1.159
70	0.965	0.965	0.962	0.958	0.962	0.965	0.962	0.960	0.962	0.962	0.965	0.988	1.065	1.110	1.126	1.133	1.140	1.144	1.148	1.153
71	0.967	0.965	0.962	0.962	0.962	0.962	0.960	0.962	0.955	0.960	0.960	0.994	1.063	1.101	1.111	1.120	1.123	1.128	1.132	1.136
72	0.965	0.967	0.962	0.962	0.962	0.962	0.962	0.960	0.960	0.962	0.967	1.006	1.069	1.093	1.101	1.108	1.111	1.116	1.118	1.121
73	0.967	0.965	0.965	0.965	0.962	0.965	0.960	0.960	0.958	0.962	0.969	1.027	1.071	1.089	1.094	1.099	1.101	1.107	1.110	1.112
74	0.967	0.960	0.960	0.969	0.960	0.965	0.960	0.965	0.960	0.965	0.978	1.040	1.073	1.086	1.091	1.095	1.098	1.102	1.104	1.106
75	0.969	0.967	0.962	0.962	0.962	0.960	0.958	0.958	0.958	0.962	0.995	1.054	1.076	1.084	1.089	1.093	1.097	1.099	1.103	1.105
76	0.974	0.982	0.980	0.976	0.978	0.976	0.965	0.960	0.962	0.967	1.015	1.065	1.079	1.085	1.090	1.093	1.096	1.100	1.101	1.103
77	1.014	1.042	1.050	1.061	1.065	1.051	1.034	0.994	0.967	0.976	1.028	1.069	1.082	1.085	1.091	1.093	1.096	1.099	1.101	1.106
78	1.047	1.053	1.027	1.075	1.097	1.063	1.068	1.060	1.006	0.988	1.044	1.070	1.082	1.085	1.090	1.093	1.096	1.099	1.102	1.104
79	1.053	1.061	1.030	1.054	1.078	1.086	1.076	1.081	1.056	1.023	1.058	1.076	1.082	1.085	1.089	1.093	1.096	1.099	1.102	1.107
80	1.055	1.076	1.065	1.056	1.057	1.066	1.094	1.074	1.058	1.056	1.066	1.078	1.081	1.084	1.087	1.091	1.094	1.097	1.102	1.106
81	1.064	1.078	1.080	1.067	1.051	1.042	1.044	1.054	1.057	1.066	1.076	1.081	1.081	1.084	1.086	1.091	1.093	1.096	1.100	1.105
82	1.079	1.084	1.083	1.074	1.055	1.044	1.018	1.017	1.027	1.058	1.072	1.083	1.084	1.086	1.086	1.090	1.092	1.096	1.099	1.103
83	1.081	1.077	1.077	1.071	1.057	1.042	1.011	0.997	1.015	1.060	1.092	1.100	1.101	1.099	1.097	1.096	1.096	1.099	1.099	1.095
84	1.068	1.065	1.074	1.073	1.049	1.028	1.009	1.015	1.021	1.034	1.054	1.057	1.063	1.072	1.077	1.084	1.085	1.090	1.089	1.090
85	1.039	1.055	1.069	1.078	1.053	1.030	1.018	1.023	1.018	1.015	1.014	1.017	1.015	1.017	1.014	1.018	1.018	1.018	1.017	1.021
86	1.012	1.021	1.034	1.037	1.023	1.018	1.014	1.021	1.021	1.017	1.014	1.014	1.012	1.014	1.011	1.011	1.011	1.012	1.011	1.011
87	0.999	1.001	0.995	1.001	0.999	1.004	1.007	1.017	1.023	1.015	1.012	1.012	1.011	1.011	1.009	1.009	1.006	1.007	1.009	1.011
88	0.986	0.984	0.984	0.988	0.992	0.995	1.004	1.014	1.020	1.017	1.014	1.012	1.009	1.009	1.009	1.006	1.004	1.004	1.006	1.006
89	0.976	0.976	0.976	0.982	0.990	0.997	1.001	1.014	1.017	1.017	1.015	1.015	1.014	1.011	1.009	1.007	1.007	1.007	1.006	1.007
90	0.974	0.969	0.974	0.980	0.990	0.992	0.997	1.007	1.015	1.017	1.015	1.015	1.012	1.012	1.009	1.009	1.007	1.009	1.006	1.007
91	0.969	0.969	0.974	0.980	0.988	0.990	0.992	1.002	1.011	1.012	1.012	1.015	1.011	1.014	1.011	1.012	1.011	1.011	1.006	1.007
92	0.974	0.972	0.969	0.982	0.982	0.992	0.988	1.004	1.009	1.015	1.011	1.012	1.009	1.012	1.011	1.011	1.009	1.012	1.007	1.007
93	0.997	0.995	0.990	0.994	0.995	0.999	0.999	1.007	1.011	1.012	1.012	1.015	1.014	1.014	1.014	1.014	1.009	1.009	1.006	1.006
94	1.012	1.011	1.009	1.011	1.007	1.011	1.009	1.012	1.017	1.017	1.014	1.017	1.017	1.021	1.020	1.018	1.015	1.012	1.006	1.004
95	1.024	1.024	1.023	1.023	1.023	1.021	1.017	1.021	1.024	1.024	1.020	1.023	1.023	1.026	1.024	1.026	1.023	1.018	1.009	1.004
96	1.030	1.028	1.026	1.024	1.026	1.023	1.020	1.020	1.026	1.023	1.023	1.024	1.028	1.030	1.031	1.031	1.027	1.023	1.012	1.004
97	1.034	1.033	1.031	1.030	1.028	1.026	1.021	1.023	1.023	1.021	1.018	1.026	1.028	1.034	1.033	1.034	1.027	1.021	1.015	1.012
98	1.037	1.038	1.034	1.035	1.030	1.028	1.021	1.024	1.027	1.024	1.021	1.021	1.024	1.028	1.028	1.030	1.026	1.023	1.020	1.020

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 90

IR SCAN TIME 20.90 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	1.156	1.162	1.167	1.175	1.181	1.187	1.189	1.193	1.197	1.203	1.206	1.208	1.210	1.213	1.211	1.212	1.213	1.216	1.217	1.218
65	1.154	1.159	1.165	1.172	1.177	1.181	1.184	1.184	1.193	1.195	1.201	1.200	1.205	1.206	1.208	1.206	1.210	1.210	1.211	1.209
66	1.151	1.156	1.163	1.168	1.174	1.177	1.181	1.186	1.189	1.193	1.197	1.202	1.206	1.208	1.210	1.212	1.216	1.218	1.218	1.218
67	1.153	1.159	1.166	1.172	1.176	1.180	1.185	1.190	1.195	1.197	1.201	1.207	1.213	1.215	1.219	1.221	1.225	1.229	1.230	1.231
68	1.161	1.168	1.174	1.179	1.184	1.189	1.195	1.199	1.206	1.211	1.213	1.214	1.218	1.221	1.222	1.224	1.225	1.226	1.227	1.229
69	1.166	1.174	1.178	1.182	1.187	1.193	1.197	1.199	1.203	1.207	1.211	1.213	1.213	1.214	1.214	1.215	1.217	1.218	1.217	1.217
70	1.160	1.166	1.170	1.173	1.178	1.182	1.187	1.190	1.194	1.197	1.200	1.204	1.207	1.208	1.209	1.209	1.210	1.210	1.211	1.212
71	1.140	1.146	1.151	1.155	1.158	1.163	1.167	1.170	1.174	1.178	1.182	1.186	1.188	1.191	1.191	1.195	1.198	1.200	1.201	1.203
72	1.125	1.130	1.132	1.135	1.139	1.141	1.145	1.147	1.153	1.153	1.157	1.158	1.161	1.161	1.162	1.161	1.165	1.169	1.173	1.176
73	1.115	1.118	1.120	1.122	1.124	1.128	1.132	1.136	1.137	1.138	1.140	1.142	1.143	1.144	1.146	1.145	1.147	1.147	1.151	1.146
74	1.108	1.111	1.115	1.118	1.120	1.121	1.126	1.130	1.131	1.131	1.132	1.133	1.136	1.137	1.136	1.138	1.137	1.138	1.139	1.140
75	1.107	1.108	1.112	1.116	1.119	1.120	1.122	1.126	1.128	1.130	1.131	1.132	1.133	1.135	1.135	1.135	1.134	1.136	1.136	1.137
76	1.106	1.108	1.110	1.115	1.118	1.119	1.121	1.123	1.126	1.127	1.129	1.130	1.130	1.131	1.132	1.132	1.133	1.134	1.135	1.135
77	1.106	1.108	1.111	1.115	1.118	1.120	1.123	1.125	1.127	1.127	1.129	1.129	1.129	1.129	1.132	1.132	1.130	1.131	1.132	1.134
78	1.108	1.111	1.113	1.115	1.119	1.120	1.123	1.126	1.127	1.130	1.130	1.130	1.130	1.130	1.131	1.132	1.131	1.131	1.132	1.133
79	1.109	1.113	1.115	1.118	1.118	1.120	1.121	1.126	1.125	1.129	1.128	1.130	1.129	1.131	1.131	1.134	1.132	1.134	1.134	1.136
80	1.108	1.112	1.116	1.118	1.120	1.123	1.125	1.127	1.129	1.130	1.130	1.130	1.130	1.131	1.132	1.132	1.134	1.136	1.137	1.137
81	1.106	1.113	1.116	1.120	1.121	1.124	1.127	1.130	1.131	1.133	1.133	1.135	1.134	1.135	1.135	1.138	1.138	1.139	1.139	1.141
82	1.107	1.111	1.116	1.120	1.125	1.129	1.131	1.133	1.135	1.137	1.138	1.140	1.139	1.140	1.140	1.142	1.142	1.144	1.144	1.146
83	1.095	1.100	1.105	1.110	1.114	1.118	1.123	1.130	1.132	1.136	1.136	1.136	1.138	1.139	1.140	1.141	1.142	1.143	1.145	1.147
84	1.090	1.093	1.096	1.101	1.105	1.110	1.117	1.126	1.132	1.137	1.139	1.140	1.140	1.140	1.140	1.142	1.143	1.144	1.145	1.147
85	1.026	1.031	1.037	1.043	1.045	1.050	1.054	1.060	1.067	1.079	1.085	1.093	1.095	1.094	1.089	1.093	1.096	1.100	1.104	1.108
86	1.007	1.011	1.006	1.009	1.006	1.011	1.009	1.011	1.007	1.011	1.009	1.012	1.009	1.012	1.011	1.012	1.011	1.012	1.015	1.014
87	1.011	1.011	1.011	1.012	1.009	1.011	1.009	1.012	1.009	1.011	1.007	1.009	1.009	1.009	1.006	1.009	1.007	1.007	1.009	1.009
88	1.006	1.006	1.007	1.011	1.009	1.009	1.009	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.006	1.006	1.004	1.006
89	1.007	1.007	1.007	1.011	1.007	1.007	1.009	1.011	1.009	1.011	1.011	1.012	1.009	1.011	1.007	1.009	1.007	1.007	1.007	1.009
90	1.006	1.009	1.007	1.009	1.007	1.009	1.009	1.011	1.009	1.011	1.011	1.015	1.020	1.017	1.011	1.011	1.007	1.009	1.007	1.007
91	1.006	1.006	1.007	1.009	1.007	1.009	1.009	1.011	1.009	1.011	1.018	1.050	1.067	1.054	1.023	1.014	1.007	1.009	1.007	1.007
92	1.007	1.006	1.006	1.007	1.006	1.009	1.007	1.011	1.011	1.012	1.012	1.023	1.034	1.028	1.014	1.009	1.007	1.009	1.007	1.009
93	0.995	1.002	0.995	1.006	1.002	1.007	1.006	1.012	1.011	1.014	1.009	1.011	1.006	1.009	1.002	1.007	1.006	1.007	1.006	1.009
94	1.001	1.004	1.004	1.007	1.009	1.012	1.014	1.015	1.017	1.018	1.017	1.015	1.011	1.011	1.006	1.006	1.004	1.002	0.997	1.002
95	1.001	1.004	1.007	1.012	1.012	1.015	1.018	1.021	1.020	1.023	1.021	1.020	1.017	1.015	1.011	1.009	1.004	1.004	1.001	1.004
96	1.004	1.006	1.011	1.014	1.018	1.020	1.021	1.021	1.023	1.023	1.024	1.023	1.021	1.018	1.017	1.011	1.009	1.004	1.002	1.001
97	1.015	1.015	1.015	1.018	1.018	1.020	1.020	1.021	1.021	1.021	1.021	1.024	1.021	1.021	1.017	1.017	1.011	1.011	1.006	1.006
98	1.020	1.021	1.020	1.020	1.020	1.021	1.020	1.023	1.021	1.021	1.021	1.021	1.020	1.021	1.017	1.015	1.012	1.015	1.023	1.030

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 90

IR SCAN TIME 20.90 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	1.214	1.213	1.212	1.211	1.210	1.210	1.207	1.204	1.199	1.197	1.194	1.190	1.185	1.177	1.150	1.095	1.037	1.014	1.004	1.001
65	1.209	1.207	1.211	1.211	1.210	1.207	1.206	1.204	1.201	1.197	1.196	1.194	1.192	1.188	1.178	1.157	1.112	1.054	1.023	1.007
66	1.218	1.218	1.219	1.222	1.225	1.224	1.221	1.219	1.220	1.219	1.219	1.216	1.214	1.210	1.207	1.201	1.189	1.154	1.091	1.035
67	1.234	1.237	1.239	1.239	1.241	1.240	1.239	1.240	1.239	1.239	1.238	1.235	1.233	1.232	1.229	1.225	1.217	1.205	1.177	1.118
68	1.230	1.232	1.235	1.235	1.235	1.233	1.234	1.234	1.235	1.237	1.239	1.239	1.238	1.235	1.235	1.234	1.232	1.228	1.218	1.195
69	1.218	1.219	1.218	1.218	1.219	1.221	1.222	1.223	1.222	1.225	1.227	1.229	1.233	1.233	1.232	1.235	1.237	1.237	1.235	1.231
70	1.213	1.214	1.215	1.216	1.216	1.214	1.214	1.214	1.213	1.217	1.221	1.223	1.226	1.228	1.229	1.232	1.236	1.238	1.240	1.240
71	1.203	1.205	1.207	1.207	1.209	1.210	1.209	1.210	1.212	1.215	1.216	1.217	1.218	1.218	1.218	1.219	1.220	1.220	1.221	1.220
72	1.179	1.182	1.183	1.187	1.191	1.192	1.194	1.198	1.200	1.200	1.200	1.201	1.203	1.205	1.204	1.201	1.201	1.203	1.204	1.203
73	1.153	1.157	1.159	1.160	1.162	1.164	1.167	1.169	1.169	1.173	1.177	1.178	1.179	1.181	1.178	1.182	1.183	1.186	1.189	1.189
74	1.141	1.142	1.144	1.144	1.144	1.144	1.144	1.144	1.144	1.147	1.149	1.150	1.152	1.153	1.154	1.156	1.158	1.160	1.164	1.165
75	1.138	1.138	1.140	1.141	1.142	1.140	1.139	1.137	1.137	1.136	1.137	1.137	1.138	1.140	1.141	1.143	1.144	1.144	1.146	1.147
76	1.137	1.136	1.136	1.137	1.138	1.137	1.138	1.137	1.136	1.135	1.134	1.135	1.137	1.137	1.138	1.140	1.140	1.141	1.142	1.142
77	1.135	1.135	1.136	1.135	1.135	1.135	1.134	1.134	1.135	1.135	1.136	1.136	1.137	1.137	1.140	1.141	1.142	1.142	1.143	1.145
78	1.135	1.136	1.137	1.136	1.136	1.136	1.136	1.135	1.134	1.134	1.134	1.135	1.136	1.137	1.138	1.140	1.142	1.144	1.146	1.148
79	1.135	1.136	1.137	1.139	1.138	1.139	1.138	1.139	1.138	1.138	1.138	1.139	1.138	1.138	1.139	1.141	1.142	1.144	1.145	1.149
80	1.139	1.139	1.140	1.140	1.140	1.140	1.140	1.140	1.141	1.141	1.142	1.142	1.142	1.141	1.143	1.144	1.145	1.146	1.147	1.147
81	1.141	1.142	1.142	1.144	1.143	1.144	1.144	1.144	1.143	1.143	1.144	1.144	1.144	1.144	1.146	1.148	1.149	1.149	1.150	1.152
82	1.147	1.149	1.149	1.149	1.149	1.149	1.149	1.148	1.147	1.147	1.145	1.145	1.143	1.144	1.145	1.146	1.147	1.149	1.149	1.150
83	1.149	1.151	1.152	1.155	1.154	1.156	1.156	1.156	1.154	1.155	1.153	1.154	1.152	1.153	1.152	1.153	1.152	1.152	1.150	1.151
84	1.149	1.150	1.152	1.153	1.152	1.153	1.152	1.151	1.150	1.150	1.150	1.150	1.150	1.152	1.152	1.153	1.154	1.156	1.156	1.158
85	1.113	1.118	1.119	1.124	1.126	1.128	1.127	1.126	1.124	1.124	1.124	1.125	1.126	1.126	1.128	1.129	1.130	1.131	1.132	1.136
86	1.014	1.015	1.014	1.014	1.014	1.017	1.017	1.017	1.014	1.017	1.017	1.018	1.017	1.017	1.018	1.020	1.020	1.020	1.020	1.021
87	1.007	1.009	1.007	1.009	1.007	1.007	1.006	1.009	1.006	1.007	1.006	1.007	1.006	1.007	1.004	1.007	1.004	1.006	1.006	1.007
88	1.006	1.007	1.007	1.006	1.007	1.006	1.006	1.007	1.006	1.002	1.004	1.002	1.002	1.001	1.001	1.001	1.001	0.995	1.001	0.994
89	1.007	1.009	1.006	1.009	1.007	1.007	1.006	1.009	1.004	1.006	1.004	1.006	1.004	1.004	1.002	1.002	1.001	1.002	1.001	1.001
90	1.006	1.009	1.007	1.007	1.007	1.012	1.007	1.007	1.006	1.007	1.006	1.006	1.004	1.006	1.002	1.004	1.001	1.002	0.995	0.997
91	1.006	1.007	1.006	1.007	1.006	1.007	1.007	1.009	1.007	1.009	1.015	1.037	1.043	1.027	1.012	1.006	0.999	1.001	0.999	1.002
92	1.007	1.009	1.007	1.009	1.007	1.009	1.007	1.007	1.006	1.007	1.011	1.028	1.037	1.026	1.009	1.001	0.995	0.997	0.997	0.999
93	1.007	1.009	1.007	1.011	1.009	1.011	1.007	1.009	1.007	1.009	1.006	1.007	1.006	1.006	1.001	1.002	1.001	1.002	0.999	0.999
94	1.001	1.007	1.004	1.007	1.006	1.011	1.007	1.009	1.006	1.007	1.004	1.004	1.002	1.006	1.004	1.004	1.002	1.002	0.999	1.001
95	1.001	1.004	1.002	1.007	1.006	1.007	1.006	1.007	1.006	1.004	1.004	1.004	1.002	1.004	1.004	1.006	1.001	1.002	0.997	1.002
96	1.002	1.001	1.001	1.002	1.004	1.004	1.004	1.006	1.007	1.006	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.001	1.002	0.999
97	1.002	1.004	1.002	1.004	1.004	1.006	1.004	1.007	1.007	1.009	1.004	1.007	1.006	1.007	1.006	1.007	1.004	1.004	1.002	1.006
98	1.020	1.011	1.004	1.004	1.002	1.006	1.006	1.007	1.009	1.011	1.007	1.007	1.007	1.007	1.006	1.006	1.006	1.004	1.002	1.001

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 20.90 SEC
GROUP 90 INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.995	0.995	0.992	0.999	0.997	0.992	0.984	0.982	0.980	0.980	0.978	0.978	0.978	0.980	0.980	0.980	0.978	0.982	0.980	0.982
65	1.001	0.995	0.994	0.990	0.995	0.997	0.990	0.980	0.978	0.976	0.974	0.974	0.974	0.978	0.974	0.976	0.976	0.974	0.976	0.976
66	1.014	1.002	0.995	0.994	0.992	0.992	0.999	0.992	0.978	0.969	0.967	0.967	0.967	0.967	0.967	0.965	0.965	0.967	0.967	0.967
67	1.050	1.018	1.002	0.994	0.994	0.986	0.992	0.990	0.992	0.976	0.965	0.958	0.962	0.958	0.960	0.958	0.962	0.958	0.962	0.960
68	1.144	1.077	1.031	1.007	0.997	0.995	0.994	0.992	0.992	0.992	0.978	0.965	0.960	0.955	0.955	0.952	0.955	0.955	0.952	0.952
69	1.221	1.190	1.122	1.050	1.015	1.001	0.997	0.994	0.992	0.990	0.992	0.984	0.967	0.955	0.952	0.950	0.950	0.950	0.950	0.950
70	1.238	1.233	1.213	1.158	1.078	1.026	1.007	0.997	0.994	0.992	0.990	0.990	0.988	0.976	0.960	0.952	0.947	0.950	0.950	0.947
71	1.218	1.214	1.208	1.197	1.165	1.102	1.039	1.011	0.997	0.992	0.988	0.988	0.986	0.988	0.978	0.962	0.952	0.950	0.947	0.950
72	1.202	1.200	1.197	1.195	1.189	1.172	1.125	1.058	1.017	0.999	0.990	0.988	0.986	0.986	0.986	0.980	0.967	0.958	0.952	0.950
73	1.190	1.189	1.189	1.188	1.188	1.186	1.174	1.139	1.077	1.024	1.006	0.992	0.988	0.986	0.990	0.986	0.980	0.974	0.960	0.944
74	1.165	1.164	1.169	1.170	1.174	1.172	1.173	1.165	1.145	1.093	1.037	1.001	0.992	0.984	0.988	0.980	0.984	0.984	0.978	0.967
75	1.147	1.149	1.151	1.152	1.155	1.156	1.157	1.156	1.153	1.138	1.100	1.045	1.011	0.995	0.990	0.988	0.986	0.986	0.984	0.982
76	1.142	1.143	1.144	1.145	1.148	1.149	1.149	1.148	1.147	1.145	1.138	1.110	1.059	1.015	0.999	0.992	0.986	0.984	0.984	0.986
77	1.147	1.149	1.150	1.151	1.156	1.155	1.154	1.152	1.153	1.152	1.150	1.144	1.128	1.084	1.034	1.006	0.992	0.988	0.984	0.986
78	1.149	1.151	1.153	1.156	1.158	1.156	1.158	1.160	1.161	1.159	1.159	1.158	1.155	1.144	1.114	1.059	1.017	0.999	0.988	0.984
79	1.150	1.153	1.154	1.155	1.153	1.154	1.156	1.159	1.159	1.159	1.159	1.160	1.160	1.160	1.155	1.139	1.095	1.042	1.006	0.992
80	1.149	1.152	1.153	1.153	1.157	1.159	1.160	1.159	1.161	1.160	1.160	1.158	1.158	1.158	1.159	1.157	1.147	1.112	1.056	1.012
81	1.149	1.150	1.151	1.155	1.155	1.156	1.155	1.158	1.158	1.159	1.159	1.160	1.159	1.160	1.159	1.162	1.161	1.153	1.122	1.070
82	1.150	1.153	1.152	1.154	1.153	1.155	1.153	1.154	1.154	1.158	1.159	1.162	1.162	1.162	1.160	1.160	1.159	1.157	1.149	1.131
83	1.149	1.149	1.149	1.150	1.150	1.152	1.152	1.153	1.153	1.157	1.158	1.160	1.162	1.165	1.164	1.165	1.163	1.162	1.157	1.153
84	1.157	1.158	1.157	1.158	1.158	1.156	1.156	1.158	1.156	1.157	1.156	1.156	1.156	1.159	1.162	1.165	1.167	1.164	1.160	1.159
85	1.137	1.140	1.141	1.144	1.146	1.149	1.152	1.154	1.154	1.156	1.158	1.160	1.160	1.163	1.163	1.165	1.163	1.163	1.160	1.160
86	1.023	1.024	1.027	1.026	1.027	1.033	1.037	1.040	1.043	1.045	1.047	1.051	1.056	1.061	1.066	1.074	1.072	1.074	1.074	1.075
87	1.004	1.006	1.006	1.006	1.007	1.007	1.007	1.011	1.006	1.004	1.002	1.009	1.014	1.021	1.023	1.021	1.014	1.011	1.009	1.007
88	0.999	0.995	0.997	0.990	0.994	0.990	0.995	0.994	0.997	0.995	0.997	0.995	0.999	0.999	1.001	1.002	1.006	1.007	1.007	1.006
89	0.995	0.995	0.997	0.999	0.997	0.997	0.995	0.997	0.995	0.997	0.997	0.997	0.995	0.997	0.997	1.002	1.001	1.004	1.002	1.006
90	0.995	1.001	0.999	0.999	0.995	0.999	0.997	1.001	0.999	0.999	0.997	0.999	0.997	0.997	1.001	1.009	1.009	1.009	1.006	1.007
91	0.999	1.001	0.999	1.001	0.999	1.001	0.999	0.999	0.997	1.011	1.026	1.027	1.011	1.002	0.999	1.002	1.002	1.004	1.004	1.007
92	0.997	0.997	0.995	0.997	0.997	1.001	0.997	0.999	0.999	1.014	1.031	1.031	1.014	1.006	1.001	1.002	1.002	1.006	1.004	1.006
93	0.997	0.997	0.997	0.997	0.997	0.999	0.997	0.999	0.997	1.001	0.999	1.002	1.001	1.001	0.999	1.004	1.004	1.007	1.007	1.007
94	0.997	0.999	0.995	0.997	0.995	0.997	0.994	0.995	0.995	1.001	0.999	1.001	1.001	1.001	1.001	1.006	1.007	1.011	1.011	1.012
95	0.995	0.999	0.994	0.997	0.994	0.997	0.995	0.997	0.994	0.997	0.994	0.997	0.995	0.999	0.999	1.007	1.009	1.014	1.012	1.017
96	1.001	0.999	1.001	0.999	0.999	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.999	0.999	1.004	1.007	1.012	1.011
97	1.001	1.004	1.001	1.002	1.001	1.002	1.001	1.004	1.001	1.002	1.001	1.001	0.999	1.001	1.004	1.011	1.015	1.018	1.018	1.021
98	1.001	1.004	1.001	1.002	1.001	1.001	0.999	1.001	1.001	1.004	1.001	1.002	1.002	1.004	1.006	1.017	1.021	1.023	1.023	1.023

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 90

IR SCAN TIME 20.90 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.980	0.982	0.980	0.980	0.978	0.980	0.978	0.978	0.978	0.980	0.976	0.978	0.978	0.980	0.976	0.978	0.976	0.978	0.976	0.978
65	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.969	0.972	0.972	0.972	0.972	0.974	0.974	0.972	0.969	0.972	0.972	0.972	0.969
66	0.965	0.965	0.967	0.967	0.967	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.962	0.962
67	0.962	0.960	0.962	0.960	0.960	0.960	0.960	0.960	0.958	0.960	0.960	0.960	0.960	0.960	0.958	0.960	0.960	0.958	0.960	0.958
68	0.955	0.950	0.952	0.950	0.952	0.950	0.952	0.950	0.952	0.950	0.952	0.950	0.952	0.947	0.952	0.947	0.952	0.952	0.955	0.952
69	0.950	0.950	0.950	0.947	0.950	0.950	0.950	0.947	0.947	0.947	0.947	0.947	0.944	0.950	0.944	0.947	0.947	0.947	0.947	0.935
70	0.947	0.950	0.950	0.950	0.950	0.947	0.947	0.947	0.947	0.947	0.947	0.947	0.944	0.947	0.944	0.944	0.947	0.944	0.944	0.944
71	0.947	0.947	0.944	0.950	0.947	0.944	0.947	0.947	0.947	0.947	0.947	0.947	0.944	0.944	0.944	0.947	0.944	0.944	0.947	0.944
72	0.950	0.947	0.947	0.950	0.947	0.947	0.947	0.947	0.944	0.944	0.947	0.947	0.941	0.947	0.944	0.947	0.947	0.944	0.944	0.944
73	0.947	0.950	0.947	0.947	0.958	0.947	0.947	0.950	0.947	0.944	0.947	0.935	0.950	0.944	0.944	0.947	0.944	0.947	0.944	0.947
74	0.958	0.950	0.952	0.947	0.950	0.944	0.947	0.947	0.947	0.947	0.944	0.944	0.944	0.947	0.947	0.947	0.947	0.947	0.947	0.944
75	0.978	0.962	0.955	0.947	0.950	0.944	0.947	0.944	0.947	0.944	0.950	0.941	0.947	0.944	0.950	0.950	0.947	0.947	0.947	0.947
76	0.988	0.984	0.976	0.965	0.958	0.950	0.950	0.950	0.947	0.950	0.947	0.947	0.947	0.947	0.944	0.947	0.944	0.941	0.947	0.944
77	0.984	0.986	0.986	0.984	0.978	0.965	0.958	0.952	0.950	0.947	0.947	0.947	0.947	0.947	0.947	0.947	0.947	0.947	0.947	0.947
78	0.984	0.986	0.984	0.988	0.990	0.986	0.982	0.972	0.962	0.955	0.950	0.947	0.947	0.947	0.947	0.947	0.947	0.947	0.947	0.947
79	0.984	0.982	0.982	0.986	0.984	0.984	0.984	0.984	0.982	0.980	0.974	0.967	0.960	0.958	0.952	0.952	0.950	0.950	0.950	0.950
80	0.992	0.984	0.982	0.986	0.984	0.984	0.984	0.984	0.982	0.984	0.984	0.984	0.982	0.978	0.972	0.972	0.965	0.962	0.960	0.958
81	1.021	1.001	0.990	0.988	0.982	0.984	0.982	0.984	0.982	0.984	0.982	0.986	0.986	0.986	0.984	0.986	0.982	0.982	0.982	0.978
82	1.086	1.037	1.002	0.992	0.982	0.984	0.980	0.982	0.978	0.982	0.980	0.986	0.984	0.986	0.984	0.982	0.982	0.986	0.984	0.984
83	1.138	1.104	1.050	1.014	0.995	0.988	0.984	0.986	0.982	0.986	0.986	0.988	0.986	0.986	0.984	0.988	0.978	0.984	0.978	0.984
84	1.154	1.144	1.117	1.069	1.023	1.002	0.990	0.990	0.988	0.992	0.992	0.992	0.990	0.990	0.984	0.986	0.986	0.986	0.984	0.984
85	1.156	1.153	1.144	1.126	1.084	1.035	1.004	0.995	0.992	0.992	0.994	0.995	0.994	0.995	0.992	0.992	0.990	0.992	0.988	0.988
86	1.073	1.073	1.069	1.067	1.056	1.035	1.012	1.002	0.997	1.001	0.997	0.997	0.994	0.994	0.990	0.992	0.992	0.992	0.992	0.992
87	1.006	1.004	1.001	0.999	1.001	1.001	1.001	1.002	1.006	1.007	1.002	0.999	0.992	0.992	0.992	0.992	0.990	0.992	0.990	0.994
88	1.004	1.001	0.997	0.992	0.995	0.994	0.992	0.992	0.992	0.994	0.994	0.992	0.992	0.990	0.992	0.992	0.992	0.990	0.992	0.992
89	1.001	1.001	0.995	0.995	0.992	0.992	0.990	0.994	0.990	0.992	0.990	0.994	0.992	0.995	0.992	0.994	0.992	0.992	0.992	0.994
90	1.011	1.012	1.002	0.997	0.992	0.994	0.992	0.992	0.990	0.994	0.992	0.992	0.992	0.994	0.990	0.992	0.990	0.992	0.990	0.992
91	1.004	1.004	0.997	0.997	0.994	0.994	0.992	0.992	0.992	0.992	0.992	0.992	0.990	0.992	0.992	0.992	0.990	0.992	0.990	0.994
92	1.004	1.002	0.995	0.995	0.992	0.992	0.988	0.990	0.992	0.992	0.990	0.988	0.990	0.988	0.990	0.990	0.992	0.990	0.994	0.990	0.992
93	1.004	1.002	0.995	0.995	0.992	0.992	0.992	0.994	0.990	0.992	0.990	0.992	0.992	0.992	0.990	0.994	0.990	0.994	0.992	0.994
94	1.011	1.011	1.004	1.001	0.997	0.997	0.994	0.994	0.992	0.994	0.990	0.992	0.990	0.995	0.992	0.995	0.992	0.995	0.994	0.995
95	1.014	1.014	1.007	1.006	1.001	0.999	0.999	0.999	0.999	0.997	0.997	0.999	0.997	0.997	0.995	0.999	0.997	0.997	0.997	0.999
96	1.014	1.011	1.009	1.001	1.001	0.997	0.997	0.997	0.999	0.999	1.001	0.999	0.999	0.997	0.999	0.997	0.999	0.997	0.999	0.997
97	1.018	1.018	1.011	1.006	1.001	1.001	0.997	1.001	0.997	0.999	1.001	1.001	0.995	0.999	0.995	1.001	0.995	0.999	0.995	0.999
98	1.023	1.023	1.015	1.009	1.004	1.004	1.001	1.002	1.001	1.004	1.002	1.002	1.002	1.002	0.999	1.001	0.999	1.001	0.999	1.001

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 90

IR SCAN TIME 20.90 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.976	0.980	0.974	0.976	0.976	0.980	0.974	0.978	0.972	0.978
65	0.969	0.972	0.969	0.972	0.969	0.969	0.969	0.972	0.969	0.969
66	0.962	0.962	0.965	0.962	0.965	0.962	0.962	0.962	0.965	0.962
67	0.958	0.958	0.960	0.958	0.958	0.958	0.958	0.958	0.958	0.958
68	0.955	0.952	0.952	0.950	0.952	0.950	0.950	0.950	0.952	0.952
69	0.947	0.941	0.947	0.939	0.947	0.941	0.947	0.939	0.947	0.939
70	0.941	0.944	0.947	0.944	0.944	0.944	0.944	0.944	0.944	0.944
71	0.941	0.944	0.941	0.947	0.944	0.947	0.944	0.947	0.944	0.947
72	0.944	0.944	0.944	0.944	0.944	0.947	0.947	0.944	0.947	0.944
73	0.944	0.944	0.941	0.944	0.950	0.944	0.944	0.935	0.947	0.944
74	0.944	0.944	0.941	0.947	0.944	0.944	0.944	0.944	0.947	0.944
75	0.947	0.947	0.947	0.947	0.950	0.950	0.947	0.944	0.944	0.947
76	0.947	0.941	0.944	0.939	0.944	0.941	0.944	0.941	0.944	0.944
77	0.947	0.947	0.947	0.947	0.947	0.947	0.947	0.947	0.944	0.947
78	0.947	0.947	0.947	0.947	0.947	0.947	0.947	0.947	0.944	0.950
79	0.950	0.950	0.947	0.950	0.947	0.950	0.947	0.950	0.947	0.950
80	0.955	0.952	0.950	0.947	0.950	0.947	0.947	0.947	0.947	0.947
81	0.972	0.969	0.965	0.965	0.960	0.960	0.958	0.958	0.950	0.952
82	0.962	0.984	0.980	0.982	0.980	0.980	0.972	0.972	0.965	0.967
83	0.976	0.982	0.976	0.984	0.980	0.986	0.980	0.984	0.980	0.982
84	0.982	0.984	0.982	0.982	0.982	0.984	0.982	0.984	0.984	0.984
85	0.986	0.988	0.986	0.986	0.984	0.984	0.984	0.984	0.984	0.986
86	0.990	0.992	0.992	0.992	0.990	0.988	0.990	0.990	0.990	0.990
87	0.992	0.994	0.992	0.994	0.994	0.994	0.994	0.995	0.995	0.994
88	0.992	0.994	0.992	0.992	0.992	0.995	0.995	0.995	0.994	0.995
89	0.992	0.994	0.994	0.995	0.995	0.995	0.995	0.995	0.997	0.995
90	0.992	0.995	0.990	0.994	0.992	0.995	0.992	0.997	0.992	0.999
91	0.990	0.992	0.990	0.994	0.992	0.992	0.992	0.994	0.992	0.994
92	0.990	0.994	0.990	0.994	0.992	0.992	0.992	0.995	0.994	0.995
93	0.994	0.995	0.995	0.997	0.995	0.995	0.995	0.997	0.995	0.995
94	0.995	0.997	0.995	0.997	0.995	0.997	0.995	0.999	0.995	0.999
95	0.997	0.997	0.997	0.997	0.995	0.997	0.995	0.999	0.997	0.999
96	0.997	0.995	0.997	0.995	0.997	0.999	0.997	0.999	0.999	0.999
97	0.995	0.997	0.992	0.997	0.994	0.997	0.995	1.001	0.999	1.001
98	0.999	1.001	0.999	1.001	0.999	1.004	1.001	1.004	1.002	1.004

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 20.90 SEC
GROUP 90 HREF = 0.207E-01

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	0.010	0.010	0.010	0.008	0.009	0.010	0.009	0.009	0.008	0.010	0.008	0.006	0.008	0.009	0.008	0.007	0.008	0.007	0.008	0.006
30	0.010	0.010	0.010	0.010	0.010	0.008	0.009	0.007	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.007	0.007	0.006	0.007	0.006
31	0.010	0.010	0.009	0.009	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.007	0.006	0.007	0.006	0.007	0.006	0.006	0.005
32	0.010	0.010	0.009	0.010	0.009	0.010	0.008	0.008	0.007	0.008	0.007	0.007	0.006	0.007	0.006	0.007	0.006	0.007	0.007	0.008
33	0.010	0.009	0.009	0.008	0.008	0.008	0.007	0.006	0.006	0.005	0.006	0.007	0.006	0.005	0.006	0.007	0.008	0.008	0.008	0.008
34	0.009	0.009	0.008	0.008	0.007	0.006	0.006	0.005	0.005	0.005	0.005	0.005	0.006	0.007	0.006	0.007	0.008	0.008	0.008	0.008
35	0.008	0.007	0.007	0.005	0.006	0.004	0.005	0.005	0.006	0.005	0.007	0.006	0.008	0.006	0.008	0.008	0.008	0.006	0.005	0.002
36	0.007	0.007	0.007	0.006	0.006	0.006	0.007	0.007	0.008	0.008	0.008	0.008	0.007	0.007	0.006	0.004	0.003	0.003	0.003	0.003
37	0.007	0.006	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.005	0.003	0.001	0.001	0.001	0.001	0.001	0.001
38	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.006	0.005	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	0.008	0.009	0.008	0.010	0.008	0.008	0.008	0.006	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
40	0.010	0.010	0.010	0.008	0.008	0.005	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.009	0.010	0.007	0.006	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	0.008	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	0.004	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.006
45	0.002	0.002	0.001	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.000	0.000	0.002	0.003	0.015	0.045	0.072
46	0.003	0.003	0.003	0.003	0.002	0.003	0.002	0.002	0.001	0.002	0.001	0.002	0.002	0.003	0.002	0.003	0.006	0.031	0.081	0.120
47	0.004	0.003	0.003	0.003	0.005	0.003	0.003	0.003	0.005	0.003	0.003	0.003	0.003	0.003	0.004	0.004	0.009	0.039	0.094	0.132
48	0.004	0.004	0.004	0.003	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.004	0.005	0.013	0.053	0.110	0.144
49	0.004	0.005	0.001	0.005	0.002	0.004	0.001	0.003	0.002	0.003	0.002	0.004	0.003	0.004	0.004	0.005	0.019	0.066	0.113	0.140
50	0.003	0.003	0.003	0.003	0.002	0.003	0.002	0.003	0.002	0.003	0.003	0.003	0.003	0.003	0.002	0.005	0.020	0.063	0.097	0.116
51	0.002	0.002	0.001	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.000	0.001	0.002	0.006	0.029	0.066	0.087	0.098
52	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008	0.043	0.077	0.091	0.098
53	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.005	0.041	0.073	0.086	0.094
54	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.008	0.044	0.068	0.077	0.083
55	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.011	0.047	0.066	0.072	0.077
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.021	0.053	0.066	0.072	0.075
57	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.031	0.058	0.068	0.072	0.076
58	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.005	0.039	0.060	0.069	0.073	0.077
59	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.013	0.048	0.064	0.069	0.073	0.077
60	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.025	0.054	0.066	0.071	0.074	0.076
61	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.033	0.058	0.066	0.071	0.073	0.077
62	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.010	0.039	0.059	0.066	0.071	0.073	0.077
63	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.011	0.043	0.060	0.066	0.070	0.073	0.076

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 20.90 SEC
GROUP 90 HREF = 0.207E-01

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	0.007	0.005	0.007	0.005	0.006	0.003	0.006	0.005	0.005	0.005	0.006	0.005	0.008	0.007	0.008	0.009	0.010	0.008	0.009	0.008
30	0.006	0.006	0.006	0.006	0.006	0.006	0.007	0.007	0.008	0.008	0.009	0.008	0.010	0.009	0.008	0.008	0.007	0.005	0.005	0.002
31	0.005	0.006	0.007	0.008	0.008	0.008	0.008	0.009	0.009	0.009	0.009	0.007	0.006	0.004	0.003	0.002	0.000	0.000	0.000	0.000
32	0.008	0.009	0.008	0.008	0.008	0.010	0.008	0.008	0.005	0.005	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.008	0.009	0.008	0.008	0.006	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
34	0.007	0.005	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
44	0.008	0.008	0.006	0.005	0.004	0.003	0.002	0.001	0.000	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
45	0.084	0.088	0.087	0.081	0.072	0.060	0.047	0.034	0.023	0.015	0.009	0.005	0.003	0.003	0.003	0.003	0.002	0.001	0.000	0.002
46	0.141	0.154	0.164	0.168	0.167	0.164	0.154	0.136	0.117	0.094	0.061	0.033	0.017	0.011	0.007	0.005	0.003	0.004	0.003	0.003
47	0.151	0.165	0.177	0.186	0.193	0.195	0.191	0.181	0.163	0.141	0.113	0.078	0.043	0.023	0.016	0.014	0.011	0.009	0.007	0.007
48	0.163	0.177	0.192	0.204	0.214	0.221	0.224	0.222	0.211	0.191	0.165	0.134	0.097	0.057	0.029	0.015	0.010	0.010	0.011	0.011
49	0.158	0.174	0.191	0.209	0.225	0.237	0.247	0.252	0.250	0.242	0.224	0.197	0.164	0.125	0.080	0.042	0.020	0.011	0.008	0.008
50	0.131	0.147	0.164	0.184	0.207	0.227	0.244	0.258	0.267	0.268	0.264	0.254	0.236	0.207	0.166	0.115	0.065	0.032	0.015	0.010
51	0.106	0.116	0.127	0.140	0.156	0.173	0.191	0.211	0.233	0.249	0.262	0.270	0.270	0.263	0.245	0.214	0.163	0.103	0.052	0.024
52	0.101	0.105	0.108	0.114	0.120	0.128	0.136	0.148	0.163	0.181	0.200	0.219	0.236	0.249	0.257	0.257	0.247	0.212	0.144	0.076
53	0.100	0.105	0.109	0.114	0.116	0.117	0.115	0.117	0.122	0.129	0.136	0.147	0.161	0.176	0.192	0.208	0.222	0.231	0.225	0.179
54	0.089	0.095	0.101	0.107	0.114	0.117	0.119	0.118	0.118	0.116	0.117	0.117	0.120	0.125	0.132	0.142	0.154	0.166	0.178	0.185
55	0.081	0.085	0.089	0.094	0.098	0.101	0.106	0.112	0.118	0.122	0.123	0.121	0.118	0.115	0.113	0.114	0.115	0.122	0.130	0.138
56	0.078	0.081	0.085	0.088	0.091	0.093	0.096	0.099	0.105	0.109	0.114	0.118	0.120	0.118	0.117	0.115	0.114	0.113	0.114	0.116
57	0.078	0.082	0.086	0.089	0.090	0.092	0.093	0.096	0.099	0.102	0.104	0.107	0.109	0.113	0.116	0.117	0.117	0.117	0.117	0.116
58	0.079	0.084	0.087	0.090	0.092	0.093	0.095	0.097	0.099	0.102	0.103	0.104	0.104	0.106	0.107	0.110	0.114	0.117	0.119	0.119
59	0.079	0.082	0.086	0.090	0.092	0.095	0.097	0.100	0.103	0.105	0.106	0.108	0.107	0.107	0.107	0.106	0.106	0.107	0.111	0.116
60	0.079	0.082	0.085	0.089	0.092	0.095	0.097	0.099	0.102	0.106	0.108	0.110	0.110	0.111	0.111	0.110	0.107	0.107	0.106	0.107
61	0.079	0.082	0.085	0.089	0.093	0.096	0.098	0.101	0.103	0.105	0.107	0.108	0.108	0.110	0.110	0.111	0.111	0.111	0.109	0.109
62	0.079	0.083	0.085	0.088	0.092	0.096	0.097	0.099	0.102	0.106	0.107	0.110	0.111	0.111	0.111	0.111	0.109	0.109	0.109	0.111
63	0.079	0.081	0.084	0.088	0.092	0.095	0.097	0.098	0.101	0.104	0.107	0.109	0.110	0.111	0.112	0.112	0.112	0.113	0.114	0.113

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 20.90 SEC
GROUP 90 HREF = 0.207E-01

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	0.008	0.007	0.006	0.005	0.004	0.003	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
30	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
44	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
45	0.000	0.001	0.000	0.001	0.001	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
46	0.003	0.003	0.003	0.003	0.002	0.004	0.002	0.002	0.002	0.003	0.003	0.001	0.001	0.000	0.001	0.001	0.000	0.002	0.003	0.002
47	0.005	0.005	0.004	0.005	0.003	0.003	0.003	0.003	0.002	0.003	0.001	0.002	0.002	0.002	0.001	0.002	0.000	0.001	0.001	0.001
48	0.011	0.009	0.007	0.006	0.005	0.004	0.003	0.002	0.003	0.003	0.003	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.001
49	0.008	0.010	0.011	0.011	0.008	0.005	0.004	0.005	0.003	0.003	0.003	0.003	0.002	0.003	0.002	0.003	0.002	0.002	0.002	0.003
50	0.005	0.005	0.005	0.008	0.011	0.012	0.009	0.005	0.004	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.003	0.002	0.003
51	0.010	0.005	0.003	0.005	0.004	0.007	0.010	0.010	0.005	0.003	0.001	0.002	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.001
52	0.035	0.016	0.005	0.004	0.003	0.004	0.005	0.008	0.007	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
53	0.106	0.050	0.021	0.008	0.003	0.002	0.003	0.004	0.006	0.007	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
54	0.168	0.114	0.056	0.023	0.008	0.002	0.002	0.001	0.003	0.004	0.006	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
55	0.144	0.140	0.112	0.064	0.027	0.010	0.003	0.000	0.002	0.001	0.003	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
56	0.120	0.125	0.124	0.107	0.069	0.032	0.013	0.006	0.004	0.003	0.003	0.003	0.005	0.006	0.002	0.002	0.002	0.002	0.002	0.002
57	0.116	0.116	0.115	0.116	0.114	0.090	0.050	0.022	0.010	0.004	0.002	0.003	0.001	0.003	0.007	0.003	0.003	0.003	0.003	0.003
58	0.118	0.117	0.116	0.115	0.113	0.110	0.092	0.052	0.022	0.011	0.004	0.003	0.000	0.001	0.000	0.004	0.003	0.003	0.003	0.003
59	0.119	0.119	0.117	0.116	0.117	0.115	0.108	0.091	0.056	0.024	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.003
60	0.109	0.112	0.115	0.117	0.118	0.116	0.114	0.112	0.101	0.072	0.034	0.013	0.004	0.001	0.001	0.001	0.001	0.001	0.000	0.000
61	0.107	0.108	0.107	0.108	0.110	0.114	0.117	0.117	0.114	0.107	0.065	0.047	0.016	0.006	0.000	0.000	0.000	0.000	0.000	0.001
62	0.111	0.110	0.109	0.107	0.106	0.106	0.106	0.108	0.111	0.115	0.113	0.097	0.062	0.027	0.010	0.003	0.003	0.003	0.003	0.003
63	0.112	0.109	0.109	0.110	0.110	0.109	0.106	0.103	0.102	0.101	0.102	0.102	0.101	0.085	0.048	0.018	0.006	0.003	0.003	0.003

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 20.90 SEC
GROUP 90 HREF = 0.207E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
30	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
44	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
45	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
46	0.001	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
47	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.002
48	0.002	0.001	0.002	0.001	0.001	0.001	0.001	0.000	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.001
49	0.002	0.002	0.001	0.002	0.002	0.002	0.001	0.003	0.001	0.002	0.000	0.001	0.000	0.001	0.001	0.002	0.001	0.002	0.001	0.002
50	0.002	0.003	0.001	0.003	0.001	0.003	0.001	0.002	0.002	0.002	0.001	0.002	0.001	0.002	0.002	0.001	0.002	0.001	0.002	0.002
51	0.000	0.002	0.001	0.003	0.002	0.002	0.002	0.003	0.002	0.002	0.003	0.003	0.002	0.002	0.002	0.003	0.001	0.002	0.001	0.002
52	0.003	0.003	0.003	0.000	0.000	0.002	0.001	0.002	0.001	0.002	0.001	0.002	0.000	0.003	0.000	0.002	0.000	0.002	0.000	0.001
53	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.001	0.001	0.001	0.001
54	0.003	0.003	0.003	0.003	0.003	0.003	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
55	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
57	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
58	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
59	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
60	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
61	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
62	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
63	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 20.90 SEC
HREF = 0.207E-01

GROUP 90

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
30	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
44	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
45	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
46	0.000	0.001	0.001	0.001	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
47	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48	0.001	0.001	0.003	0.001	0.002	0.002	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000
49	0.000	0.001	0.001	0.002	0.000	0.002	0.000	0.002	0.000	0.001	0.000	0.002	0.000	0.002	0.001	0.001	0.000	0.000	0.000	0.001
50	0.001	0.002	0.001	0.002	0.001	0.002	0.001	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
51	0.000	0.002	0.000	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
53	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
55	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
57	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
58	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
59	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
60	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
61	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
62	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
63	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 20.90 SEC
HREF = 0.207E-01

GROUP 90

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
30	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
44	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
45	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
46	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
47	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000
48	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000
49	0.000	0.003	0.000	0.001	0.000	0.000	0.000	0.001	0.001	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
51	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
53	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
55	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
57	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
58	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
59	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
60	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
61	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
62	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
63	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 20.90 SEC
HREF = 0.207E-01

GROUP 90

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.018	0.047	0.060	0.064	0.069	0.072	0.076
65	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.026	0.052	0.060	0.064	0.068	0.071	0.073
66	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.033	0.053	0.059	0.063	0.066	0.069	0.071
67	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.008	0.040	0.056	0.061	0.065	0.067	0.070	0.072
68	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.018	0.048	0.059	0.064	0.068	0.071	0.073	0.076
69	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.026	0.054	0.063	0.067	0.071	0.074	0.077	0.079
70	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.030	0.052	0.060	0.065	0.068	0.071	0.073	0.075
71	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.029	0.048	0.053	0.058	0.059	0.062	0.064	0.066
72	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.003	0.032	0.043	0.048	0.051	0.053	0.055	0.057	0.058
73	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.012	0.033	0.042	0.044	0.047	0.048	0.051	0.052	0.054
74	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.018	0.034	0.040	0.043	0.045	0.046	0.048	0.049	0.050
75	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.024	0.035	0.039	0.042	0.044	0.046	0.047	0.049	0.050
76	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.007	0.030	0.037	0.040	0.042	0.043	0.045	0.047	0.048	0.049
77	0.006	0.019	0.023	0.028	0.030	0.023	0.015	0.015	0.015	0.015	0.013	0.032	0.038	0.040	0.043	0.043	0.045	0.047	0.048	0.050
78	0.021	0.024	0.012	0.035	0.046	0.029	0.031	0.028	0.003	0.003	0.020	0.032	0.038	0.040	0.042	0.043	0.045	0.047	0.048	0.049
79	0.024	0.028	0.013	0.024	0.036	0.040	0.035	0.038	0.026	0.010	0.027	0.035	0.038	0.040	0.042	0.044	0.045	0.047	0.048	0.051
80	0.025	0.035	0.030	0.026	0.026	0.030	0.044	0.034	0.027	0.026	0.030	0.036	0.038	0.039	0.041	0.043	0.044	0.046	0.048	0.050
81	0.029	0.036	0.037	0.031	0.023	0.019	0.020	0.024	0.026	0.030	0.035	0.038	0.038	0.039	0.040	0.043	0.043	0.045	0.047	0.050
82	0.037	0.039	0.039	0.034	0.025	0.020	0.008	0.008	0.012	0.027	0.033	0.039	0.039	0.040	0.040	0.042	0.043	0.045	0.047	0.049
83	0.036	0.036	0.036	0.033	0.026	0.019	0.005	0.005	0.007	0.028	0.043	0.047	0.048	0.047	0.046	0.045	0.045	0.047	0.047	0.045
84	0.031	0.030	0.034	0.034	0.022	0.013	0.004	0.007	0.010	0.015	0.024	0.026	0.029	0.033	0.036	0.039	0.040	0.042	0.042	0.042
85	0.018	0.025	0.032	0.036	0.024	0.013	0.008	0.010	0.008	0.007	0.006	0.008	0.007	0.008	0.006	0.008	0.008	0.008	0.008	0.010
86	0.005	0.010	0.015	0.016	0.010	0.008	0.006	0.010	0.010	0.008	0.006	0.006	0.005	0.006	0.005	0.005	0.005	0.005	0.005	0.005
87	0.000	0.000	0.000	0.000	0.000	0.002	0.003	0.008	0.010	0.007	0.005	0.005	0.005	0.005	0.004	0.004	0.003	0.003	0.004	0.005
88	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.006	0.009	0.008	0.006	0.005	0.004	0.004	0.004	0.003	0.002	0.002	0.003	0.003
89	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.008	0.008	0.007	0.007	0.006	0.005	0.004	0.003	0.003	0.003	0.003	0.003
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.007	0.008	0.007	0.007	0.005	0.005	0.004	0.004	0.003	0.004	0.003	0.003
91	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.005	0.005	0.005	0.007	0.005	0.006	0.005	0.005	0.005	0.005	0.003	0.003
92	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.004	0.007	0.005	0.005	0.004	0.005	0.005	0.005	0.004	0.005	0.003	0.003
93	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.005	0.005	0.005	0.007	0.006	0.006	0.006	0.006	0.004	0.004	0.003	0.003
94	0.005	0.005	0.004	0.005	0.003	0.005	0.004	0.005	0.008	0.008	0.006	0.008	0.008	0.010	0.009	0.008	0.007	0.005	0.003	0.002
95	0.011	0.011	0.010	0.010	0.010	0.010	0.008	0.010	0.011	0.011	0.009	0.010	0.010	0.011	0.011	0.011	0.010	0.008	0.004	0.002
96	0.013	0.013	0.011	0.011	0.011	0.010	0.009	0.009	0.011	0.010	0.010	0.011	0.013	0.013	0.014	0.014	0.012	0.010	0.005	0.002
97	0.015	0.015	0.014	0.013	0.013	0.011	0.010	0.010	0.010	0.010	0.008	0.011	0.013	0.015	0.015	0.015	0.012	0.010	0.007	0.005
98	0.016	0.017	0.015	0.016	0.013	0.013	0.010	0.011	0.012	0.011	0.010	0.010	0.011	0.013	0.013	0.013	0.011	0.010	0.009	0.009

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 20.90 SEC
GROUP 90 HREF = 0.207E-01

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	0.077	0.080	0.083	0.088	0.091	0.095	0.096	0.098	0.101	0.104	0.106	0.107	0.108	0.110	0.109	0.109	0.110	0.112	0.113	0.113
65	0.076	0.079	0.082	0.086	0.089	0.091	0.093	0.093	0.098	0.099	0.103	0.102	0.106	0.106	0.107	0.106	0.109	0.108	0.109	0.108
66	0.074	0.077	0.081	0.084	0.087	0.069	0.091	0.094	0.096	0.098	0.100	0.103	0.106	0.107	0.108	0.109	0.112	0.113	0.113	0.113
67	0.076	0.079	0.083	0.086	0.088	0.091	0.093	0.097	0.099	0.101	0.103	0.107	0.110	0.112	0.114	0.115	0.118	0.120	0.121	0.121
68	0.080	0.084	0.087	0.090	0.093	0.096	0.099	0.102	0.106	0.109	0.110	0.111	0.113	0.115	0.116	0.117	0.117	0.118	0.119	0.120
69	0.083	0.087	0.090	0.092	0.095	0.098	0.100	0.102	0.104	0.106	0.109	0.110	0.110	0.111	0.111	0.111	0.113	0.113	0.113	0.113
70	0.079	0.083	0.085	0.087	0.089	0.092	0.095	0.096	0.099	0.101	0.103	0.105	0.107	0.107	0.108	0.108	0.109	0.108	0.109	0.109
71	0.068	0.072	0.074	0.076	0.078	0.081	0.083	0.085	0.087	0.090	0.092	0.094	0.096	0.097	0.097	0.099	0.101	0.103	0.103	0.104
72	0.060	0.063	0.064	0.066	0.068	0.069	0.071	0.072	0.075	0.075	0.078	0.078	0.080	0.080	0.080	0.080	0.082	0.084	0.087	0.088
73	0.055	0.057	0.058	0.059	0.060	0.062	0.064	0.066	0.067	0.067	0.068	0.069	0.070	0.071	0.072	0.071	0.072	0.072	0.074	0.072
74	0.052	0.053	0.055	0.056	0.057	0.058	0.060	0.063	0.063	0.063	0.064	0.065	0.066	0.067	0.067	0.067	0.067	0.067	0.068	0.068
75	0.051	0.052	0.054	0.055	0.057	0.058	0.059	0.060	0.062	0.063	0.063	0.064	0.065	0.066	0.066	0.066	0.065	0.066	0.066	0.067
76	0.050	0.051	0.052	0.055	0.056	0.057	0.058	0.059	0.060	0.061	0.062	0.063	0.063	0.063	0.064	0.064	0.065	0.065	0.066	0.066
77	0.050	0.051	0.053	0.055	0.057	0.058	0.059	0.060	0.061	0.061	0.062	0.062	0.062	0.062	0.064	0.064	0.063	0.063	0.064	0.065
78	0.052	0.053	0.054	0.055	0.057	0.058	0.059	0.060	0.061	0.063	0.063	0.063	0.063	0.063	0.063	0.064	0.063	0.063	0.064	0.065
79	0.052	0.054	0.055	0.057	0.056	0.058	0.058	0.060	0.060	0.062	0.062	0.063	0.063	0.063	0.063	0.065	0.064	0.065	0.065	0.066
80	0.052	0.054	0.055	0.057	0.058	0.059	0.060	0.061	0.062	0.063	0.063	0.063	0.063	0.063	0.064	0.064	0.065	0.066	0.067	0.067
81	0.052	0.054	0.055	0.057	0.058	0.060	0.061	0.063	0.063	0.065	0.065	0.066	0.065	0.066	0.066	0.067	0.067	0.068	0.068	0.069
82	0.051	0.053	0.055	0.058	0.060	0.062	0.063	0.065	0.066	0.067	0.067	0.068	0.068	0.068	0.068	0.069	0.069	0.071	0.071	0.072
83	0.045	0.047	0.050	0.052	0.054	0.057	0.059	0.063	0.064	0.066	0.066	0.066	0.067	0.068	0.068	0.069	0.069	0.070	0.071	0.072
84	0.042	0.044	0.045	0.048	0.050	0.052	0.056	0.060	0.064	0.067	0.068	0.068	0.068	0.068	0.068	0.069	0.070	0.071	0.071	0.072
85	0.011	0.014	0.016	0.019	0.021	0.023	0.024	0.028	0.031	0.037	0.040	0.044	0.045	0.044	0.042	0.043	0.045	0.047	0.049	0.052
86	0.003	0.005	0.003	0.004	0.003	0.005	0.004	0.005	0.003	0.005	0.004	0.005	0.004	0.005	0.005	0.005	0.005	0.007	0.006	
87	0.005	0.005	0.005	0.005	0.004	0.005	0.004	0.005	0.004	0.005	0.003	0.004	0.004	0.004	0.003	0.004	0.003	0.003	0.004	0.004
88	0.003	0.003	0.003	0.005	0.004	0.004	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.003
89	0.003	0.003	0.003	0.005	0.003	0.003	0.004	0.005	0.004	0.005	0.005	0.005	0.004	0.005	0.003	0.004	0.003	0.003	0.003	0.004
90	0.003	0.004	0.003	0.004	0.003	0.004	0.004	0.005	0.004	0.005	0.005	0.007	0.009	0.008	0.005	0.005	0.003	0.004	0.003	0.003
91	0.003	0.003	0.003	0.004	0.003	0.004	0.004	0.005	0.004	0.005	0.008	0.023	0.031	0.024	0.010	0.006	0.003	0.004	0.003	0.003
92	0.003	0.003	0.003	0.003	0.003	0.004	0.003	0.005	0.005	0.005	0.005	0.010	0.015	0.013	0.006	0.004	0.003	0.004	0.003	0.004
93	0.003	0.001	0.001	0.003	0.001	0.003	0.003	0.005	0.005	0.006	0.004	0.005	0.003	0.004	0.001	0.003	0.003	0.003	0.003	0.004
94	0.000	0.002	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.008	0.008	0.007	0.005	0.005	0.003	0.003	0.002	0.001	0.001	0.001
95	0.000	0.002	0.003	0.005	0.005	0.007	0.008	0.010	0.009	0.010	0.010	0.009	0.008	0.007	0.005	0.004	0.002	0.002	0.000	0.002
96	0.002	0.003	0.005	0.006	0.008	0.009	0.010	0.010	0.010	0.010	0.011	0.010	0.010	0.008	0.008	0.005	0.004	0.002	0.001	0.000
97	0.007	0.007	0.007	0.008	0.008	0.009	0.009	0.010	0.010	0.010	0.010	0.011	0.010	0.010	0.008	0.008	0.005	0.005	0.003	0.003
98	0.009	0.010	0.009	0.009	0.009	0.010	0.009	0.010	0.010	0.010	0.010	0.010	0.009	0.010	0.008	0.007	0.005	0.007	0.010	0.013

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 20.90 SEC
GROUP 90 HREF = 0.207E-01

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	0.111	0.110	0.110	0.109	0.108	0.108	0.107	0.105	0.102	0.100	0.099	0.097	0.093	0.089	0.074	0.045	0.016	0.006	0.002	0.000
65	0.108	0.107	0.109	0.109	0.108	0.107	0.106	0.105	0.103	0.101	0.100	0.099	0.098	0.095	0.089	0.078	0.054	0.024	0.010	0.003
66	0.113	0.113	0.114	0.116	0.117	0.117	0.115	0.114	0.114	0.114	0.114	0.112	0.111	0.109	0.107	0.103	0.096	0.076	0.043	0.016
67	0.123	0.125	0.126	0.127	0.128	0.127	0.127	0.127	0.126	0.126	0.126	0.124	0.123	0.122	0.120	0.117	0.113	0.105	0.089	0.056
68	0.121	0.122	0.124	0.124	0.124	0.123	0.123	0.123	0.124	0.125	0.126	0.127	0.126	0.124	0.124	0.123	0.122	0.119	0.113	0.099
69	0.113	0.114	0.113	0.113	0.114	0.115	0.116	0.116	0.116	0.117	0.119	0.120	0.123	0.123	0.122	0.124	0.125	0.125	0.124	0.122
70	0.110	0.111	0.112	0.112	0.112	0.111	0.111	0.111	0.110	0.113	0.115	0.116	0.118	0.120	0.120	0.122	0.125	0.126	0.127	0.127
71	0.104	0.106	0.106	0.107	0.108	0.109	0.108	0.108	0.110	0.111	0.112	0.113	0.113	0.113	0.113	0.114	0.114	0.115	0.115	0.115
72	0.090	0.092	0.093	0.095	0.097	0.098	0.099	0.101	0.102	0.102	0.102	0.103	0.104	0.105	0.105	0.103	0.103	0.104	0.105	0.104
73	0.075	0.078	0.079	0.079	0.080	0.081	0.083	0.085	0.085	0.086	0.089	0.090	0.090	0.091	0.090	0.092	0.093	0.094	0.096	0.096
74	0.069	0.069	0.070	0.071	0.071	0.071	0.071	0.070	0.071	0.072	0.073	0.074	0.075	0.075	0.076	0.077	0.078	0.079	0.081	0.082
75	0.067	0.067	0.068	0.069	0.069	0.068	0.068	0.067	0.067	0.066	0.067	0.067	0.067	0.068	0.069	0.070	0.070	0.071	0.072	0.072
76	0.067	0.066	0.066	0.067	0.067	0.067	0.067	0.067	0.066	0.066	0.065	0.066	0.067	0.067	0.067	0.068	0.068	0.069	0.069	0.069
77	0.066	0.066	0.066	0.066	0.066	0.066	0.065	0.065	0.066	0.066	0.066	0.066	0.067	0.067	0.068	0.069	0.069	0.069	0.070	0.071
78	0.066	0.066	0.067	0.066	0.066	0.066	0.066	0.066	0.065	0.065	0.065	0.066	0.066	0.067	0.067	0.068	0.069	0.071	0.072	0.073
79	0.066	0.066	0.067	0.068	0.067	0.068	0.067	0.068	0.067	0.067	0.067	0.068	0.067	0.067	0.067	0.069	0.069	0.070	0.071	0.073
80	0.068	0.068	0.068	0.068	0.068	0.068	0.068	0.068	0.069	0.069	0.069	0.069	0.069	0.069	0.070	0.070	0.071	0.072	0.072	0.072
81	0.069	0.069	0.069	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.071	0.071	0.071	0.072	0.073	0.073	0.073	0.074	0.075
82	0.072	0.073	0.073	0.073	0.073	0.073	0.073	0.073	0.072	0.072	0.071	0.071	0.070	0.071	0.071	0.072	0.072	0.073	0.073	0.074
83	0.073	0.074	0.075	0.077	0.076	0.077	0.077	0.077	0.076	0.077	0.076	0.076	0.075	0.075	0.075	0.075	0.075	0.075	0.074	0.074
84	0.073	0.074	0.075	0.075	0.075	0.075	0.075	0.074	0.074	0.074	0.074	0.074	0.074	0.075	0.075	0.075	0.076	0.077	0.077	0.078
85	0.054	0.056	0.057	0.060	0.060	0.062	0.061	0.061	0.060	0.060	0.060	0.060	0.060	0.061	0.062	0.062	0.063	0.063	0.064	0.066
86	0.006	0.007	0.006	0.006	0.006	0.008	0.008	0.008	0.006	0.008	0.008	0.008	0.008	0.008	0.008	0.009	0.009	0.009	0.009	0.010
87	0.003	0.004	0.003	0.004	0.003	0.003	0.003	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.003	0.002	0.003	0.003	0.003
88	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.001	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
89	0.003	0.004	0.003	0.004	0.003	0.003	0.003	0.004	0.002	0.003	0.002	0.003	0.002	0.002	0.001	0.001	0.000	0.001	0.000	0.000
90	0.003	0.004	0.003	0.003	0.003	0.005	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.003	0.001	0.002	0.000	0.001	0.001	0.001
91	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.003	0.004	0.007	0.016	0.019	0.012	0.005	0.003	0.003	0.000	0.000	0.001
92	0.003	0.004	0.003	0.004	0.003	0.004	0.003	0.003	0.003	0.003	0.005	0.013	0.016	0.011	0.004	0.000	0.000	0.000	0.000	0.000
93	0.003	0.004	0.003	0.005	0.004	0.005	0.003	0.004	0.003	0.004	0.003	0.003	0.003	0.003	0.000	0.001	0.000	0.001	0.001	0.001
94	0.000	0.003	0.002	0.003	0.003	0.005	0.003	0.004	0.003	0.003	0.002	0.002	0.001	0.003	0.002	0.002	0.001	0.001	0.001	0.000
95	0.000	0.002	0.001	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.002	0.001	0.002	0.002	0.003	0.000	0.001	0.001	0.001
96	0.001	0.000	0.000	0.001	0.002	0.002	0.002	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.000	0.001	0.001
97	0.001	0.002	0.001	0.002	0.002	0.003	0.002	0.003	0.003	0.004	0.002	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.001	0.003
98	0.009	0.005	0.002	0.002	0.001	0.003	0.003	0.003	0.004	0.005	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.001	0.000

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 20.90 SEC
HREF = 0.207E-01

GROUP 90

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
66	0.006	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
67	0.023	0.008	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
68	0.071	0.036	0.014	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
69	0.115	0.097	0.059	0.023	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
70	0.126	0.123	0.110	0.078	0.036	0.011	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
71	0.113	0.111	0.107	0.101	0.082	0.048	0.018	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
72	0.104	0.102	0.101	0.099	0.096	0.086	0.060	0.027	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
73	0.097	0.096	0.096	0.096	0.096	0.094	0.087	0.068	0.036	0.011	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
74	0.082	0.082	0.085	0.085	0.087	0.086	0.086	0.082	0.071	0.043	0.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
75	0.072	0.073	0.074	0.075	0.076	0.077	0.078	0.077	0.075	0.067	0.047	0.021	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
76	0.069	0.070	0.071	0.071	0.073	0.073	0.073	0.073	0.072	0.071	0.067	0.052	0.027	0.007	0.007	0.007	0.007	0.007	0.007	0.007
77	0.072	0.073	0.074	0.074	0.077	0.077	0.076	0.075	0.075	0.075	0.074	0.071	0.062	0.039	0.015	0.003	0.003	0.003	0.003	0.003
78	0.073	0.074	0.076	0.077	0.078	0.077	0.078	0.079	0.080	0.079	0.079	0.078	0.077	0.071	0.054	0.027	0.008	0.008	0.008	0.008
79	0.074	0.076	0.076	0.077	0.076	0.076	0.077	0.079	0.079	0.079	0.079	0.079	0.079	0.079	0.077	0.068	0.045	0.019	0.003	0.003
80	0.073	0.075	0.075	0.076	0.078	0.079	0.079	0.079	0.080	0.079	0.079	0.078	0.078	0.078	0.079	0.078	0.072	0.054	0.026	0.005
81	0.073	0.074	0.074	0.076	0.076	0.077	0.077	0.078	0.078	0.079	0.079	0.079	0.079	0.079	0.079	0.080	0.080	0.075	0.059	0.032
82	0.074	0.075	0.075	0.076	0.075	0.077	0.076	0.076	0.076	0.078	0.079	0.080	0.080	0.080	0.079	0.079	0.079	0.078	0.073	0.063
83	0.073	0.073	0.073	0.074	0.074	0.075	0.075	0.076	0.076	0.078	0.078	0.079	0.080	0.082	0.082	0.082	0.081	0.080	0.078	0.075
84	0.078	0.078	0.078	0.078	0.078	0.078	0.077	0.078	0.077	0.078	0.077	0.077	0.077	0.079	0.080	0.082	0.083	0.082	0.079	0.079
85	0.067	0.068	0.069	0.070	0.072	0.073	0.075	0.076	0.076	0.077	0.078	0.079	0.079	0.081	0.081	0.082	0.081	0.081	0.079	0.079
86	0.010	0.011	0.012	0.011	0.012	0.015	0.016	0.018	0.019	0.021	0.021	0.023	0.026	0.028	0.030	0.034	0.033	0.034	0.034	0.035
87	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.005	0.003	0.002	0.001	0.004	0.006	0.010	0.010	0.010	0.006	0.005	0.004	0.003
88	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.003	0.003	0.003	0.003
89	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.002	0.001	0.003
90	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.003	0.003
91	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.011	0.012	0.005	0.001	0.001	0.001	0.001	0.002	0.003
92	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.014	0.014	0.006	0.003	0.000	0.001	0.001	0.003	0.002	0.003
93	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.001	0.000	0.000	0.000	0.002	0.002	0.003	0.003	0.003
94	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.005	0.005	0.005
95	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.004	0.006	0.005	0.008
96	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.003	0.005	0.005
97	0.000	0.002	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.002	0.005	0.007	0.008	0.008	0.010
98	0.000	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.001	0.001	0.002	0.003	0.008	0.010	0.010	0.010	0.010

IR HEAT TRANSFER COEFFICIENT = H(.9IO)/HREF
IR SCAN TIME 20,90 SEC
GROUP 90 HREF = 0.207E-01

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
66	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
67	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
68	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
69	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
70	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
71	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
72	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
73	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
74	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
75	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
76	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
77	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
78	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
79	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
80	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
81	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
82	0.040	0.016	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
83	0.067	0.049	0.023	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
84	0.076	0.071	0.056	0.032	0.010	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
85	0.077	0.075	0.071	0.061	0.039	0.016	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
86	0.034	0.034	0.032	0.031	0.026	0.016	0.005	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
87	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.001	0.003	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
88	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
89	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.005	0.005	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
91	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
92	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
93	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
94	0.005	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	0.006	0.006	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
96	0.006	0.005	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97	0.008	0.008	0.005	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
98	0.010	0.010	0.007	0.004	0.002	0.002	0.000	0.001	0.000	0.002	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 20.90 SEC
GROUP 90 HREF = 0.207E-01

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
66	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
67	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
68	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
69	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
70	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
71	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
72	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
73	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
74	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
75	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
76	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
77	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
78	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
79	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
80	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
81	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
82	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
83	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
84	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
85	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
86	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
87	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
88	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
89	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
91	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
92	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
93	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
94	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
96	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
98	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.002	0.001	0.002

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VAF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

GROUP	* * * * MODEL DESCRIPTION * * * * TITLE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
91	RSI AFT	0.01	0.000	-10.00	40.00	0.053	23	33	16

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FI2	RE/F FT-1	HREF BTU/FT2-SEC-R	INITIAL TEMP DEG R
7.94	211.37	1276.67	93.81	0.0227	3770.	0.203E-04	0.755E-07	0.101E+07	0.206E-01	547.7

IR CAMERA INFORMATION

MOUNTING LOCATION	260
F STOP	1.8
LENS-DEG	15
SENSITIVITY	500.
BLACK LEVEL VOLTAGE	1.3421
LINE SCAN PHI	90
MODEL EMISSIVITY	0.96
REF EMISSIVITY	0.94
WINDOW FACTOR	0.860

TIME RECORDS

LIFT OFF	0.00
CENTER LINE	1.99
IR SCAN TIME	21.46
DELTA TIME,SEC	20.34
PHOTO 1 TIME	2333
PHOTO 2 TIME	0
PHOTO 3 TIME	0
PHOTO 4 TIME	0

REFERENCE TARGET INFORMATION

TCR5	502.38
TCR6	-228.49

DIGITAL DATA AREA PRINTOUT LOCATION

LINE 29 THROUGH 98
POINT 1 THROUGH 110

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 20.34 SEC
GROUP 91 INITIAL TEMP 547.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	1.007	1.006	1.007	1.007	1.006	1.004	1.004	1.004	1.008	1.003	1.004	1.003	1.001	1.003	1.003	1.003	1.003	1.003	1.001	1.001
30	1.008	1.008	1.006	1.006	1.004	1.006	1.004	1.004	1.003	1.004	1.004	1.004	1.003	1.004	1.001	1.003	1.000	1.000	0.998	0.998
31	1.007	1.006	1.004	1.006	1.006	1.006	1.004	1.006	1.003	1.004	1.003	1.004	1.001	1.003	1.000	0.997	0.997	0.998	0.998	1.001
32	1.006	1.007	1.007	1.006	1.006	1.007	1.008	1.004	1.004	1.004	1.000	1.000	0.998	1.000	0.997	0.997	0.997	1.000	1.000	1.001
33	1.006	1.008	1.006	1.004	1.004	1.003	1.003	1.001	1.001	0.998	1.000	0.997	0.997	0.995	0.998	1.000	1.003	1.000	1.003	1.001
34	1.006	1.004	1.004	1.003	1.000	1.000	0.998	0.998	0.997	0.998	0.997	0.998	1.000	1.000	1.000	1.001	1.003	1.003	1.003	1.000
35	1.003	1.003	0.994	1.001	0.992	0.998	0.991	0.997	0.992	1.000	0.997	1.000	0.997	1.000	0.998	1.003	1.000	0.998	0.994	0.989
36	0.998	1.000	0.998	0.998	0.997	1.000	0.998	1.000	1.000	1.003	1.000	1.001	1.000	1.001	0.998	0.994	0.988	0.983	0.972	0.968
37	0.998	1.000	1.000	1.001	1.000	1.001	1.001	1.003	1.000	1.003	1.001	1.000	0.994	0.989	0.983	0.977	0.970	0.970	0.968	0.970
38	1.000	1.001	1.001	1.003	1.000	1.001	1.003	1.003	1.000	0.998	0.992	0.988	0.979	0.976	0.970	0.972	0.970	0.972	0.970	0.968
39	1.001	1.003	1.001	1.003	1.000	1.003	0.998	0.997	0.989	0.986	0.977	0.974	0.970	0.972	0.972	0.970	0.970	0.970	0.970	0.972
40	1.003	1.001	1.004	1.003	1.000	0.994	0.989	0.983	0.977	0.972	0.970	0.970	0.970	0.972	0.972	0.970	0.970	0.970	0.972	0.970
41	1.003	1.004	1.000	0.997	0.989	0.984	0.974	0.974	0.970	0.972	0.970	0.974	0.972	0.974	0.968	0.974	0.972	0.974	0.972	0.974
42	1.000	0.989	0.989	0.976	0.977	0.968	0.972	0.966	0.970	0.970	0.972	0.968	0.972	0.972	0.972	0.972	0.972	0.972	0.974	0.972
43	0.989	0.984	0.977	0.981	0.976	0.977	0.976	0.976	0.974	0.974	0.976	0.974	0.974	0.974	0.974	0.976	0.970	0.977	0.976	0.979
44	0.983	0.983	0.981	0.983	0.979	0.981	0.977	0.979	0.977	0.979	0.976	0.979	0.977	0.981	0.979	0.979	0.979	0.991	1.018	1.053
45	0.986	0.986	0.984	0.984	0.984	0.983	0.983	0.984	0.983	0.983	0.983	0.984	0.983	0.984	0.984	0.988	0.988	1.015	1.096	1.175
46	0.991	0.989	0.988	0.989	0.988	0.988	0.986	0.986	0.986	0.988	0.984	0.988	0.986	0.988	0.988	0.991	0.992	1.029	1.115	1.189
47	0.991	0.991	0.991	0.991	0.989	0.991	0.988	0.989	0.986	0.989	0.988	0.991	0.988	0.989	0.991	0.992	0.995	1.038	1.128	1.195
48	0.991	0.991	0.992	0.991	0.991	0.989	0.989	0.989	0.989	0.989	0.991	0.989	0.991	0.991	0.992	0.992	1.001	1.052	1.145	1.205
49	0.992	0.992	0.986	0.991	0.986	0.991	0.986	0.991	0.986	0.989	0.986	0.992	0.991	0.992	0.992	0.995	1.004	1.077	1.185	1.240
50	0.989	0.988	0.988	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.988	0.988	0.988	0.991	0.991	1.019	1.132	1.246	1.294
51	0.983	0.983	0.983	0.981	0.981	0.981	0.979	0.979	0.983	0.981	0.981	0.983	0.984	0.983	0.988	0.991	1.040	1.171	1.275	1.318
52	0.976	0.976	0.974	0.972	0.972	0.972	0.974	0.972	0.972	0.972	0.972	0.972	0.974	0.974	0.977	0.984	1.053	1.190	1.278	1.316
53	0.970	0.968	0.968	0.966	0.966	0.964	0.966	0.964	0.966	0.966	0.966	0.966	0.966	0.968	0.970	0.979	1.053	1.171	1.238	1.273
54	0.964	0.962	0.964	0.964	0.962	0.962	0.960	0.962	0.960	0.962	0.962	0.964	0.964	0.964	0.968	0.979	1.053	1.147	1.192	1.213
55	0.964	0.962	0.964	0.960	0.960	0.960	0.960	0.962	0.960	0.962	0.962	0.962	0.964	0.966	0.968	0.984	1.065	1.147	1.181	1.194
56	0.966	0.968	0.958	0.964	0.958	0.964	0.958	0.964	0.956	0.966	0.964	0.966	0.964	0.977	0.968	0.991	1.073	1.153	1.181	1.191
57	0.968	0.970	0.966	0.966	0.964	0.964	0.964	0.964	0.964	0.964	0.966	0.966	0.968	0.968	0.974	1.003	1.095	1.159	1.182	1.191
58	0.972	0.968	0.970	0.972	0.970	0.972	0.970	0.972	0.970	0.974	0.974	0.974	0.962	0.976	0.983	1.031	1.123	1.170	1.185	1.193
59	0.972	0.974	0.972	0.972	0.972	0.974	0.972	0.974	0.974	0.977	0.976	0.979	0.977	0.983	0.991	1.056	1.139	1.174	1.186	1.193
60	0.972	0.970	0.970	0.970	0.970	0.974	0.974	0.974	0.974	0.976	0.977	0.979	0.979	0.986	1.001	1.081	1.151	1.176	1.185	1.192
61	0.970	0.970	0.968	0.966	0.966	0.968	0.970	0.972	0.972	0.974	0.976	0.981	0.981	0.988	1.015	1.101	1.157	1.176	1.183	1.190
62	0.964	0.962	0.960	0.962	0.960	0.964	0.964	0.966	0.966	0.970	0.974	0.977	0.979	0.988	1.024	1.110	1.157	1.173	1.181	1.186
63	0.958	0.956	0.950	0.956	0.950	0.958	0.954	0.962	0.960	0.966	0.966	0.972	0.976	0.986	1.033	1.117	1.157	1.171	1.177	1.184

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 91

IR SCAN TIME 20.34 SEC
INITIAL TEMP 547.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	0.997	1.000	0.997	1.000	0.994	0.997	0.994	0.998	0.994	0.997	0.997	1.000	0.998	1.000	0.998	1.004	1.003	1.004	1.001	1.001
30	0.997	1.000	0.997	0.998	0.998	1.000	1.000	1.001	1.001	1.003	1.003	1.004	1.004	1.003	1.001	1.000	0.997	0.995	0.989	0.991
31	0.997	0.998	1.003	1.003	1.001	1.004	1.003	1.004	1.001	1.004	1.003	0.997	1.001	0.994	0.989	0.984	0.983	0.977	0.974	0.972
32	1.001	1.003	1.001	1.004	1.003	1.004	1.001	1.000	0.995	0.994	0.988	0.984	0.977	0.976	0.968	0.964	0.962	0.964	0.958	0.958
33	1.003	1.003	1.001	0.998	0.995	0.992	0.988	0.981	0.977	0.972	0.966	0.962	0.960	0.958	0.960	0.958	0.960	0.960	0.960	0.958
34	0.997	0.994	0.989	0.986	0.977	0.974	0.966	0.964	0.960	0.960	0.958	0.960	0.958	0.960	0.960	0.962	0.960	0.960	0.960	0.960
35	0.983	0.977	0.968	0.966	0.962	0.962	0.962	0.962	0.962	0.962	0.960	0.962	0.962	0.962	0.960	0.964	0.958	0.962	0.958	0.962
36	0.964	0.966	0.960	0.964	0.960	0.964	0.960	0.964	0.962	0.964	0.960	0.964	0.960	0.964	0.964	0.964	0.966	0.966	0.966	0.964
37	0.966	0.968	0.966	0.968	0.966	0.966	0.964	0.966	0.966	0.966	0.964	0.966	0.966	0.966	0.966	0.970	0.962	0.968	0.958	0.968
38	0.970	0.970	0.970	0.970	0.970	0.970	0.968	0.968	0.968	0.970	0.966	0.970	0.968	0.968	0.966	0.970	0.968	0.970	0.968	0.968
39	0.968	0.970	0.968	0.972	0.968	0.972	0.970	0.972	0.970	0.970	0.970	0.972	0.970	0.972	0.968	0.970	0.970	0.970	0.968	0.970
40	0.970	0.970	0.970	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.970	0.972	0.970	0.970	0.970	0.972	0.970	0.970	0.970
41	0.974	0.974	0.974	0.974	0.974	0.974	0.972	0.976	0.972	0.974	0.972	0.974	0.972	0.974	0.972	0.974	0.972	0.972	0.972	0.974
42	0.974	0.974	0.972	0.976	0.976	0.976	0.974	0.977	0.976	0.976	0.974	0.974	0.976	0.974	0.974	0.974	0.972	0.974	0.974	0.970
43	0.977	0.981	0.977	0.981	0.977	0.979	0.977	0.979	0.976	0.977	0.972	0.977	0.976	0.976	0.977	0.977	0.976	0.977	0.974	0.977
44	1.073	1.075	1.066	1.053	1.038	1.026	1.012	1.001	0.994	0.991	0.984	0.984	0.983	0.984	0.979	0.979	0.977	0.981	0.976	0.979
45	1.215	1.235	1.244	1.244	1.234	1.221	1.203	1.180	1.139	1.086	1.037	1.010	0.998	0.991	0.988	0.989	0.986	0.988	0.986	0.988
46	1.224	1.243	1.255	1.265	1.271	1.273	1.271	1.273	1.270	1.234	1.161	1.088	1.037	1.011	0.998	0.994	0.991	0.992	0.989	0.991
47	1.225	1.242	1.255	1.265	1.271	1.276	1.278	1.273	1.264	1.260	1.237	1.175	1.099	1.049	1.026	1.016	1.006	1.000	0.995	0.994
48	1.229	1.240	1.250	1.260	1.269	1.275	1.277	1.276	1.273	1.261	1.249	1.232	1.186	1.111	1.051	1.020	1.014	1.015	1.015	1.008
49	1.253	1.255	1.256	1.261	1.266	1.271	1.274	1.275	1.273	1.268	1.260	1.246	1.227	1.190	1.123	1.059	1.020	1.007	1.003	1.007
50	1.306	1.304	1.296	1.285	1.279	1.276	1.274	1.271	1.269	1.265	1.261	1.257	1.247	1.226	1.186	1.122	1.058	1.020	1.006	0.997
51	1.337	1.348	1.351	1.347	1.335	1.314	1.292	1.276	1.270	1.266	1.261	1.259	1.256	1.249	1.235	1.198	1.135	1.065	1.025	1.003
52	1.338	1.355	1.370	1.382	1.391	1.387	1.366	1.335	1.304	1.279	1.267	1.263	1.260	1.255	1.251	1.242	1.216	1.154	1.079	1.029
53	1.301	1.327	1.352	1.377	1.401	1.415	1.417	1.411	1.394	1.360	1.316	1.281	1.265	1.261	1.258	1.254	1.248	1.227	1.171	1.090
54	1.233	1.256	1.282	1.312	1.346	1.376	1.401	1.421	1.436	1.440	1.423	1.381	1.327	1.283	1.262	1.258	1.258	1.254	1.239	1.192
55	1.202	1.213	1.224	1.237	1.254	1.274	1.301	1.337	1.379	1.418	1.446	1.455	1.440	1.396	1.336	1.286	1.261	1.258	1.261	1.255
56	1.198	1.204	1.211	1.218	1.224	1.228	1.233	1.245	1.264	1.292	1.330	1.376	1.418	1.444	1.444	1.412	1.354	1.299	1.267	1.259
57	1.199	1.204	1.212	1.220	1.224	1.225	1.226	1.230	1.237	1.243	1.250	1.260	1.282	1.321	1.370	1.415	1.438	1.423	1.371	1.310
58	1.198	1.202	1.210	1.216	1.222	1.226	1.230	1.233	1.237	1.241	1.243	1.244	1.246	1.250	1.256	1.279	1.322	1.378	1.420	1.420
59	1.199	1.203	1.210	1.218	1.222	1.225	1.227	1.230	1.235	1.241	1.246	1.251	1.250	1.247	1.246	1.246	1.247	1.256	1.281	1.326
60	1.197	1.202	1.207	1.215	1.221	1.227	1.230	1.234	1.239	1.243	1.245	1.245	1.245	1.250	1.252	1.251	1.247	1.245	1.245	1.249
61	1.194	1.199	1.203	1.210	1.216	1.223	1.226	1.229	1.234	1.240	1.243	1.246	1.247	1.249	1.246	1.246	1.247	1.249	1.250	1.248
62	1.192	1.197	1.200	1.206	1.212	1.219	1.222	1.224	1.229	1.235	1.238	1.243	1.245	1.248	1.250	1.250	1.248	1.248	1.247	1.249
63	1.189	1.193	1.197	1.202	1.209	1.216	1.219	1.222	1.225	1.230	1.234	1.238	1.240	1.244	1.246	1.247	1.250	1.255	1.259	1.259

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 91

IR SCAN TIME 20.34 SEC
INITIAL TEMP 547.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	1.000	0.998	0.994	0.994	0.989	0.989	0.984	0.984	0.977	0.977	0.972	0.974	0.968	0.968	0.966	0.966	0.964	0.964	0.962	0.962
30	0.983	0.984	0.974	0.976	0.968	0.970	0.960	0.962	0.958	0.958	0.954	0.958	0.956	0.960	0.958	0.958	0.958	0.960	0.960	0.960
31	0.966	0.962	0.964	0.960	0.960	0.960	0.962	0.956	0.958	0.958	0.956	0.958	0.954	0.956	0.952	0.958	0.958	0.956	0.958	0.958
32	0.958	0.960	0.958	0.960	0.958	0.960	0.958	0.958	0.958	0.958	0.958	0.958	0.956	0.956	0.956	0.956	0.956	0.958	0.956	0.958
33	0.960	0.960	0.960	0.960	0.960	0.960	0.958	0.958	0.958	0.958	0.958	0.958	0.958	0.956	0.958	0.956	0.956	0.956	0.956	0.956
34	0.958	0.960	0.960	0.960	0.960	0.962	0.960	0.960	0.960	0.960	0.958	0.958	0.958	0.960	0.956	0.960	0.958	0.958	0.956	0.954
35	0.960	0.962	0.962	0.962	0.962	0.962	0.962	0.964	0.962	0.962	0.960	0.962	0.960	0.960	0.960	0.962	0.960	0.958	0.958	0.958
36	0.964	0.964	0.964	0.964	0.962	0.966	0.964	0.964	0.964	0.966	0.964	0.962	0.962	0.964	0.962	0.962	0.962	0.962	0.960	0.962
37	0.960	0.968	0.958	0.970	0.960	0.966	0.960	0.968	0.958	0.966	0.960	0.966	0.964	0.966	0.964	0.966	0.964	0.964	0.964	0.966
38	0.968	0.968	0.966	0.966	0.966	0.966	0.966	0.966	0.964	0.966	0.966	0.968	0.964	0.966	0.962	0.966	0.962	0.966	0.960	0.964
39	0.968	0.970	0.968	0.970	0.968	0.968	0.968	0.970	0.966	0.968	0.966	0.968	0.964	0.966	0.966	0.968	0.966	0.966	0.966	0.966
40	0.970	0.972	0.970	0.970	0.970	0.968	0.970	0.968	0.970	0.968	0.970	0.968	0.968	0.968	0.966	0.966	0.968	0.968	0.966	0.966
41	0.968	0.974	0.970	0.972	0.972	0.972	0.970	0.974	0.970	0.970	0.970	0.970	0.968	0.970	0.968	0.972	0.968	0.968	0.966	0.968
42	0.972	0.972	0.972	0.972	0.970	0.970	0.970	0.970	0.972	0.974	0.970	0.970	0.966	0.970	0.970	0.966	0.968	0.970	0.968	0.968
43	0.974	0.976	0.974	0.974	0.972	0.974	0.972	0.974	0.972	0.974	0.972	0.974	0.972	0.972	0.972	0.974	0.972	0.974	0.970	0.972
44	0.974	0.981	0.976	0.977	0.974	0.977	0.974	0.977	0.974	0.979	0.977	0.977	0.976	0.979	0.976	0.977	0.974	0.976	0.974	0.976
45	0.984	0.986	0.984	0.986	0.984	0.983	0.984	0.984	0.983	0.983	0.981	0.983	0.977	0.981	0.979	0.981	0.979	0.979	0.977	0.981
46	0.989	0.991	0.988	0.988	0.988	0.988	0.984	0.986	0.984	0.986	0.984	0.984	0.983	0.986	0.983	0.984	0.983	0.984	0.983	0.984
47	0.992	0.994	0.991	0.992	0.989	0.989	0.988	0.988	0.986	0.988	0.986	0.988	0.984	0.988	0.984	0.988	0.984	0.986	0.984	0.986
48	1.001	0.997	0.994	0.994	0.992	0.991	0.989	0.989	0.988	0.986	0.988	0.986	0.988	0.986	0.986	0.986	0.986	0.986	0.986	0.986
49	1.011	1.011	1.006	0.998	0.992	0.992	0.989	0.992	0.988	0.989	0.986	0.989	0.986	0.988	0.986	0.989	0.986	0.986	0.986	0.988
50	0.997	0.998	1.003	1.003	0.997	0.994	0.991	0.989	0.989	0.989	0.989	0.988	0.988	0.986	0.988	0.986	0.988	0.986	0.986	0.986
51	0.997	0.991	0.994	0.991	0.994	0.989	0.989	0.986	0.986	0.983	0.984	0.981	0.983	0.981	0.981	0.981	0.983	0.979	0.981	0.981
52	1.003	0.995	0.992	0.992	0.991	0.989	0.983	0.976	0.974	0.972	0.970	0.968	0.970	0.966	0.970	0.968	0.970	0.968	0.970	0.970
53	1.031	1.003	0.992	0.989	0.989	0.989	0.969	0.979	0.972	0.966	0.964	0.964	0.964	0.962	0.962	0.962	0.960	0.962	0.964	0.968
54	1.112	1.042	1.007	0.992	0.988	0.988	0.989	0.988	0.983	0.970	0.964	0.962	0.962	0.962	0.960	0.962	0.960	0.962	0.964	0.970
55	1.223	1.149	1.066	1.018	0.997	0.988	0.988	0.989	0.989	0.983	0.974	0.968	0.962	0.960	0.962	0.960	0.962	0.964	0.968	0.972
56	1.261	1.245	1.183	1.094	1.032	1.004	0.991	0.989	0.988	0.991	0.986	0.977	0.968	0.966	0.962	0.964	0.962	0.966	0.968	0.972
57	1.272	1.258	1.254	1.220	1.138	1.060	1.016	0.995	0.988	0.988	0.989	0.986	0.979	0.970	0.968	0.966	0.968	0.968	0.970	0.974
58	1.374	1.314	1.271	1.252	1.223	1.143	1.061	1.014	0.992	0.983	0.983	0.983	0.983	0.983	0.974	0.974	0.970	0.974	0.972	0.974
59	1.372	1.389	1.360	1.306	1.259	1.210	1.129	1.052	1.007	0.992	0.979	0.961	0.976	0.983	0.979	0.979	0.974	0.974	0.972	0.974
60	1.257	1.279	1.315	1.336	1.319	1.275	1.226	1.152	1.066	1.016	0.992	0.984	0.979	0.979	0.979	0.981	0.977	0.979	0.974	0.976
61	1.246	1.246	1.247	1.253	1.269	1.282	1.272	1.239	1.173	1.084	1.023	0.997	0.986	0.981	0.977	0.977	0.977	0.979	0.976	0.977
62	1.250	1.251	1.248	1.245	1.244	1.245	1.249	1.257	1.250	1.204	1.114	1.040	1.004	0.989	0.981	0.979	0.977	0.979	0.976	0.977
63	1.253	1.251	1.252	1.254	1.254	1.248	1.244	1.243	1.241	1.241	1.227	1.167	1.076	1.020	0.995	0.989	0.983	0.977	0.977	0.979

NASA/KI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 91

IR SCAN TIME 20.34 SEC
INITIAL TEMP 547.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.960	0.960	0.960	0.960	0.958	0.960	0.958	0.960	0.958	0.960	0.958	0.960	0.958	0.958	0.958	0.960	0.960	0.960	0.962	0.962
30	0.958	0.960	0.958	0.956	0.958	0.958	0.958	0.956	0.956	0.958	0.958	0.958	0.958	0.960	0.954	0.958	0.960	0.958	0.958	0.958
31	0.954	0.956	0.956	0.954	0.954	0.954	0.956	0.956	0.954	0.954	0.956	0.954	0.956	0.956	0.954	0.947	0.956	0.956	0.956	0.956
32	0.956	0.960	0.954	0.956	0.958	0.956	0.954	0.954	0.954	0.956	0.954	0.954	0.954	0.958	0.947	0.956	0.950	0.958	0.950	0.956
33	0.956	0.956	0.956	0.956	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.956	0.954	0.952
34	0.956	0.958	0.958	0.956	0.956	0.958	0.954	0.956	0.956	0.956	0.956	0.956	0.956	0.958	0.954	0.956	0.954	0.954	0.954	0.954
35	0.958	0.958	0.958	0.960	0.958	0.956	0.956	0.960	0.956	0.958	0.958	0.958	0.954	0.958	0.956	0.958	0.956	0.956	0.956	0.956
36	0.962	0.962	0.960	0.960	0.960	0.962	0.960	0.960	0.958	0.960	0.958	0.960	0.958	0.960	0.960	0.960	0.958	0.960	0.956	0.956
37	0.962	0.966	0.962	0.962	0.962	0.964	0.962	0.962	0.962	0.962	0.962	0.962	0.962	0.962	0.962	0.962	0.958	0.960	0.960	0.962
38	0.960	0.966	0.962	0.964	0.962	0.966	0.960	0.964	0.960	0.964	0.964	0.966	0.962	0.964	0.962	0.962	0.962	0.962	0.962	0.962
39	0.964	0.964	0.964	0.966	0.964	0.964	0.964	0.966	0.964	0.966	0.964	0.966	0.958	0.964	0.960	0.964	0.958	0.964	0.960	0.964
40	0.968	0.966	0.966	0.966	0.964	0.966	0.966	0.964	0.964	0.964	0.966	0.964	0.964	0.966	0.968	0.964	0.964	0.962	0.962	0.962
41	0.968	0.968	0.966	0.970	0.966	0.968	0.966	0.968	0.966	0.966	0.966	0.968	0.964	0.966	0.964	0.968	0.962	0.966	0.964	0.966
42	0.966	0.968	0.966	0.968	0.968	0.968	0.966	0.966	0.966	0.966	0.966	0.966	0.968	0.964	0.966	0.964	0.966	0.966	0.966	0.968
43	0.968	0.970	0.970	0.970	0.968	0.970	0.968	0.970	0.968	0.968	0.968	0.970	0.968	0.968	0.968	0.970	0.968	0.968	0.968	0.968
44	0.974	0.976	0.972	0.974	0.974	0.974	0.974	0.974	0.970	0.974	0.974	0.974	0.974	0.972	0.972	0.972	0.974	0.974	0.972	0.974
45	0.976	0.979	0.976	0.979	0.976	0.979	0.976	0.981	0.977	0.979	0.977	0.979	0.976	0.977	0.977	0.979	0.977	0.977	0.977	0.979
46	0.983	0.984	0.983	0.983	0.983	0.983	0.981	0.983	0.979	0.984	0.974	0.983	0.974	0.983	0.976	0.983	0.976	0.983	0.974	0.983
47	0.983	0.984	0.983	0.984	0.983	0.983	0.983	0.984	0.981	0.983	0.981	0.984	0.983	0.983	0.981	0.984	0.981	0.983	0.981	0.984
48	0.986	0.984	0.986	0.986	0.984	0.983	0.984	0.984	0.984	0.983	0.984	0.981	0.983	0.983	0.983	0.983	0.983	0.981	0.983	0.983
49	0.986	0.988	0.984	0.986	0.984	0.986	0.983	0.986	0.983	0.986	0.984	0.986	0.983	0.986	0.984	0.986	0.983	0.983	0.983	0.986
50	0.986	0.984	0.984	0.983	0.986	0.986	0.986	0.984	0.984	0.983	0.984	0.983	0.984	0.983	0.984	0.983	0.984	0.984	0.984	0.983
51	0.983	0.983	0.984	0.984	0.986	0.984	0.986	0.984	0.984	0.983	0.986	0.984	0.986	0.984	0.984	0.983	0.983	0.984	0.984	0.983
52	0.974	0.974	0.979	0.979	0.983	0.983	0.983	0.983	0.984	0.983	0.984	0.984	0.984	0.983	0.983	0.981	0.983	0.983	0.984	0.981
53	0.972	0.974	0.977	0.979	0.981	0.981	0.983	0.979	0.983	0.979	0.984	0.979	0.984	0.981	0.983	0.981	0.983	0.979	0.981	0.979
54	0.972	0.976	0.979	0.979	0.983	0.981	0.983	0.983	0.984	0.981	0.984	0.984	0.983	0.984	0.983	0.984	0.983	0.981	0.983	0.979
55	0.974	0.976	0.979	0.981	0.981	0.981	0.983	0.981	0.983	0.983	0.984	0.984	0.984	0.984	0.984	0.983	0.983	0.983	0.981	0.981
56	0.974	0.979	0.979	0.983	0.981	0.983	0.983	0.983	0.983	0.984	0.983	0.984	0.983	0.986	0.981	0.983	0.981	0.983	0.979	0.979
57	0.976	0.976	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.977	0.979	0.979
58	0.974	0.976	0.976	0.970	0.977	0.974	0.976	0.974	0.974	0.974	0.972	0.974	0.974	0.970	0.968	0.974	0.979	0.976	0.972	0.974
59	0.974	0.974	0.970	0.977	0.972	0.977	0.972	0.976	0.972	0.972	0.970	0.972	0.970	0.970	0.970	0.972	0.970	0.972	0.968	0.972
60	0.974	0.976	0.972	0.974	0.972	0.977	0.970	0.974	0.968	0.974	0.968	0.972	0.966	0.970	0.968	0.972	0.968	0.972	0.968	0.970
61	0.976	0.977	0.974	0.976	0.976	0.976	0.974	0.976	0.972	0.972	0.970	0.972	0.970	0.970	0.970	0.972	0.970	0.970	0.970	0.972
62	0.976	0.977	0.976	0.976	0.974	0.976	0.972	0.974	0.972	0.974	0.970	0.972	0.970	0.972	0.970	0.974	0.970	0.974	0.972	0.972
63	0.976	0.976	0.974	0.974	0.972	0.972	0.970	0.972	0.968	0.970	0.968	0.970	0.966	0.970	0.968	0.970	0.968	0.970	0.968	0.972

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 20.34 SEC
GROUP 91 INITIAL TEMP 547.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.960	0.960	0.958	0.962	0.962	0.962	0.960	0.962	0.960	0.960	0.960	0.960	0.956	0.958	0.956	0.960	0.958	0.954	0.956	0.958
30	0.956	0.960	0.958	0.960	0.958	0.960	0.960	0.960	0.958	0.960	0.958	0.958	0.956	0.958	0.956	0.958	0.956	0.956	0.956	0.956
31	0.956	0.956	0.954	0.954	0.958	0.958	0.954	0.958	0.960	0.960	0.958	0.956	0.956	0.954	0.956	0.952	0.952	0.952	0.952	0.956
32	0.952	0.956	0.950	0.956	0.952	0.956	0.952	0.954	0.952	0.956	0.956	0.956	0.956	0.956	0.952	0.954	0.952	0.954	0.952	0.952
33	0.954	0.952	0.954	0.954	0.952	0.952	0.954	0.954	0.954	0.952	0.952	0.950	0.952	0.947	0.952	0.947	0.950	0.950	0.950	0.950
34	0.954	0.956	0.952	0.954	0.954	0.954	0.952	0.954	0.952	0.954	0.952	0.954	0.952	0.956	0.952	0.952	0.950	0.952	0.952	0.952
35	0.956	0.956	0.954	0.956	0.954	0.954	0.954	0.954	0.954	0.954	0.952	0.954	0.952	0.954	0.952	0.954	0.952	0.954	0.952	0.956
36	0.956	0.958	0.956	0.958	0.956	0.958	0.956	0.958	0.956	0.958	0.956	0.956	0.954	0.958	0.954	0.956	0.954	0.956	0.956	0.956
37	0.958	0.960	0.958	0.960	0.958	0.960	0.958	0.960	0.958	0.960	0.956	0.960	0.958	0.960	0.956	0.958	0.958	0.958	0.956	0.958
38	0.960	0.962	0.960	0.962	0.960	0.962	0.960	0.960	0.958	0.960	0.960	0.960	0.958	0.960	0.958	0.960	0.958	0.960	0.956	0.960
39	0.958	0.962	0.958	0.962	0.958	0.960	0.958	0.964	0.966	0.962	0.960	0.964	0.960	0.962	0.960	0.960	0.960	0.960	0.960	0.962
40	0.964	0.962	0.964	0.962	0.962	0.962	0.962	0.962	0.962	0.960	0.960	0.958	0.960	0.958	0.962	0.956	0.960	0.956	0.962	0.958
41	0.962	0.964	0.964	0.966	0.962	0.966	0.964	0.966	0.964	0.964	0.964	0.964	0.962	0.962	0.962	0.962	0.960	0.962	0.960	0.964
42	0.966	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.962	0.962	0.962	0.966	0.964	0.962	0.964	0.962	0.964	0.962
43	0.968	0.968	0.968	0.968	0.966	0.968	0.966	0.968	0.966	0.966	0.968	0.964	0.966	0.966	0.966	0.966	0.966	0.966	0.964	0.968
44	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.970	0.974	0.970	0.972	0.970	0.974	0.970	0.972	0.968	0.972	0.970	0.970
45	0.977	0.979	0.976	0.979	0.977	0.979	0.977	0.979	0.976	0.979	0.976	0.977	0.976	0.977	0.977	0.977	0.977	0.977	0.976	0.979
46	0.976	0.984	0.977	0.984	0.979	0.984	0.981	0.983	0.981	0.983	0.981	0.981	0.981	0.983	0.979	0.981	0.979	0.981	0.979	0.981
47	0.981	0.983	0.983	0.986	0.983	0.983	0.981	0.983	0.979	0.983	0.979	0.983	0.977	0.981	0.977	0.983	0.979	0.983	0.979	0.983
48	0.984	0.983	0.984	0.983	0.986	0.984	0.984	0.983	0.983	0.983	0.983	0.981	0.983	0.983	0.981	0.979	0.983	0.981	0.981	0.981
49	0.983	0.984	0.983	0.986	0.983	0.984	0.983	0.986	0.983	0.984	0.981	0.984	0.983	0.983	0.981	0.984	0.983	0.983	0.981	0.983
50	0.984	0.984	0.984	0.984	0.984	0.983	0.983	0.981	0.983	0.979	0.981	0.979	0.981	0.979	0.981	0.979	0.981	0.979	0.979	0.979
51	0.984	0.983	0.983	0.979	0.981	0.979	0.979	0.977	0.976	0.974	0.976	0.974	0.974	0.974	0.976	0.976	0.974	0.974	0.974	0.974
52	0.983	0.983	0.981	0.977	0.976	0.974	0.970	0.970	0.970	0.970	0.968	0.970	0.970	0.968	0.966	0.966	0.966	0.966	0.966	0.966
53	0.981	0.976	0.979	0.977	0.976	0.970	0.968	0.966	0.962	0.962	0.962	0.960	0.960	0.960	0.960	0.960	0.960	0.962	0.960	0.960
54	0.979	0.981	0.979	0.976	0.974	0.968	0.966	0.962	0.962	0.956	0.958	0.954	0.958	0.954	0.956	0.954	0.956	0.952	0.954	0.952
55	0.981	0.977	0.977	0.976	0.974	0.970	0.968	0.964	0.960	0.960	0.958	0.958	0.958	0.956	0.956	0.956	0.954	0.954	0.954	0.954
56	0.976	0.981	0.976	0.976	0.976	0.972	0.968	0.966	0.962	0.962	0.960	0.960	0.958	0.960	0.956	0.960	0.956	0.958	0.958	0.958
57	0.979	0.977	0.977	0.976	0.976	0.974	0.974	0.970	0.968	0.968	0.968	0.966	0.968	0.964	0.964	0.962	0.964	0.966	0.964	0.964
58	0.974	0.972	0.972	0.968	0.968	0.970	0.968	0.966	0.968	0.964	0.968	0.970	0.968	0.966	0.966	0.972	0.964	0.968	0.964	0.970
59	0.970	0.972	0.970	0.972	0.972	0.972	0.970	0.970	0.970	0.970	0.968	0.972	0.970	0.970	0.970	0.968	0.968	0.970	0.968	0.970
60	0.968	0.972	0.970	0.972	0.970	0.974	0.974	0.972	0.970	0.972	0.970	0.970	0.970	0.972	0.968	0.970	0.970	0.972	0.970	0.972
61	0.972	0.972	0.970	0.974	0.968	0.972	0.968	0.970	0.968	0.970	0.966	0.972	0.968	0.970	0.968	0.972	0.968	0.970	0.968	0.974
62	0.972	0.974	0.972	0.972	0.972	0.972	0.970	0.972	0.972	0.972	0.970	0.972	0.970	0.972	0.970	0.972	0.970	0.972	0.970	0.970
63	0.970	0.970	0.970	0.976	0.970	0.970	0.966	0.970	0.968	0.970	0.968	0.970	0.968	0.968	0.968	0.970	0.968	0.968	0.968	0.968

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 91

IR SCAN TIME 20.34 SEC
INITIAL TEMP 547.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.954	0.956	0.956	0.956	0.954	0.956	0.954	0.956	0.956	0.954
30	0.954	0.956	0.954	0.954	0.954	0.954	0.952	0.954	0.952	0.954
31	0.952	0.956	0.954	0.950	0.952	0.954	0.954	0.952	0.958	0.952
32	0.952	0.958	0.952	0.952	0.956	0.952	0.950	0.952	0.950	0.952
33	0.950	0.947	0.950	0.945	0.952	0.947	0.952	0.952	0.950	0.952
34	0.952	0.954	0.950	0.952	0.950	0.952	0.950	0.952	0.952	0.952
35	0.952	0.954	0.952	0.954	0.952	0.956	0.954	0.954	0.954	0.952
36	0.956	0.958	0.956	0.956	0.956	0.956	0.956	0.956	0.956	0.958
37	0.958	0.958	0.958	0.960	0.958	0.958	0.956	0.960	0.956	0.958
38	0.958	0.960	0.958	0.960	0.958	0.960	0.958	0.960	0.958	0.960
39	0.960	0.962	0.956	0.962	0.960	0.962	0.960	0.962	0.960	0.962
40	0.962	0.958	0.962	0.960	0.962	0.962	0.960	0.960	0.960	0.962
41	0.956	0.964	0.960	0.962	0.962	0.962	0.962	0.964	0.958	0.962
42	0.964	0.964	0.964	0.962	0.964	0.962	0.964	0.964	0.964	0.964
43	0.964	0.968	0.964	0.968	0.966	0.966	0.966	0.970	0.964	0.966
44	0.970	0.970	0.970	0.972	0.972	0.972	0.968	0.970	0.970	0.970
45	0.974	0.977	0.974	0.977	0.976	0.976	0.974	0.976	0.976	0.976
46	0.979	0.981	0.977	0.983	0.979	0.981	0.977	0.979	0.977	0.981
47	0.977	0.981	0.977	0.983	0.981	0.983	0.981	0.983	0.979	0.979
48	0.983	0.981	0.983	0.979	0.981	0.979	0.983	0.977	0.983	0.977
49	0.981	0.983	0.981	0.984	0.981	0.981	0.979	0.983	0.979	0.981
50	0.983	0.979	0.979	0.977	0.977	0.977	0.977	0.977	0.977	0.977
51	0.974	0.974	0.974	0.972	0.972	0.972	0.972	0.974	0.972	0.972
52	0.966	0.964	0.964	0.964	0.964	0.964	0.966	0.964	0.962	0.964
53	0.962	0.958	0.958	0.958	0.958	0.958	0.958	0.956	0.958	0.956
54	0.956	0.954	0.954	0.954	0.954	0.952	0.952	0.952	0.952	0.952
55	0.954	0.952	0.954	0.950	0.952	0.943	0.954	0.945	0.954	0.945
56	0.956	0.960	0.956	0.956	0.956	0.956	0.956	0.954	0.954	0.958
57	0.964	0.964	0.966	0.964	0.964	0.964	0.964	0.964	0.966	0.964
58	0.966	0.966	0.966	0.966	0.966	0.964	0.966	0.966	0.964	0.966
59	0.970	0.970	0.968	0.970	0.968	0.970	0.968	0.968	0.968	0.968
60	0.970	0.972	0.970	0.974	0.970	0.974	0.970	0.972	0.972	0.972
61	0.972	0.972	0.970	0.972	0.970	0.972	0.972	0.974	0.972	0.972
62	0.970	0.972	0.968	0.970	0.966	0.970	0.966	0.970	0.966	0.972
63	0.964	0.968	0.968	0.968	0.968	0.968	0.968	0.966	0.966	0.968

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VAF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 20.34 SEC
GROUP 91 INITIAL TEMP 547.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.952	0.952	0.950	0.952	0.950	0.954	0.952	0.958	0.958	0.960	0.960	0.966	0.968	0.983	1.036	1.120	1.155	1.167	1.174	1.181
65	0.950	0.952	0.947	0.947	0.947	0.950	0.952	0.956	0.956	0.958	0.962	0.966	0.968	0.983	1.055	1.131	1.158	1.168	1.174	1.180
66	0.950	0.947	0.947	0.950	0.947	0.950	0.952	0.956	0.956	0.958	0.958	0.964	0.966	0.998	1.083	1.141	1.159	1.168	1.172	1.178
67	0.950	0.947	0.947	0.947	0.945	0.950	0.952	0.956	0.954	0.958	0.958	0.964	0.968	1.012	1.099	1.144	1.157	1.165	1.170	1.174
68	0.952	0.947	0.947	0.945	0.945	0.950	0.950	0.954	0.958	0.958	0.956	0.962	0.970	1.036	1.112	1.145	1.155	1.162	1.165	1.170
69	0.950	0.950	0.947	0.947	0.947	0.950	0.952	0.954	0.958	0.956	0.956	0.966	0.979	1.055	1.120	1.143	1.150	1.156	1.160	1.165
70	0.952	0.952	0.943	0.950	0.940	0.947	0.956	0.952	0.954	0.958	0.958	0.962	0.984	1.062	1.118	1.138	1.145	1.151	1.154	1.158
71	0.952	0.950	0.947	0.947	0.945	0.950	0.950	0.954	0.954	0.954	0.943	0.964	0.984	1.066	1.118	1.135	1.140	1.146	1.149	1.153
72	0.947	0.947	0.945	0.945	0.945	0.950	0.950	0.952	0.954	0.956	0.958	0.962	0.994	1.071	1.118	1.131	1.138	1.143	1.145	1.150
73	0.950	0.945	0.945	0.947	0.947	0.952	0.952	0.954	0.954	0.954	0.958	0.962	1.007	1.083	1.119	1.128	1.134	1.139	1.143	1.148
74	0.945	0.943	0.945	0.947	0.945	0.947	0.950	0.952	0.954	0.956	0.956	0.968	1.030	1.098	1.122	1.129	1.135	1.139	1.143	1.146
75	0.947	0.947	0.950	0.945	0.947	0.947	0.950	0.954	0.954	0.956	0.960	0.977	1.046	1.106	1.125	1.132	1.137	1.139	1.143	1.146
76	0.962	1.006	1.024	1.001	0.984	0.977	0.966	0.958	0.956	0.958	0.960	0.992	1.069	1.116	1.128	1.135	1.140	1.143	1.146	1.147
77	1.021	1.096	1.073	1.055	1.040	1.012	1.003	0.981	0.964	0.958	0.964	1.010	1.087	1.123	1.133	1.138	1.143	1.146	1.150	1.152
78	1.046	1.121	1.068	1.052	1.058	1.034	1.015	1.014	0.981	0.966	0.964	1.018	1.091	1.125	1.132	1.139	1.142	1.147	1.150	1.154
79	1.038	1.106	1.096	1.106	1.066	1.037	1.037	1.026	1.011	0.986	0.974	1.028	1.095	1.122	1.128	1.136	1.139	1.144	1.147	1.152
80	1.029	1.087	1.122	1.125	1.105	1.059	1.038	1.029	1.021	1.008	0.992	1.033	1.094	1.117	1.124	1.128	1.133	1.136	1.140	1.144
81	1.039	1.106	1.171	1.143	1.131	1.092	1.044	1.011	1.003	1.010	1.014	1.055	1.106	1.123	1.126	1.128	1.130	1.132	1.133	1.138
82	1.078	1.105	1.142	1.125	1.124	1.104	1.062	1.018	0.989	0.984	1.012	1.078	1.131	1.145	1.147	1.145	1.143	1.140	1.142	1.143
83	1.079	1.073	1.079	1.091	1.112	1.108	1.066	1.018	0.997	1.001	1.023	1.089	1.147	1.151	1.155	1.158	1.159	1.161	1.163	1.165
84	1.033	1.031	1.043	1.073	1.103	1.122	1.106	1.051	1.029	1.032	1.038	1.032	1.038	1.040	1.045	1.060	1.069	1.079	1.090	1.101
85	1.001	1.006	1.019	1.053	1.081	1.100	1.084	1.043	1.031	1.026	1.028	1.016	1.011	1.010	1.011	1.011	1.010	1.011	1.010	1.008
86	0.989	0.989	0.994	1.004	1.014	1.016	1.010	1.004	1.009	1.015	1.021	1.012	1.007	1.004	1.004	1.004	1.004	1.004	1.003	1.003
87	0.981	0.983	0.983	0.983	0.986	0.986	0.989	0.994	1.007	1.018	1.020	1.010	1.006	1.003	1.001	1.000	1.000	1.000	1.000	1.000
88	0.976	0.979	0.979	0.984	0.983	0.988	0.989	0.992	1.003	1.020	1.020	1.011	1.004	1.004	1.003	1.001	0.998	1.000	0.997	0.998
89	0.974	0.976	0.981	0.983	0.986	0.983	0.986	0.986	0.991	1.008	1.018	1.010	1.006	1.004	1.003	1.001	1.001	0.998	0.998	0.998
90	0.974	0.976	0.981	0.983	0.983	0.983	0.983	0.984	0.986	1.003	1.007	1.004	1.003	1.003	1.001	1.000	0.998	1.000	0.998	1.000
91	0.979	0.981	0.981	0.983	0.979	0.981	0.981	0.984	0.983	0.992	1.001	1.004	1.000	1.003	1.001	1.003	1.000	1.000	0.998	1.000
92	0.984	0.984	0.979	0.984	0.977	0.984	0.981	0.988	0.983	0.994	0.998	1.001	0.995	0.998	0.995	0.997	0.994	0.998	0.995	0.995
93	0.995	0.995	0.994	0.994	0.991	0.994	0.992	0.997	0.994	1.000	1.001	0.998	0.995	0.995	0.995	0.994	0.992	0.991	0.991	0.994
94	1.001	1.001	1.000	1.001	1.000	1.000	1.001	1.003	1.006	1.006	1.001	0.997	0.997	0.995	0.997	0.994	0.995	0.992	0.994	
95	1.003	1.003	1.000	1.004	1.004	1.004	1.003	1.003	1.003	1.010	1.011	1.007	0.997	0.998	0.997	0.998	0.997	1.000	0.997	0.997
96	1.003	1.000	1.001	1.003	1.003	1.004	1.003	1.001	1.001	1.008	1.014	1.006	1.000	0.998	1.000	1.004	1.004	1.004	1.000	0.997
97	1.003	1.003	1.003	1.006	1.006	1.007	1.004	1.003	1.003	1.010	1.014	1.007	0.998	1.000	1.003	1.010	1.008	1.007	1.003	1.003
98	1.001	1.003	1.003	1.004	1.007	1.004	1.003	1.001	1.003	1.011	1.016	1.008	1.004	1.001	1.001	1.003	1.003	1.003	1.003	1.000

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VAF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 91

IR SCAN TIME 20.34 SEC
INITIAL TEMP 547.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	1.186	1.191	1.193	1.200	1.206	1.213	1.215	1.218	1.220	1.225	1.229	1.231	1.233	1.236	1.237	1.239	1.242	1.247	1.249	1.250
65	1.185	1.189	1.193	1.199	1.205	1.209	1.213	1.212	1.218	1.218	1.224	1.223	1.228	1.229	1.232	1.231	1.236	1.237	1.238	1.237
66	1.182	1.187	1.192	1.198	1.203	1.207	1.209	1.213	1.215	1.217	1.218	1.222	1.225	1.227	1.227	1.229	1.231	1.233	1.232	1.232
67	1.177	1.182	1.188	1.194	1.198	1.200	1.204	1.207	1.211	1.214	1.214	1.217	1.220	1.221	1.221	1.223	1.224	1.226	1.225	1.226
68	1.172	1.178	1.183	1.187	1.190	1.194	1.197	1.200	1.204	1.208	1.210	1.210	1.212	1.216	1.218	1.220	1.220	1.221	1.222	1.223
69	1.166	1.171	1.177	1.181	1.183	1.187	1.191	1.193	1.196	1.198	1.202	1.206	1.207	1.208	1.207	1.210	1.211	1.212	1.213	1.215
70	1.160	1.166	1.171	1.175	1.176	1.180	1.183	1.186	1.188	1.191	1.194	1.196	1.198	1.199	1.200	1.200	1.201	1.202	1.203	1.204
71	1.155	1.159	1.164	1.169	1.171	1.173	1.177	1.180	1.182	1.185	1.186	1.188	1.190	1.191	1.190	1.191	1.194	1.194	1.193	1.194
72	1.152	1.154	1.158	1.162	1.163	1.165	1.170	1.172	1.177	1.177	1.179	1.180	1.181	1.180	1.180	1.177	1.179	1.181	1.184	1.185
73	1.149	1.150	1.155	1.158	1.160	1.162	1.165	1.171	1.173	1.175	1.175	1.175	1.176	1.177	1.175	1.175	1.173	1.173	1.174	1.175
74	1.148	1.149	1.152	1.154	1.159	1.162	1.163	1.166	1.171	1.171	1.170	1.170	1.171	1.171	1.171	1.171	1.170	1.169	1.170	1.170
75	1.148	1.149	1.151	1.153	1.157	1.161	1.162	1.164	1.167	1.169	1.170	1.170	1.170	1.170	1.170	1.169	1.168	1.168	1.168	1.168
76	1.149	1.152	1.153	1.155	1.160	1.164	1.166	1.166	1.168	1.169	1.171	1.171	1.170	1.169	1.170	1.169	1.167	1.167	1.167	1.167
77	1.155	1.158	1.158	1.160	1.163	1.168	1.171	1.173	1.175	1.175	1.175	1.174	1.172	1.171	1.172	1.171	1.167	1.166	1.168	1.168
78	1.157	1.162	1.164	1.166	1.168	1.172	1.175	1.177	1.179	1.181	1.181	1.180	1.178	1.177	1.175	1.175	1.171	1.171	1.170	1.171
79	1.157	1.162	1.165	1.169	1.171	1.174	1.176	1.180	1.181	1.184	1.183	1.185	1.182	1.182	1.181	1.182	1.179	1.178	1.177	1.177
80	1.149	1.154	1.159	1.163	1.168	1.171	1.175	1.177	1.180	1.182	1.183	1.182	1.182	1.182	1.183	1.183	1.183	1.184	1.185	1.184
81	1.140	1.146	1.151	1.156	1.160	1.165	1.169	1.172	1.174	1.177	1.177	1.178	1.178	1.179	1.178	1.181	1.181	1.182	1.183	1.185
82	1.144	1.143	1.146	1.151	1.155	1.160	1.166	1.169	1.172	1.173	1.174	1.175	1.175	1.174	1.174	1.174	1.175	1.176	1.177	1.178
83	1.156	1.143	1.142	1.143	1.144	1.147	1.150	1.155	1.164	1.171	1.172	1.172	1.171	1.172	1.172	1.171	1.172	1.171	1.171	1.173
84	1.107	1.113	1.121	1.128	1.136	1.145	1.150	1.159	1.171	1.179	1.184	1.183	1.178	1.173	1.171	1.171	1.172	1.173	1.174	1.175
85	1.004	1.004	1.008	1.011	1.019	1.028	1.031	1.036	1.041	1.055	1.068	1.079	1.087	1.086	1.084	1.076	1.083	1.089	1.096	1.101
86	1.003	0.998	1.000	0.995	0.997	0.995	0.997	0.994	0.998	0.997	0.998	0.998	1.000	1.000	1.003	1.000	1.003	1.004	1.004	1.003
87	0.998	1.000	0.998	0.998	0.998	0.995	0.997	0.995	0.997	0.995	0.997	0.998	0.997	1.000	0.997	0.997	0.997	0.995	0.997	0.997
88	0.997	0.998	0.994	0.995	0.994	0.997	0.995	0.997	0.995	0.997	0.995	0.997	0.997	0.998	0.997	0.998	0.997	0.998	0.997	0.997
89	0.998	0.998	0.998	0.995	0.995	0.995	0.995	0.994	0.994	0.994	0.997	0.997	1.000	0.998	1.000	0.998	1.000	1.000	0.998	0.998
90	0.997	0.997	0.995	0.995	0.995	0.997	0.994	0.995	0.994	0.997	0.997	1.003	1.020	1.034	1.015	1.003	1.000	1.001	0.998	0.998
91	0.998	0.998	0.997	0.997	0.994	0.995	0.994	0.997	0.995	0.995	0.995	1.010	1.052	1.074	1.045	1.014	1.001	1.000	1.000	1.000
92	0.995	0.997	0.994	0.995	0.994	0.994	0.992	0.994	0.992	0.994	0.991	0.995	1.000	1.008	1.004	1.000	0.998	0.998	0.998	0.998
93	0.989	0.995	0.989	0.992	0.986	0.989	0.984	0.988	0.983	0.986	0.983	0.988	0.984	0.991	0.988	0.992	0.994	0.994	0.994	0.998
94	0.992	0.994	0.992	0.992	0.989	0.989	0.986	0.988	0.986	0.986	0.983	0.986	0.984	0.988	0.986	0.991	0.989	0.989	0.983	0.988
95	0.992	0.994	0.991	0.992	0.989	0.989	0.986	0.988	0.984	0.986	0.986	0.986	0.986	0.984	0.986	0.988	0.988	0.988	0.988	0.988
96	0.994	0.992	0.992	0.991	0.991	0.989	0.989	0.986	0.988	0.986	0.986	0.986	0.986	0.986	0.984	0.984	0.984	0.986	0.983	0.986
97	0.995	0.997	0.995	0.995	0.992	0.992	0.992	0.994	0.992	0.994	0.992	0.992	0.991	0.989	0.988	0.988	0.986	0.988	0.988	0.988
98	1.000	0.998	0.997	0.997	0.997	0.995	0.997	0.997	0.998	0.995	0.995	0.992	0.991	0.988	0.988	0.986	0.986	0.995	1.024	1.046

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 91

IR SCAN TIME 20.34 SEC
INITIAL TEMP 547.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	1.249	1.253	1.255	1.257	1.254	1.250	1.246	1.245	1.243	1.239	1.232	1.214	1.159	1.077	1.019	0.997	0.986	0.983	0.976	0.977
65	1.238	1.241	1.246	1.248	1.248	1.252	1.252	1.248	1.245	1.244	1.244	1.237	1.220	1.176	1.099	1.032	1.004	0.988	0.981	0.976
66	1.232	1.233	1.236	1.239	1.239	1.239	1.240	1.244	1.248	1.251	1.247	1.245	1.239	1.228	1.191	1.118	1.041	1.004	0.983	0.977
67	1.228	1.229	1.230	1.232	1.232	1.233	1.234	1.236	1.238	1.239	1.242	1.246	1.249	1.247	1.235	1.205	1.136	1.055	1.006	0.986
68	1.224	1.226	1.226	1.226	1.224	1.225	1.227	1.230	1.233	1.236	1.237	1.238	1.240	1.244	1.245	1.242	1.218	1.155	1.071	1.018
69	1.217	1.217	1.217	1.218	1.219	1.220	1.219	1.220	1.222	1.225	1.228	1.230	1.230	1.234	1.235	1.233	1.228	1.215	1.167	1.084
70	1.205	1.207	1.208	1.209	1.209	1.211	1.212	1.213	1.218	1.220	1.222	1.223	1.220	1.222	1.223	1.222	1.219	1.213	1.202	1.165
71	1.195	1.195	1.195	1.197	1.198	1.198	1.200	1.202	1.205	1.207	1.208	1.209	1.209	1.212	1.212	1.213	1.213	1.212	1.208	1.200
72	1.186	1.185	1.185	1.187	1.185	1.185	1.187	1.186	1.186	1.187	1.190	1.192	1.194	1.194	1.198	1.203	1.206	1.207	1.207	1.204
73	1.175	1.177	1.177	1.176	1.174	1.175	1.174	1.174	1.174	1.177	1.177	1.179	1.178	1.181	1.185	1.191	1.193	1.195	1.195	1.195
74	1.171	1.171	1.171	1.171	1.169	1.168	1.165	1.165	1.167	1.169	1.171	1.172	1.173	1.175	1.177	1.179	1.181	1.180	1.180	1.181
75	1.168	1.168	1.168	1.169	1.168	1.165	1.163	1.163	1.163	1.164	1.166	1.168	1.171	1.172	1.173	1.173	1.174	1.174	1.174	1.174
76	1.167	1.166	1.166	1.165	1.165	1.165	1.164	1.163	1.162	1.162	1.164	1.165	1.167	1.168	1.170	1.170	1.170	1.169	1.171	1.171
77	1.168	1.167	1.166	1.166	1.165	1.163	1.163	1.162	1.163	1.163	1.163	1.163	1.165	1.166	1.166	1.166	1.168	1.169	1.171	1.171
78	1.171	1.172	1.171	1.171	1.169	1.167	1.165	1.164	1.162	1.162	1.162	1.162	1.163	1.165	1.166	1.168	1.169	1.171	1.171	1.174
79	1.177	1.177	1.176	1.175	1.173	1.172	1.170	1.169	1.167	1.167	1.165	1.164	1.163	1.164	1.165	1.168	1.170	1.172	1.174	1.177
80	1.184	1.183	1.183	1.181	1.179	1.177	1.176	1.174	1.173	1.171	1.170	1.168	1.167	1.167	1.169	1.169	1.170	1.172	1.174	1.175
81	1.185	1.186	1.186	1.186	1.184	1.183	1.181	1.179	1.177	1.176	1.174	1.174	1.172	1.174	1.174	1.174	1.173	1.173	1.173	1.175
82	1.180	1.181	1.182	1.182	1.181	1.181	1.182	1.179	1.178	1.177	1.174	1.173	1.173	1.174	1.175	1.177	1.177	1.178	1.178	1.178
83	1.174	1.175	1.176	1.176	1.175	1.175	1.174	1.173	1.173	1.172	1.172	1.172	1.173	1.173	1.174	1.175	1.175	1.176	1.176	1.177
84	1.177	1.177	1.177	1.177	1.175	1.172	1.170	1.167	1.165	1.163	1.161	1.160	1.160	1.160	1.162	1.164	1.166	1.169	1.171	1.172
85	1.107	1.115	1.121	1.126	1.132	1.135	1.134	1.133	1.132	1.132	1.132	1.129	1.134	1.135	1.136	1.137	1.138	1.140	1.143	1.144
86	1.004	1.003	1.006	1.006	1.007	1.007	1.010	1.007	1.010	1.011	1.011	1.011	1.012	1.014	1.014	1.016	1.019	1.021	1.025	1.026
87	0.997	0.995	0.998	0.997	0.998	0.997	0.998	0.998	0.998	0.998	0.998	0.997	0.998	0.997	1.000	1.001	1.003	1.003	1.001	1.001
88	0.997	0.997	0.997	0.997	0.995	0.998	0.997	0.998	0.997	0.998	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.991	0.994
89	0.998	0.998	0.998	0.998	0.998	0.997	0.998	0.998	0.998	0.998	0.998	0.998	0.997	0.997	0.998	0.995	0.997	0.992	0.992	0.992
90	0.998	1.000	0.997	0.997	0.997	0.998	0.998	0.998	0.998	1.000	1.001	1.003	0.998	1.000	0.995	0.995	0.992	0.994	0.994	0.994
91	0.997	0.998	0.995	0.997	0.997	0.998	0.998	1.000	1.000	1.015	1.043	1.045	1.021	1.006	0.995	0.995	0.992	0.995	0.994	0.997
92	0.998	1.000	0.998	0.998	0.995	0.998	0.998	0.998	0.997	1.006	1.015	1.020	1.007	1.000	0.994	0.992	0.992	0.995	0.992	0.994
93	0.998	1.001	0.998	1.003	0.998	1.000	0.998	1.000	0.997	0.998	0.997	0.998	0.997	0.997	0.997	0.998	0.995	0.995	0.995	0.995
94	0.988	0.994	0.994	0.998	0.997	1.000	0.997	0.997	0.994	0.997	0.994	0.997	0.995	1.000	0.998	0.998	0.995	0.997	0.995	0.997
95	0.986	0.989	0.989	0.992	0.991	0.994	0.992	0.995	0.992	0.992	0.994	0.995	0.995	0.998	0.997	0.998	0.995	0.997	0.995	0.997
96	0.986	0.988	0.988	0.988	0.989	0.991	0.992	0.992	0.992	0.994	0.994	0.995	0.998	0.998	0.997	0.998	0.997	0.997	0.998	1.000
97	0.988	0.986	0.986	0.989	0.988	0.991	0.989	0.995	0.994	0.998	0.997	0.998	0.998	1.000	1.000	1.001	0.998	1.000	1.001	1.003
98	1.038	1.012	0.997	0.991	0.991	0.991	0.992	0.992	0.995	0.995	0.998	1.000	1.000	1.001	1.001	1.001	1.000	1.003	1.001	1.003

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 91

IR SCAN TIME 20.34 SEC
INITIAL TEMP 547.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.976	0.977	0.970	0.972	0.970	0.970	0.968	0.966	0.964	0.966	0.964	0.966	0.964	0.966	0.964	0.966	0.966	0.968	0.966	0.966
65	0.976	0.976	0.970	0.968	0.966	0.964	0.964	0.960	0.962	0.960	0.960	0.960	0.960	0.960	0.960	0.960	0.960	0.958	0.960	0.960
66	0.970	0.974	0.972	0.968	0.962	0.958	0.956	0.954	0.954	0.954	0.952	0.954	0.950	0.952	0.952	0.952	0.952	0.954	0.950	0.952
67	0.974	0.970	0.970	0.972	0.958	0.956	0.945	0.950	0.943	0.945	0.940	0.945	0.940	0.945	0.938	0.945	0.940	0.943	0.940	0.947
68	0.989	0.977	0.972	0.972	0.972	0.964	0.950	0.945	0.940	0.943	0.940	0.940	0.933	0.940	0.938	0.940	0.938	0.940	0.938	0.938
69	1.018	0.991	0.977	0.976	0.970	0.970	0.964	0.952	0.943	0.940	0.935	0.938	0.935	0.935	0.933	0.933	0.935	0.935	0.933	0.935
70	1.090	1.025	0.992	0.981	0.974	0.970	0.968	0.964	0.950	0.945	0.938	0.935	0.935	0.935	0.935	0.935	0.933	0.935	0.933	0.935
71	1.175	1.112	1.040	1.000	0.981	0.972	0.968	0.970	0.964	0.954	0.943	0.940	0.935	0.935	0.935	0.935	0.933	0.933	0.933	0.933
72	1.198	1.183	1.135	1.060	1.008	0.984	0.974	0.968	0.966	0.966	0.958	0.947	0.940	0.935	0.935	0.930	0.933	0.933	0.933	0.930
73	1.193	1.192	1.182	1.146	1.076	1.016	0.988	0.976	0.968	0.968	0.966	0.962	0.945	0.943	0.935	0.938	0.933	0.935	0.933	0.935
74	1.182	1.181	1.181	1.171	1.143	1.079	1.020	0.983	0.974	0.964	0.966	0.962	0.964	0.947	0.943	0.927	0.935	0.935	0.935	0.930
75	1.175	1.175	1.175	1.172	1.165	1.142	1.088	1.024	0.991	0.976	0.972	0.966	0.968	0.968	0.958	0.945	0.938	0.935	0.933	0.930
76	1.171	1.172	1.172	1.171	1.169	1.161	1.143	1.096	1.031	0.994	0.976	0.968	0.968	0.968	0.970	0.966	0.952	0.943	0.938	0.935
77	1.174	1.177	1.176	1.173	1.171	1.169	1.163	1.148	1.105	1.043	0.998	0.979	0.970	0.968	0.968	0.970	0.966	0.958	0.950	0.940
78	1.177	1.178	1.177	1.177	1.177	1.176	1.173	1.169	1.159	1.127	1.066	1.014	0.984	0.974	0.968	0.968	0.970	0.972	0.968	0.960
79	1.177	1.175	1.175	1.178	1.179	1.177	1.176	1.176	1.173	1.167	1.144	1.093	1.033	0.997	0.977	0.970	0.964	0.968	0.968	0.972
80	1.177	1.178	1.181	1.181	1.181	1.181	1.180	1.177	1.176	1.174	1.170	1.155	1.112	1.050	1.003	0.979	0.970	0.968	0.970	0.968
81	1.177	1.181	1.181	1.182	1.182	1.184	1.182	1.181	1.179	1.178	1.175	1.175	1.163	1.127	1.063	1.012	0.986	0.976	0.970	0.972
82	1.178	1.178	1.178	1.178	1.179	1.181	1.184	1.185	1.185	1.184	1.182	1.180	1.176	1.163	1.132	1.073	1.020	0.988	0.974	0.968
83	1.178	1.179	1.179	1.180	1.180	1.181	1.182	1.183	1.186	1.187	1.186	1.185	1.182	1.176	1.165	1.138	1.084	1.028	0.994	0.976
84	1.173	1.175	1.177	1.177	1.179	1.181	1.183	1.184	1.185	1.186	1.189	1.188	1.186	1.180	1.174	1.165	1.142	1.094	1.036	0.998
85	1.147	1.150	1.154	1.158	1.163	1.164	1.168	1.171	1.176	1.180	1.183	1.185	1.186	1.185	1.182	1.177	1.170	1.148	1.104	1.046
86	1.030	1.033	1.039	1.044	1.053	1.056	1.061	1.067	1.075	1.084	1.095	1.101	1.106	1.109	1.110	1.111	1.112	1.110	1.099	1.069
87	1.003	1.003	1.004	1.006	1.006	1.003	1.003	1.004	1.012	1.019	1.025	1.023	1.019	1.015	1.015	1.011	1.008	1.007	1.007	1.007
88	0.991	0.994	0.989	0.992	0.991	0.994	0.992	0.994	0.992	0.997	0.997	1.004	1.004	1.011	1.010	1.008	1.003	1.003	1.000	1.000
89	0.992	0.994	0.994	0.994	0.992	0.994	0.994	0.995	0.994	0.994	0.997	1.000	1.006	1.007	1.008	1.007	1.006	1.003	1.001	0.998
90	0.992	0.994	0.994	0.995	0.994	0.997	0.995	0.995	0.994	0.995	1.000	1.010	1.011	1.012	1.012	1.018	1.016	1.010	1.004	1.001
91	0.994	0.995	0.995	0.997	0.994	1.001	1.019	1.030	1.018	1.006	1.001	1.006	1.007	1.012	1.012	1.015	1.011	1.010	1.004	1.004
92	0.995	0.997	0.995	0.995	0.997	1.003	1.016	1.030	1.019	1.010	1.004	1.008	1.011	1.016	1.016	1.018	1.012	1.011	1.006	1.004
93	0.994	0.997	0.995	0.998	0.998	1.000	1.001	1.003	1.001	1.004	1.006	1.012	1.015	1.020	1.021	1.023	1.019	1.015	1.010	1.010
94	0.995	0.998	0.995	1.000	0.998	1.001	1.001	1.004	1.003	1.006	1.008	1.014	1.019	1.025	1.028	1.029	1.028	1.024	1.018	1.018
95	0.995	0.998	0.998	1.000	0.998	1.001	1.000	1.004	1.000	1.004	1.004	1.016	1.020	1.028	1.031	1.034	1.033	1.029	1.023	1.023
96	1.000	0.998	1.001	1.001	1.001	1.001	1.004	1.004	1.004	1.004	1.008	1.014	1.021	1.028	1.032	1.036	1.036	1.031	1.025	1.019
97	1.001	1.003	1.003	1.006	1.003	1.007	1.007	1.008	1.008	1.008	1.011	1.020	1.029	1.036	1.040	1.042	1.041	1.037	1.030	1.026
98	1.003	1.003	1.006	1.004	1.006	1.006	1.008	1.007	1.007	1.008	1.015	1.025	1.034	1.040	1.043	1.049	1.045	1.040	1.032	1.025

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 91

IR SCAN TIME 20.34 SEC
INITIAL TEMP 547.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.968	0.968	0.966	0.966	0.964	0.966	0.964	0.966	0.964	0.966	0.962	0.966	0.964	0.966	0.964	0.966	0.962	0.964	0.962	0.964
65	0.960	0.960	0.960	0.960	0.960	0.958	0.960	0.960	0.958	0.960	0.958	0.958	0.958	0.958	0.956	0.958	0.958	0.958	0.956	0.956
66	0.950	0.954	0.952	0.952	0.950	0.952	0.950	0.952	0.950	0.950	0.950	0.950	0.950	0.952	0.947	0.950	0.947	0.950	0.947	0.950
67	0.945	0.947	0.945	0.945	0.945	0.945	0.943	0.945	0.940	0.945	0.945	0.943	0.943	0.945	0.940	0.945	0.940	0.943	0.940	0.943
68	0.938	0.940	0.933	0.938	0.933	0.938	0.933	0.935	0.930	0.938	0.933	0.935	0.933	0.935	0.933	0.935	0.930	0.938	0.935	0.938
69	0.933	0.935	0.933	0.935	0.933	0.933	0.930	0.933	0.933	0.933	0.933	0.933	0.933	0.933	0.930	0.933	0.933	0.935	0.930	0.935
70	0.933	0.933	0.930	0.933	0.930	0.933	0.930	0.933	0.930	0.933	0.930	0.930	0.930	0.933	0.930	0.930	0.930	0.927	0.930	0.933
71	0.927	0.933	0.930	0.933	0.933	0.933	0.930	0.933	0.933	0.933	0.930	0.933	0.930	0.930	0.927	0.933	0.930	0.930	0.927	0.930
72	0.933	0.930	0.933	0.933	0.930	0.933	0.930	0.930	0.930	0.930	0.930	0.927	0.930	0.930	0.930	0.927	0.930	0.930	0.930	0.930
73	0.933	0.933	0.933	0.933	0.933	0.933	0.933	0.933	0.933	0.933	0.933	0.933	0.930	0.930	0.927	0.930	0.927	0.930	0.927	0.933
74	0.935	0.933	0.933	0.933	0.933	0.933	0.933	0.933	0.930	0.933	0.933	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.930
75	0.933	0.930	0.930	0.927	0.930	0.924	0.930	0.927	0.933	0.930	0.930	0.927	0.930	0.927	0.930	0.930	0.930	0.930	0.930	0.930
76	0.935	0.933	0.933	0.933	0.933	0.933	0.933	0.930	0.933	0.933	0.930	0.930	0.930	0.930	0.930	0.930	0.933	0.927	0.930	0.927
77	0.938	0.933	0.933	0.933	0.933	0.933	0.935	0.933	0.930	0.933	0.933	0.930	0.933	0.933	0.933	0.930	0.930	0.930	0.930	0.933
78	0.950	0.945	0.938	0.938	0.935	0.935	0.933	0.935	0.933	0.935	0.935	0.933	0.930	0.935	0.933	0.933	0.933	0.935	0.933	0.933
79	0.966	0.962	0.954	0.947	0.938	0.938	0.935	0.938	0.933	0.935	0.933	0.935	0.935	0.935	0.933	0.935	0.933	0.935	0.933	0.935
80	0.970	0.970	0.970	0.966	0.962	0.954	0.947	0.945	0.940	0.935	0.933	0.933	0.933	0.933	0.933	0.933	0.933	0.933	0.933	0.933
81	0.968	0.970	0.968	0.972	0.970	0.970	0.968	0.968	0.962	0.958	0.952	0.950	0.943	0.938	0.938	0.938	0.933	0.935	0.933	0.933
82	0.966	0.964	0.968	0.966	0.972	0.972	0.974	0.972	0.974	0.972	0.972	0.970	0.966	0.966	0.962	0.954	0.952	0.947	0.945	0.940
83	0.972	0.968	0.968	0.972	0.974	0.977	0.979	0.981	0.979	0.979	0.977	0.976	0.976	0.977	0.974	0.968	0.974	0.962	0.968	0.958
84	0.983	0.977	0.979	0.977	0.981	0.981	0.984	0.986	0.986	0.986	0.984	0.981	0.979	0.981	0.979	0.979	0.981	0.979	0.976	0.976
85	1.007	0.991	0.984	0.988	0.988	0.991	0.992	0.994	0.991	0.994	0.989	0.988	0.986	0.986	0.983	0.983	0.983	0.979	0.979	0.979
86	1.025	1.003	0.994	0.991	0.992	0.994	0.995	0.995	0.997	0.995	0.995	0.994	0.994	0.992	0.991	0.991	0.989	0.988	0.984	0.984
87	1.004	1.003	1.003	1.003	0.998	0.995	0.994	0.995	0.997	0.997	0.998	0.997	0.998	0.997	0.997	0.995	0.997	0.995	0.995	0.995
88	0.998	0.998	0.998	0.998	0.994	0.994	0.991	0.992	0.992	0.995	0.997	0.998	0.997	0.998	0.997	0.998	0.998	0.998	0.998	1.001
89	0.998	0.995	0.995	0.994	0.994	0.991	0.992	0.991	0.994	0.992	0.997	0.997	0.997	0.997	0.997	0.997	0.998	1.000	1.000	1.001
90	1.000	1.000	0.995	0.997	0.997	1.000	0.997	0.998	0.997	0.998	0.998	1.000	0.998	1.000	0.995	1.000	0.997	1.003	1.000	1.003
91	1.001	1.003	1.001	1.003	1.000	1.001	1.001	1.003	1.003	1.003	1.001	1.003	1.001	1.001	1.001	1.003	1.001	1.003	1.003	1.004
92	1.003	1.004	1.003	1.003	1.001	1.004	1.004	1.006	1.004	1.008	1.007	1.007	1.006	1.008	1.006	1.007	1.004	1.007	1.004	1.007
93	1.008	1.008	1.007	1.011	1.010	1.011	1.011	1.012	1.012	1.014	1.012	1.015	1.012	1.015	1.012	1.014	1.012	1.012	1.012	1.014
94	1.016	1.018	1.016	1.018	1.018	1.020	1.018	1.019	1.019	1.021	1.020	1.021	1.020	1.021	1.020	1.021	1.019	1.020	1.019	1.021
95	1.019	1.021	1.020	1.023	1.023	1.024	1.024	1.025	1.025	1.028	1.028	1.030	1.030	1.030	1.031	1.032	1.031	1.032	1.033	1.036
96	1.020	1.020	1.023	1.023	1.024	1.025	1.028	1.030	1.032	1.036	1.039	1.041	1.043	1.046	1.046	1.046	1.047	1.050	1.051	1.050
97	1.023	1.024	1.025	1.026	1.029	1.032	1.034	1.037	1.039	1.041	1.046	1.047	1.048	1.054	1.050	1.055	1.054	1.058	1.057	1.059
98	1.023	1.023	1.025	1.029	1.030	1.031	1.033	1.036	1.039	1.041	1.042	1.044	1.048	1.048	1.048	1.052	1.050	1.049	1.051	1.052

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 91

IR SCAN TIME 20.34 SEC
INITIAL TEMP 547.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.962	0.964	0.964	0.962	0.962	0.964	0.960	0.964	0.962	0.964
65	0.958	0.956	0.958	0.954	0.956	0.956	0.956	0.956	0.956	0.956
66	0.947	0.950	0.947	0.950	0.947	0.950	0.947	0.947	0.947	0.950
67	0.943	0.943	0.943	0.943	0.940	0.940	0.940	0.943	0.943	0.943
68	0.935	0.935	0.935	0.935	0.935	0.938	0.935	0.938	0.935	0.938
69	0.918	0.933	0.924	0.933	0.924	0.930	0.924	0.933	0.924	0.930
70	0.927	0.930	0.930	0.930	0.927	0.930	0.927	0.927	0.930	0.930
71	0.927	0.930	0.927	0.930	0.927	0.933	0.930	0.927	0.924	0.927
72	0.930	0.927	0.924	0.927	0.927	0.927	0.924	0.927	0.927	0.927
73	0.927	0.927	0.930	0.930	0.927	0.927	0.927	0.930	0.927	0.930
74	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.924	0.930	0.927
75	0.930	0.930	0.930	0.927	0.930	0.930	0.930	0.927	0.927	0.930
76	0.930	0.924	0.930	0.924	0.930	0.927	0.927	0.924	0.930	0.924
77	0.930	0.930	0.930	0.930	0.930	0.930	0.927	0.930	0.930	0.930
78	0.930	0.935	0.930	0.933	0.930	0.933	0.930	0.933	0.930	0.933
79	0.933	0.935	0.933	0.938	0.933	0.938	0.933	0.938	0.935	0.938
80	0.933	0.930	0.933	0.930	0.930	0.933	0.933	0.933	0.930	0.933
81	0.930	0.933	0.930	0.933	0.930	0.930	0.930	0.933	0.930	0.933
82	0.940	0.938	0.935	0.935	0.933	0.933	0.933	0.933	0.933	0.933
83	0.960	0.947	0.950	0.938	0.945	0.933	0.940	0.930	0.935	0.927
84	0.976	0.974	0.972	0.970	0.968	0.964	0.958	0.954	0.950	0.947
85	0.979	0.983	0.979	0.979	0.979	0.977	0.976	0.974	0.972	0.970
86	0.984	0.981	0.984	0.983	0.986	0.984	0.986	0.983	0.986	0.981
87	0.992	0.991	0.989	0.991	0.991	0.991	0.989	0.989	0.989	0.989
88	1.000	1.000	0.998	1.000	1.000	1.001	0.998	0.997	0.995	0.998
89	1.003	1.003	1.004	1.006	1.007	1.007	1.007	1.006	1.006	1.006
90	1.000	1.004	1.003	1.006	1.006	1.011	1.008	1.011	1.010	1.014
91	1.003	1.004	1.003	1.007	1.007	1.010	1.011	1.012	1.012	1.016
92	1.004	1.007	1.004	1.008	1.008	1.011	1.012	1.015	1.016	1.020
93	1.011	1.012	1.012	1.015	1.014	1.018	1.018	1.023	1.021	1.025
94	1.020	1.023	1.021	1.025	1.023	1.026	1.028	1.030	1.033	1.036
95	1.036	1.034	1.037	1.038	1.038	1.040	1.041	1.042	1.043	1.047
96	1.050	1.052	1.049	1.053	1.050	1.052	1.053	1.055	1.056	1.058
97	1.058	1.059	1.059	1.060	1.059	1.061	1.060	1.064	1.066	1.071
98	1.053	1.054	1.053	1.055	1.056	1.059	1.064	1.080	1.108	1.136

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 20.34 SEC
GROUP 91 HREF = 0.2066E-01

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.002	0.004	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
30	0.004	0.004	0.003	0.003	0.002	0.003	0.002	0.002	0.001	0.002	0.002	0.002	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001
31	0.003	0.003	0.002	0.003	0.003	0.003	0.002	0.003	0.001	0.002	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
32	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001
33	0.003	0.004	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
40	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
41	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
42	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
43	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
44	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.008	0.026
45	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.007	0.047	0.093
46	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.014	0.058	0.101
47	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.018	0.065	0.105
48	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.001	0.025	0.075	0.111
49	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.038	0.099	0.135
50	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.009	0.067	0.139	0.173
51	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.019	0.090	0.159	0.192
52	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.026	0.102	0.161	0.191
53	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.026	0.090	0.133	0.158
54	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.026	0.076	0.103	0.117
55	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.031	0.076	0.097	0.105
56	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.036	0.080	0.097	0.103
57	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.047	0.083	0.097	0.103
58	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.015	0.062	0.090	0.099	0.104
59	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.027	0.072	0.092	0.099	0.104
60	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.001	0.040	0.078	0.093	0.099	0.103
61	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.007	0.051	0.082	0.093	0.098	0.102
62	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.055	0.082	0.092	0.096	0.100
63	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.016	0.059	0.082	0.090	0.094	0.098

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 20.34 SEC
GROUP 91 HREF = 0.206E-01.

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.002	0.001	0.001
30	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001
31	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.002	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
32	0.001	0.001	0.001	0.002	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
40	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
41	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
42	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
43	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
44	0.035	0.037	0.032	0.026	0.018	0.012	0.006	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
45	0.118	0.131	0.137	0.137	0.130	0.122	0.110	0.095	0.071	0.042	0.017	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
46	0.124	0.136	0.145	0.152	0.157	0.158	0.157	0.158	0.156	0.131	0.084	0.043	0.017	0.005	0.005	0.005	0.005	0.005	0.005	0.005
47	0.124	0.136	0.145	0.152	0.157	0.160	0.161	0.158	0.152	0.149	0.133	0.093	0.049	0.024	0.012	0.008	0.003	0.003	0.003	0.003
48	0.127	0.134	0.141	0.148	0.155	0.159	0.161	0.160	0.158	0.149	0.140	0.129	0.099	0.056	0.025	0.009	0.006	0.007	0.007	0.004
49	0.143	0.145	0.146	0.149	0.153	0.157	0.158	0.159	0.158	0.154	0.148	0.139	0.126	0.102	0.062	0.029	0.009	0.003	0.001	0.003
50	0.163	0.162	0.175	0.167	0.162	0.160	0.159	0.157	0.155	0.152	0.149	0.146	0.139	0.125	0.100	0.062	0.028	0.009	0.003	0.003
51	0.208	0.217	0.220	0.216	0.206	0.189	0.172	0.160	0.156	0.153	0.149	0.148	0.146	0.141	0.131	0.107	0.069	0.031	0.012	0.001
52	0.209	0.223	0.236	0.247	0.255	0.252	0.233	0.206	0.181	0.162	0.153	0.151	0.148	0.145	0.142	0.136	0.119	0.080	0.038	0.014
53	0.179	0.199	0.220	0.243	0.265	0.279	0.281	0.275	0.258	0.227	0.191	0.164	0.152	0.149	0.147	0.144	0.140	0.126	0.090	0.044
54	0.130	0.146	0.164	0.187	0.215	0.242	0.265	0.285	0.301	0.305	0.287	0.246	0.200	0.165	0.150	0.147	0.147	0.144	0.134	0.103
55	0.110	0.117	0.124	0.133	0.144	0.158	0.179	0.208	0.245	0.282	0.311	0.321	0.304	0.261	0.207	0.167	0.149	0.147	0.149	0.145
56	0.107	0.111	0.115	0.120	0.124	0.126	0.130	0.138	0.151	0.172	0.202	0.242	0.282	0.309	0.309	0.276	0.222	0.177	0.153	0.148
57	0.107	0.111	0.116	0.121	0.124	0.124	0.125	0.128	0.132	0.137	0.142	0.148	0.164	0.195	0.237	0.279	0.303	0.287	0.237	0.186
58	0.107	0.109	0.115	0.119	0.122	0.125	0.128	0.130	0.133	0.135	0.137	0.137	0.139	0.141	0.145	0.162	0.196	0.244	0.284	0.283
59	0.108	0.110	0.115	0.119	0.123	0.124	0.126	0.127	0.131	0.135	0.139	0.142	0.141	0.140	0.139	0.139	0.139	0.146	0.164	0.199
60	0.106	0.109	0.113	0.118	0.122	0.126	0.128	0.131	0.134	0.136	0.138	0.138	0.138	0.141	0.143	0.142	0.139	0.138	0.138	0.140
61	0.105	0.108	0.110	0.114	0.118	0.123	0.125	0.127	0.131	0.134	0.137	0.139	0.140	0.140	0.139	0.139	0.139	0.140	0.141	0.140
62	0.103	0.106	0.108	0.112	0.116	0.120	0.123	0.124	0.127	0.131	0.133	0.136	0.138	0.140	0.142	0.141	0.140	0.140	0.140	0.140
63	0.101	0.103	0.106	0.110	0.114	0.119	0.120	0.122	0.125	0.128	0.131	0.133	0.135	0.137	0.139	0.139	0.141	0.145	0.148	0.148

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 20.34 SEC
GROUP 91 HREF = 0.206E-01

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
30	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
31	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
32	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
40	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
41	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
42	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
43	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
44	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
45	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
46	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
47	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
48	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
49	0.005	0.005	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
50	0.003	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
51	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
52	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
53	0.015	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
54	0.056	0.020	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
55	0.123	0.077	0.032	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
56	0.149	0.138	0.097	0.047	0.015	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
57	0.157	0.147	0.144	0.121	0.071	0.029	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
58	0.240	0.189	0.157	0.143	0.123	0.073	0.029	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
59	0.238	0.254	0.227	0.183	0.148	0.114	0.066	0.025	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
60	0.146	0.162	0.190	0.207	0.193	0.159	0.125	0.079	0.032	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
61	0.139	0.139	0.139	0.144	0.155	0.164	0.157	0.134	0.092	0.041	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
62	0.141	0.142	0.140	0.138	0.137	0.138	0.141	0.146	0.142	0.111	0.058	0.019	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
63	0.144	0.142	0.143	0.144	0.144	0.140	0.137	0.137	0.135	0.135	0.126	0.088	0.037	0.009	0.009	0.009	0.009	0.009	0.009	0.009

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 20.34 SEC
GROUP 91 HREF = 0.206E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
30	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
31	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
32	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
40	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
41	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
42	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
43	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
44	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
45	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
46	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
47	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
48	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
49	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
50	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
51	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
52	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
53	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
54	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
55	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
56	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
57	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
58	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
59	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
60	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
61	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
62	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
63	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009

IR HEAT TRANSFER COEFFICIENT - H(.9IO)/HREF
IR SCAN TIME 20.34 SEC
HREF = 0.206E-01

GROUP 91

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
30	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
31	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
32	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
40	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
41	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
42	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
43	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
44	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
45	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
46	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
47	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
48	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
49	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
50	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
51	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
52	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
53	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
54	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
55	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
56	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
57	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
58	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
59	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
60	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
61	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
62	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
63	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREFR
IR SCAN TIME 20.34 SEC
GROUP 91 HREFR = 0.206E-01

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
30	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
31	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
32	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
40	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
41	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
42	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
43	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
44	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
45	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
46	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
47	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
48	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
49	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
50	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
51	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
52	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
53	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
54	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
55	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
56	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
57	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
58	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
59	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
60	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
61	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
62	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
63	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009

IR HEAT TRANSFER COEFFICIENT - H(.9IO)/HREF
IR SCAN TIME 20.34 SEC
GROUP 91 HREF = 0.206E-01

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.017	0.060	0.081	0.088	0.092	0.097
65	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.027	0.067	0.082	0.088	0.092	0.096
66	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.041	0.073	0.083	0.088	0.091	0.095
67	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.006	0.049	0.074	0.082	0.086	0.090	0.092
68	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.017	0.056	0.075	0.081	0.085	0.086	0.089
69	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.027	0.061	0.073	0.078	0.081	0.084	0.086
70	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.030	0.060	0.071	0.075	0.078	0.080	0.083
71	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.032	0.059	0.069	0.072	0.075	0.077	0.080
72	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.034	0.059	0.067	0.071	0.073	0.075	0.078
73	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.003	0.041	0.060	0.065	0.069	0.071	0.073	0.077
74	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.014	0.049	0.062	0.066	0.069	0.071	0.073	0.075
75	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.022	0.053	0.063	0.067	0.070	0.072	0.074	0.075
76	0.011	0.003	0.011	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.034	0.058	0.065	0.069	0.072	0.073	0.075	0.076
77	0.010	0.047	0.036	0.027	0.019	0.006	0.001	0.001	0.001	0.001	0.001	0.005	0.043	0.062	0.068	0.071	0.073	0.075	0.078	0.079
78	0.022	0.061	0.033	0.025	0.028	0.016	0.007	0.006	0.006	0.006	0.006	0.008	0.045	0.063	0.067	0.071	0.073	0.076	0.078	0.080
79	0.018	0.053	0.048	0.053	0.032	0.017	0.017	0.012	0.005	0.005	0.005	0.013	0.047	0.062	0.065	0.070	0.071	0.074	0.076	0.079
80	0.014	0.043	0.062	0.064	0.052	0.029	0.018	0.014	0.010	0.004	0.004	0.016	0.047	0.059	0.063	0.065	0.068	0.070	0.072	0.074
81	0.018	0.053	0.090	0.074	0.067	0.045	0.021	0.005	0.001	0.005	0.006	0.027	0.053	0.062	0.064	0.065	0.066	0.067	0.068	0.071
82	0.038	0.052	0.073	0.064	0.063	0.052	0.030	0.008	0.008	0.008	0.006	0.038	0.067	0.075	0.076	0.075	0.073	0.072	0.073	0.073
83	0.038	0.035	0.039	0.045	0.056	0.054	0.032	0.008	0.008	0.001	0.011	0.044	0.076	0.078	0.081	0.082	0.083	0.084	0.086	0.087
84	0.016	0.015	0.021	0.036	0.051	0.062	0.053	0.025	0.014	0.015	0.018	0.015	0.018	0.019	0.022	0.029	0.034	0.039	0.045	0.050
85	0.001	0.003	0.009	0.026	0.040	0.050	0.041	0.021	0.015	0.012	0.013	0.008	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.004
86	0.003	0.003	0.003	0.002	0.006	0.008	0.005	0.002	0.004	0.007	0.010	0.006	0.003	0.002	0.002	0.002	0.002	0.002	0.001	0.001
87	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.008	0.009	0.005	0.003	0.001	0.001	0.001	0.001	0.001	0.001
88	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.009	0.009	0.005	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001
89	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.004	0.008	0.005	0.003	0.002	0.001	0.001	0.001	0.001	0.001	0.001
90	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.001	0.003	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
91	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.001	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001
92	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
93	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
94	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
95	0.001	0.001	0.001	0.002	0.002	0.002	0.001	0.001	0.001	0.005	0.005	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
96	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.004	0.006	0.003	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.002
97	0.001	0.001	0.001	0.003	0.003	0.003	0.002	0.001	0.001	0.005	0.006	0.003	0.003	0.003	0.001	0.005	0.004	0.003	0.001	0.001
98	0.001	0.001	0.001	0.002	0.003	0.002	0.001	0.001	0.001	0.005	0.008	0.004	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 20.34 SEC
GROUP 91 HREF = 0.206E-01

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	0.099	0.102	0.104	0.108	0.112	0.117	0.118	0.120	0.121	0.125	0.127	0.128	0.130	0.132	0.133	0.134	0.136	0.139	0.141	0.141
65	0.098	0.101	0.104	0.107	0.111	0.114	0.116	0.116	0.120	0.120	0.124	0.123	0.126	0.127	0.129	0.128	0.132	0.132	0.133	0.133
66	0.097	0.100	0.103	0.107	0.110	0.112	0.114	0.116	0.118	0.119	0.120	0.122	0.125	0.126	0.126	0.127	0.128	0.130	0.129	0.129
67	0.094	0.097	0.101	0.104	0.107	0.108	0.110	0.113	0.115	0.117	0.117	0.119	0.121	0.122	0.122	0.123	0.124	0.125	0.125	0.125
68	0.091	0.094	0.097	0.100	0.102	0.105	0.106	0.108	0.110	0.113	0.115	0.115	0.116	0.118	0.120	0.121	0.121	0.122	0.122	0.123
69	0.087	0.090	0.094	0.096	0.098	0.100	0.102	0.104	0.106	0.107	0.109	0.112	0.113	0.113	0.113	0.114	0.115	0.116	0.116	0.118
70	0.084	0.087	0.090	0.092	0.093	0.095	0.097	0.100	0.101	0.103	0.104	0.106	0.107	0.107	0.108	0.108	0.109	0.109	0.110	0.110
71	0.081	0.083	0.086	0.089	0.090	0.092	0.094	0.096	0.097	0.099	0.100	0.101	0.102	0.103	0.102	0.103	0.104	0.105	0.104	0.105
72	0.079	0.080	0.083	0.085	0.085	0.087	0.090	0.091	0.094	0.094	0.095	0.096	0.096	0.095	0.095	0.094	0.095	0.096	0.098	0.099
73	0.077	0.078	0.081	0.083	0.084	0.085	0.086	0.090	0.091	0.093	0.092	0.092	0.093	0.094	0.093	0.092	0.091	0.092	0.092	0.092
74	0.077	0.077	0.079	0.080	0.083	0.085	0.086	0.087	0.090	0.090	0.090	0.089	0.090	0.090	0.090	0.090	0.089	0.089	0.089	0.089
75	0.077	0.077	0.078	0.079	0.082	0.084	0.085	0.086	0.088	0.089	0.089	0.090	0.090	0.089	0.090	0.089	0.088	0.088	0.088	0.088
76	0.077	0.079	0.080	0.081	0.084	0.086	0.087	0.087	0.088	0.089	0.090	0.090	0.090	0.089	0.090	0.089	0.088	0.088	0.088	0.088
77	0.081	0.082	0.083	0.084	0.086	0.088	0.090	0.091	0.092	0.093	0.093	0.092	0.091	0.090	0.091	0.090	0.088	0.087	0.088	0.088
78	0.082	0.085	0.086	0.087	0.088	0.091	0.092	0.094	0.095	0.096	0.096	0.096	0.094	0.094	0.093	0.093	0.090	0.090	0.089	0.090
79	0.082	0.085	0.086	0.089	0.090	0.092	0.093	0.095	0.096	0.098	0.097	0.098	0.097	0.097	0.097	0.097	0.095	0.095	0.094	0.094
80	0.077	0.080	0.083	0.086	0.088	0.090	0.092	0.094	0.096	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.098	0.098	0.098
81	0.072	0.075	0.076	0.081	0.084	0.086	0.089	0.091	0.092	0.094	0.094	0.095	0.095	0.095	0.095	0.096	0.097	0.097	0.097	0.098
82	0.074	0.074	0.076	0.078	0.081	0.084	0.087	0.089	0.091	0.091	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.093	0.094	0.094
83	0.081	0.074	0.073	0.073	0.074	0.076	0.078	0.081	0.086	0.090	0.091	0.091	0.090	0.091	0.091	0.090	0.091	0.090	0.090	0.092
84	0.054	0.057	0.061	0.065	0.070	0.075	0.078	0.083	0.090	0.095	0.098	0.097	0.094	0.092	0.090	0.090	0.091	0.091	0.092	0.093
85	0.002	0.002	0.004	0.005	0.009	0.013	0.015	0.017	0.020	0.027	0.033	0.039	0.043	0.042	0.041	0.037	0.041	0.044	0.047	0.051
86	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.001
87	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
88	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
89	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
90	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.009	0.016	0.007	0.001	0.001	0.001	0.001	0.001
91	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.005	0.025	0.036	0.022	0.006	0.001	0.001	0.001	0.001
92	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.004	0.002	0.002	0.002	0.002	0.002	0.002
93	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
94	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
95	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
96	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
97	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
98	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.011	0.022

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 20.34 SEC
GROUP 91 HREF = 0.206E-01

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	0.141	0.143	0.145	0.146	0.144	0.142	0.139	0.138	0.137	0.134	0.129	0.117	0.083	0.038	0.009	0.009	0.009	0.009	0.009	0.009
65	0.133	0.135	0.139	0.140	0.140	0.143	0.143	0.140	0.138	0.137	0.137	0.133	0.121	0.093	0.049	0.015	0.002	0.002	0.002	0.002
66	0.129	0.130	0.132	0.134	0.134	0.134	0.134	0.137	0.140	0.142	0.139	0.138	0.134	0.126	0.102	0.059	0.020	0.002	0.002	0.002
67	0.126	0.127	0.127	0.129	0.129	0.130	0.130	0.132	0.133	0.134	0.136	0.139	0.141	0.139	0.131	0.111	0.070	0.027	0.003	0.003
68	0.124	0.125	0.125	0.125	0.124	0.125	0.126	0.127	0.130	0.132	0.133	0.133	0.135	0.137	0.138	0.136	0.120	0.081	0.034	0.008
69	0.119	0.119	0.119	0.120	0.121	0.121	0.120	0.121	0.122	0.124	0.127	0.127	0.128	0.131	0.131	0.130	0.126	0.118	0.088	0.041
70	0.111	0.113	0.113	0.114	0.114	0.115	0.116	0.117	0.120	0.121	0.122	0.123	0.121	0.123	0.123	0.122	0.120	0.117	0.110	0.086
71	0.105	0.105	0.105	0.106	0.107	0.107	0.108	0.110	0.112	0.112	0.113	0.114	0.114	0.116	0.116	0.116	0.116	0.116	0.113	0.108
72	0.099	0.099	0.099	0.100	0.099	0.099	0.100	0.100	0.099	0.100	0.102	0.103	0.105	0.105	0.107	0.110	0.112	0.113	0.112	0.110
73	0.093	0.094	0.094	0.093	0.092	0.092	0.092	0.092	0.092	0.094	0.094	0.095	0.094	0.096	0.099	0.102	0.104	0.105	0.105	0.105
74	0.090	0.090	0.090	0.090	0.089	0.088	0.087	0.087	0.088	0.089	0.090	0.091	0.092	0.093	0.094	0.095	0.096	0.096	0.096	0.097
75	0.088	0.088	0.088	0.089	0.088	0.087	0.086	0.085	0.085	0.086	0.087	0.088	0.090	0.091	0.092	0.092	0.092	0.092	0.092	0.092
76	0.088	0.087	0.087	0.087	0.087	0.087	0.086	0.085	0.085	0.085	0.086	0.087	0.088	0.088	0.089	0.090	0.090	0.089	0.090	0.090
77	0.088	0.088	0.087	0.087	0.086	0.085	0.085	0.085	0.085	0.085	0.086	0.086	0.087	0.087	0.087	0.087	0.088	0.089	0.090	0.090
78	0.090	0.091	0.090	0.090	0.089	0.088	0.087	0.086	0.085	0.085	0.085	0.085	0.086	0.087	0.087	0.088	0.089	0.090	0.090	0.092
79	0.094	0.094	0.093	0.092	0.092	0.091	0.090	0.089	0.088	0.088	0.086	0.086	0.085	0.086	0.086	0.088	0.089	0.091	0.092	0.094
80	0.098	0.097	0.097	0.096	0.095	0.094	0.093	0.092	0.091	0.090	0.090	0.088	0.088	0.088	0.089	0.089	0.090	0.091	0.092	0.093
81	0.099	0.100	0.100	0.099	0.098	0.097	0.096	0.095	0.094	0.093	0.092	0.092	0.091	0.092	0.092	0.092	0.092	0.091	0.091	0.093
82	0.095	0.096	0.097	0.097	0.097	0.097	0.097	0.095	0.095	0.094	0.092	0.092	0.091	0.092	0.093	0.094	0.094	0.095	0.094	0.094
83	0.092	0.092	0.093	0.093	0.093	0.092	0.092	0.092	0.091	0.091	0.091	0.091	0.092	0.092	0.092	0.093	0.093	0.093	0.093	0.094
84	0.094	0.094	0.094	0.094	0.092	0.091	0.089	0.088	0.086	0.085	0.084	0.084	0.084	0.084	0.085	0.086	0.087	0.089	0.090	0.091
85	0.054	0.058	0.061	0.064	0.067	0.069	0.069	0.068	0.068	0.067	0.068	0.066	0.068	0.069	0.070	0.070	0.071	0.072	0.073	0.074
86	0.002	0.001	0.003	0.003	0.003	0.003	0.005	0.003	0.005	0.005	0.005	0.005	0.006	0.006	0.006	0.008	0.009	0.010	0.012	0.012
87	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
88	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
89	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
90	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
91	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.007	0.021	0.022	0.010	0.003	0.003	0.003	0.003	0.003	0.003	0.003
92	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.007	0.009	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
93	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
94	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
95	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
96	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
97	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
98	0.018	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.001	0.001	0.001	0.001	0.001	0.001	0.001

NASA/RI OH90 TRANSITION TEST
V41B-F4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 9,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 20.34 SEC
GROUP 91 HREF = 0.206E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
65	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
66	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
67	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
68	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
69	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
70	0.045	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
71	0.092	0.056	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019
72	0.107	0.097	0.069	0.029	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
73	0.104	0.103	0.097	0.076	0.037	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
74	0.097	0.096	0.096	0.090	0.074	0.039	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
75	0.092	0.093	0.092	0.091	0.087	0.073	0.043	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
76	0.090	0.091	0.091	0.090	0.089	0.084	0.074	0.047	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
77	0.092	0.094	0.093	0.092	0.090	0.089	0.086	0.077	0.052	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021
78	0.094	0.094	0.094	0.094	0.094	0.093	0.091	0.089	0.083	0.065	0.032	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
79	0.094	0.093	0.093	0.095	0.095	0.094	0.093	0.093	0.092	0.088	0.074	0.046	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016
80	0.094	0.095	0.096	0.096	0.097	0.097	0.096	0.094	0.093	0.092	0.090	0.081	0.056	0.024	0.001	0.001	0.001	0.001	0.001	0.001
81	0.094	0.096	0.096	0.097	0.097	0.098	0.097	0.097	0.095	0.094	0.093	0.092	0.086	0.065	0.030	0.006	0.006	0.006	0.006	0.006
82	0.095	0.095	0.095	0.095	0.095	0.096	0.098	0.099	0.099	0.098	0.097	0.096	0.093	0.086	0.068	0.036	0.009	0.009	0.009	0.009
83	0.094	0.095	0.095	0.095	0.095	0.096	0.097	0.098	0.100	0.100	0.100	0.098	0.097	0.093	0.086	0.071	0.041	0.013	0.013	0.013
84	0.091	0.092	0.094	0.094	0.095	0.096	0.097	0.098	0.099	0.100	0.101	0.101	0.099	0.096	0.092	0.086	0.073	0.047	0.017	0.017
85	0.076	0.078	0.080	0.083	0.085	0.086	0.088	0.090	0.093	0.095	0.097	0.099	0.100	0.098	0.097	0.094	0.089	0.077	0.052	0.022
86	0.014	0.016	0.018	0.021	0.026	0.027	0.029	0.033	0.037	0.041	0.047	0.051	0.053	0.055	0.055	0.056	0.056	0.055	0.049	0.034
87	0.001	0.001	0.002	0.003	0.003	0.001	0.001	0.002	0.006	0.009	0.012	0.011	0.009	0.007	0.007	0.005	0.004	0.003	0.003	0.003
88	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.005	0.005	0.004	0.001	0.001	0.001	0.001
89	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.003	0.004	0.003	0.003	0.001	0.001	0.001
90	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.005	0.005	0.006	0.006	0.008	0.008	0.005	0.002	0.001
91	0.003	0.003	0.003	0.003	0.003	0.001	0.009	0.014	0.008	0.003	0.001	0.003	0.003	0.006	0.006	0.007	0.005	0.005	0.002	0.002
92	0.003	0.003	0.003	0.003	0.003	0.001	0.008	0.014	0.009	0.005	0.002	0.004	0.005	0.008	0.008	0.008	0.006	0.005	0.003	0.002
93	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.003	0.006	0.007	0.009	0.010	0.011	0.009	0.007	0.005	0.005
94	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.003	0.004	0.006	0.009	0.012	0.013	0.014	0.013	0.011	0.008	0.008
95	0.003	0.003	0.003	0.003	0.003	0.001	0.001	0.002	0.002	0.002	0.002	0.008	0.009	0.013	0.015	0.016	0.016	0.014	0.011	0.011
96	0.002	0.002	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.004	0.006	0.010	0.013	0.015	0.017	0.017	0.015	0.012	0.009
97	0.001	0.001	0.001	0.003	0.001	0.003	0.003	0.004	0.004	0.004	0.005	0.009	0.014	0.017	0.019	0.020	0.020	0.017	0.014	0.012
98	0.001	0.001	0.003	0.002	0.003	0.003	0.004	0.003	0.003	0.004	0.007	0.012	0.016	0.019	0.021	0.024	0.022	0.019	0.015	0.012

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 20.34 SEC
GROUP 91 HREF = 0.206E-01

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
65	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
66	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
67	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
68	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
69	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
70	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
71	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019
72	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
73	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
74	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
75	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
76	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
77	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021
78	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
79	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016
80	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
81	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
82	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
83	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
84	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017
85	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
86	0.012	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
87	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
88	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
89	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
90	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
91	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002
92	0.001	0.002	0.001	0.001	0.001	0.002	0.002	0.003	0.002	0.004	0.003	0.003	0.003	0.004	0.003	0.003	0.002	0.003	0.002	0.003
93	0.004	0.004	0.003	0.005	0.005	0.005	0.005	0.006	0.006	0.006	0.006	0.007	0.006	0.007	0.006	0.006	0.006	0.006	0.006	0.006
94	0.008	0.008	0.008	0.008	0.008	0.009	0.008	0.009	0.009	0.010	0.009	0.010	0.009	0.010	0.009	0.010	0.009	0.009	0.009	0.010
95	0.009	0.010	0.009	0.011	0.011	0.011	0.011	0.012	0.012	0.013	0.013	0.014	0.014	0.014	0.015	0.015	0.015	0.015	0.016	0.017
96	0.009	0.009	0.011	0.011	0.011	0.012	0.013	0.014	0.015	0.017	0.018	0.020	0.021	0.022	0.022	0.022	0.023	0.024	0.025	0.024
97	0.011	0.011	0.012	0.012	0.014	0.015	0.016	0.017	0.018	0.020	0.022	0.023	0.023	0.026	0.024	0.027	0.026	0.028	0.028	0.029
98	0.011	0.011	0.012	0.014	0.014	0.015	0.016	0.017	0.018	0.020	0.020	0.021	0.023	0.023	0.023	0.025	0.024	0.024	0.025	0.025

IR HEAT TRANSFER COEFFICIENT - H(.9IO)/HREF
IR SCAN TIME 20.34 SEC
GROUP 91 HREF = 0.206E-01

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
65	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
66	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
67	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
68	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
69	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
70	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
71	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019
72	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
73	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
74	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
75	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
76	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
77	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021
78	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
79	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016
80	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
81	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
82	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
83	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
84	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017
85	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
86	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
87	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
88	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
89	0.001	0.001	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003
90	0.001	0.002	0.001	0.003	0.003	0.005	0.004	0.005	0.005	0.006
91	0.001	0.002	0.001	0.003	0.003	0.005	0.005	0.006	0.006	0.008
92	0.002	0.003	0.002	0.004	0.004	0.005	0.006	0.007	0.008	0.009
93	0.005	0.006	0.006	0.007	0.006	0.008	0.008	0.011	0.010	0.012
94	0.009	0.011	0.010	0.012	0.011	0.012	0.013	0.014	0.016	0.017
95	0.017	0.016	0.017	0.018	0.018	0.019	0.020	0.020	0.021	0.023
96	0.024	0.025	0.024	0.026	0.024	0.025	0.026	0.027	0.027	0.028
97	0.028	0.029	0.029	0.029	0.029	0.029	0.029	0.031	0.032	0.034
98	0.026	0.026	0.026	0.027	0.027	0.029	0.031	0.039	0.054	0.070

NASA/RI OH90 TRANSITION TEST
V41B-P4A
AKO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

GROUP	* * * * TITLE TYPE	MODEL DESCRIPTION * * * * GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
96	RS1 AFT	0.01	0.000	-0.06	30.06	0.053	0	52	36

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/F FT-1	HRFR BTU/FT2-SEC-R	INITIAL TEMP DEG R
7.90	105.28	1261.67	93.58	0.0117	3746.	0.105E-04	0.753E-07	0.522E+06	0.147E-01	537.7

IR CAMERA INFORMATION

MOUNTING LOCATION	260
F STOP	1.8
LENS-DEG	15
SENSITIVITY	200.
BLACK LEVEL VOLTAGE	0.6663
LINE SCAN PHI	90
MODEL EMISSIVITY	0.96
REF EMISSIVITY	0.94
WINDOW FACTOR	0.860

TIME RECORDS

LIFT OFF	0.00
CENTER LINE	1.99
IR SCAN TIME	20.32
DELTA TIME,SEC	19.20
PHOTO 1 TIME	53
PHOTO 2 TIME	0
PHOTO 3 TIME	0
PHOTO 4 TIME	0

REFERENCE TARGET INFORMATION

TCR5	502.24
TCR6	-228.49

DIGITAL DATA AREA PRINTOUT LOCATION

LINE 29 THROUGH 98
POINT 1 THROUGH 110

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 96

IR SCAN TIME 19.20 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	1.015	1.012	1.015	1.014	1.014	1.011	1.011	1.007	1.014	1.007	1.009	1.007	1.004	1.006	1.006	1.006	1.006	1.007	1.006	1.006
30	1.014	1.012	1.012	1.011	1.012	1.007	1.007	1.009	1.007	1.006	1.009	1.006	1.006	1.002	1.006	1.004	1.006	1.002	1.004	1.001
31	1.012	1.012	1.009	1.009	1.007	1.007	1.007	1.007	1.007	1.007	1.006	1.004	1.006	1.002	1.004	1.002	1.004	1.002	1.002	1.002
32	1.011	1.012	1.012	1.007	1.007	1.006	1.006	1.006	1.006	1.004	1.004	1.002	1.002	1.002	1.004	1.004	1.002	1.002	1.004	1.006
33	1.011	1.011	1.009	1.007	1.007	1.006	1.006	1.004	1.006	1.002	1.006	1.004	1.002	1.004	1.004	1.004	1.006	1.006	1.007	1.007
34	1.009	1.009	1.006	1.007	1.006	1.004	1.002	1.001	1.002	1.002	1.002	1.002	1.004	1.004	1.006	1.006	1.007	1.007	1.007	1.007
35	1.007	1.004	1.006	0.999	1.002	0.999	1.002	0.999	1.002	1.002	1.002	1.002	1.006	1.004	1.007	1.007	1.006	1.006	1.004	0.999
36	1.006	1.006	1.004	1.004	1.004	1.004	1.004	1.006	1.004	1.006	1.006	1.007	1.006	1.007	1.006	1.006	0.999	0.995	0.988	0.986
37	1.004	1.006	1.006	1.006	1.007	1.007	1.006	1.006	1.006	1.006	1.006	1.007	1.006	1.002	0.999	0.990	0.986	0.980	0.976	0.976
38	1.007	1.007	1.007	1.007	1.007	1.006	1.007	1.007	1.006	1.007	1.004	1.001	0.992	0.990	0.982	0.978	0.976	0.976	0.976	0.976
39	1.009	1.009	1.007	1.009	1.007	1.007	1.006	1.006	1.001	0.997	0.988	0.986	0.980	0.980	0.976	0.976	0.972	0.976	0.974	0.976
40	1.009	1.009	1.009	1.007	1.009	1.006	1.001	0.997	0.989	0.986	0.980	0.978	0.978	0.980	0.978	0.980	0.976	0.978	0.976	0.976
41	1.011	1.009	1.007	1.006	0.999	0.995	0.986	0.984	0.980	0.980	0.978	0.982	0.980	0.980	0.978	0.980	0.978	0.980	0.980	0.978
42	1.009	1.007	0.995	0.997	0.982	0.986	0.976	0.982	0.976	0.980	0.976	0.982	0.976	0.980	0.980	0.980	0.980	0.980	0.980	0.980
43	1.004	0.999	0.990	0.986	0.982	0.986	0.980	0.982	0.980	0.980	0.980	0.980	0.980	0.982	0.980	0.980	0.976	0.980	0.976	0.980
44	0.995	0.990	0.988	0.986	0.986	0.984	0.984	0.984	0.984	0.982	0.984	0.982	0.984	0.982	0.984	0.984	0.984	0.984	0.986	0.984
45	0.992	0.994	0.992	0.992	0.988	0.990	0.986	0.988	0.986	0.988	0.986	0.988	0.986	0.988	0.984	0.988	0.988	0.992	0.997	1.012
46	0.995	0.995	0.995	0.994	0.992	0.992	0.994	0.988	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.988	0.992	1.001	1.034	1.069
47	0.995	0.994	0.992	0.988	0.997	0.995	0.992	0.992	0.995	0.994	0.992	0.994	0.995	0.992	0.992	0.994	0.992	1.012	1.055	1.085
48	0.999	0.999	0.997	0.995	0.995	0.994	0.995	0.994	0.994	0.994	0.995	0.994	0.995	0.994	0.995	0.995	0.999	1.026	1.071	1.097
49	0.997	0.994	0.997	0.992	0.997	0.990	0.995	0.988	0.995	0.988	0.995	0.994	0.992	0.994	0.994	0.995	1.002	1.035	1.076	1.098
50	0.999	0.995	0.995	0.995	0.995	0.994	0.994	0.992	0.992	0.992	0.992	0.990	0.992	0.990	0.994	0.992	1.006	1.042	1.077	1.092
51	0.995	0.992	0.994	0.992	0.992	0.990	0.990	0.988	0.990	0.988	0.990	0.988	0.990	0.990	0.990	0.992	1.009	1.050	1.079	1.093
52	0.990	0.988	0.988	0.986	0.986	0.984	0.982	0.984	0.982	0.984	0.982	0.984	0.982	0.984	0.982	0.988	1.009	1.055	1.081	1.092
53	0.980	0.982	0.978	0.978	0.978	0.976	0.976	0.974	0.974	0.974	0.972	0.972	0.972	0.972	0.972	0.980	1.015	1.060	1.082	1.090
54	0.974	0.974	0.974	0.972	0.972	0.967	0.967	0.969	0.965	0.967	0.965	0.967	0.965	0.967	0.967	0.980	1.028	1.069	1.082	1.091
55	0.972	0.969	0.967	0.967	0.965	0.967	0.965	0.965	0.965	0.967	0.967	0.962	0.965	0.965	0.967	0.994	1.044	1.073	1.082	1.089
56	0.969	0.974	0.962	0.972	0.957	0.969	0.955	0.967	0.955	0.967	0.962	0.967	0.967	0.967	0.972	1.011	1.055	1.077	1.083	1.089
57	0.972	0.974	0.969	0.974	0.967	0.967	0.967	0.967	0.965	0.965	0.962	0.965	0.962	0.972	0.978	1.024	1.060	1.077	1.082	1.089
58	0.976	0.976	0.976	0.976	0.974	0.976	0.976	0.974	0.972	0.972	0.972	0.974	0.972	0.976	0.986	1.033	1.067	1.080	1.085	1.090
59	0.984	0.984	0.982	0.980	0.978	0.980	0.978	0.978	0.978	0.978	0.976	0.978	0.976	0.982	0.997	1.044	1.072	1.082	1.086	1.091
60	0.990	0.986	0.988	0.984	0.984	0.982	0.982	0.982	0.982	0.982	0.984	0.984	0.984	0.984	1.006	1.050	1.074	1.082	1.086	1.090
61	0.992	0.992	0.992	0.994	0.988	0.988	0.988	0.986	0.986	0.988	0.986	0.988	0.986	0.988	1.018	1.060	1.077	1.084	1.088	1.093
62	0.992	0.990	0.988	0.992	0.990	0.990	0.986	0.986	0.984	0.988	0.986	0.986	0.992	0.988	0.999	1.035	1.069	1.078	1.085	1.090	1.093
63	0.992	0.990	0.990	0.986	0.988	0.984	0.986	0.986	0.988	0.986	0.988	0.986	0.990	1.007	1.050	1.073	1.081	1.086	1.091	1.093

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 96

IR SCAN TIME 19.20 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	1.001	1.004	1.001	1.004	0.997	1.002	0.997	1.002	0.999	1.002	0.999	1.002	0.999	1.004	1.001	1.006	1.006	1.007	1.006	1.009
30	1.002	1.001	1.002	1.002	1.004	1.002	1.002	1.002	1.006	1.006	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.004	1.006	0.999
31	1.002	1.004	1.002	1.002	1.006	1.006	1.007	1.007	1.007	1.009	1.009	1.007	1.007	1.004	1.002	0.999	0.995	0.994	0.990	0.986
32	1.006	1.007	1.007	1.007	1.009	1.009	1.012	1.007	1.006	1.004	1.002	0.995	0.995	0.988	0.986	0.980	0.976	0.974	0.969	0.969
33	1.007	1.009	1.009	1.007	1.004	1.002	1.001	0.994	0.992	0.988	0.984	0.976	0.974	0.969	0.967	0.967	0.967	0.962	0.967	0.967
34	1.007	1.006	1.001	0.999	0.994	0.988	0.984	0.976	0.972	0.969	0.967	0.967	0.967	0.965	0.967	0.965	0.967	0.965	0.967	0.967
35	0.995	0.990	0.986	0.980	0.974	0.972	0.969	0.969	0.967	0.967	0.967	0.969	0.969	0.967	0.969	0.967	0.969	0.972	0.969	0.969
36	0.976	0.974	0.969	0.972	0.967	0.972	0.967	0.969	0.967	0.967	0.965	0.969	0.965	0.972	0.969	0.972	0.972	0.972	0.969	0.972
37	0.974	0.972	0.972	0.974	0.974	0.972	0.972	0.974	0.972	0.974	0.972	0.972	0.972	0.974	0.974	0.965	0.974	0.962	0.976	0.965
38	0.974	0.974	0.974	0.976	0.974	0.976	0.972	0.976	0.974	0.976	0.974	0.976	0.974	0.976	0.972	0.976	0.974	0.976	0.976	0.976
39	0.976	0.978	0.976	0.976	0.976	0.976	0.974	0.976	0.976	0.978	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.978	0.976	0.976
40	0.976	0.978	0.978	0.980	0.976	0.978	0.976	0.978	0.976	0.978	0.976	0.980	0.976	0.978	0.976	0.980	0.976	0.980	0.980	0.978
41	0.978	0.980	0.980	0.980	0.980	0.980	0.978	0.980	0.980	0.980	0.978	0.980	0.978	0.978	0.978	0.980	0.978	0.978	0.976	0.980
42	0.980	0.982	0.980	0.980	0.980	0.980	0.960	0.982	0.980	0.980	0.980	0.982	0.980	0.980	0.980	0.982	0.980	0.982	0.980	0.980
43	0.978	0.980	0.978	0.980	0.980	0.982	0.980	0.982	0.978	0.980	0.976	0.984	0.980	0.982	0.980	0.984	0.980	0.984	0.980	0.980
44	0.984	0.984	0.984	0.984	0.984	0.984	0.986	0.984	0.984	0.984	0.984	0.982	0.982	0.980	0.984	0.982	0.982	0.982	0.982	0.980
45	1.015	1.021	1.020	1.020	1.017	1.015	1.009	1.006	1.001	0.997	0.992	0.992	0.988	0.990	0.986	0.990	0.988	0.988	0.988	0.988
46	1.088	1.099	1.109	1.117	1.126	1.130	1.129	1.123	1.112	1.090	1.058	1.027	1.006	0.997	0.995	0.992	0.992	0.990	0.992	0.992
47	1.099	1.108	1.113	1.117	1.123	1.132	1.143	1.154	1.158	1.161	1.138	1.089	1.049	1.027	1.014	1.006	0.997	0.995	0.997	0.995
48	1.109	1.117	1.123	1.127	1.128	1.127	1.128	1.129	1.135	1.141	1.143	1.128	1.087	1.042	1.015	1.009	1.009	1.012	1.011	1.006
49	1.109	1.117	1.127	1.134	1.139	1.141	1.140	1.135	1.129	1.125	1.125	1.128	1.123	1.092	1.047	1.014	1.001	0.995	1.001	1.007
50	1.103	1.110	1.118	1.128	1.138	1.144	1.149	1.148	1.145	1.136	1.128	1.120	1.117	1.113	1.094	1.055	1.017	1.001	0.995	0.995
51	1.100	1.106	1.113	1.120	1.129	1.135	1.140	1.145	1.149	1.148	1.143	1.135	1.128	1.116	1.108	1.093	1.062	1.023	1.004	0.990
52	1.099	1.105	1.110	1.115	1.121	1.128	1.130	1.133	1.136	1.139	1.141	1.143	1.141	1.136	1.128	1.118	1.104	1.082	1.044	1.012
53	1.095	1.101	1.108	1.113	1.119	1.123	1.127	1.130	1.133	1.134	1.136	1.134	1.136	1.136	1.136	1.132	1.127	1.117	1.098	1.060
54	1.095	1.101	1.105	1.113	1.117	1.121	1.123	1.127	1.131	1.134	1.134	1.136	1.134	1.134	1.133	1.133	1.132	1.130	1.125	1.112
55	1.093	1.099	1.103	1.109	1.112	1.117	1.118	1.122	1.126	1.131	1.134	1.137	1.136	1.136	1.134	1.134	1.131	1.132	1.130	1.130
56	1.092	1.096	1.101	1.108	1.109	1.112	1.114	1.120	1.125	1.130	1.131	1.134	1.134	1.136	1.136	1.138	1.138	1.139	1.138	1.136
57	1.091	1.097	1.101	1.106	1.107	1.111	1.111	1.116	1.123	1.126	1.128	1.130	1.131	1.134	1.134	1.137	1.140	1.144	1.144	1.146
58	1.093	1.097	1.103	1.107	1.109	1.111	1.114	1.117	1.120	1.126	1.126	1.129	1.128	1.130	1.130	1.134	1.134	1.140	1.142	1.146
59	1.093	1.099	1.103	1.108	1.111	1.114	1.115	1.119	1.122	1.127	1.129	1.132	1.133	1.134	1.133	1.133	1.133	1.134	1.138	1.142
60	1.093	1.097	1.103	1.108	1.113	1.115	1.119	1.122	1.127	1.130	1.133	1.136	1.134	1.135	1.137	1.138	1.136	1.134	1.134	1.136
61	1.096	1.100	1.103	1.109	1.114	1.119	1.121	1.125	1.129	1.133	1.136	1.138	1.138	1.140	1.140	1.140	1.138	1.139	1.137	1.138
62	1.098	1.101	1.106	1.110	1.115	1.120	1.122	1.124	1.130	1.134	1.136	1.137	1.139	1.140	1.142	1.142	1.142	1.141	1.140	1.140
63	1.099	1.102	1.107	1.112	1.117	1.121	1.123	1.126	1.130	1.134	1.138	1.141	1.143	1.144	1.145	1.142	1.142	1.143	1.145	1.146

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 96

IR SCAN TIME 19.20 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	1.009	1.009	1.006	1.007	1.002	1.002	0.999	0.999	0.995	0.995	0.992	0.992	0.990	0.986	0.982	0.984	0.980	0.982	0.980	0.978
30	1.001	0.995	0.995	0.988	0.992	0.984	0.986	0.976	0.978	0.972	0.974	0.967	0.972	0.969	0.967	0.967	0.969	0.967	0.969	0.967
31	0.984	0.980	0.976	0.976	0.972	0.969	0.967	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.962	0.967	0.962	0.965	0.960
32	0.967	0.967	0.967	0.967	0.967	0.962	0.967	0.965	0.967	0.967	0.965	0.965	0.967	0.965	0.965	0.962	0.962	0.965	0.965	0.965
33	0.967	0.965	0.969	0.967	0.967	0.967	0.967	0.967	0.969	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.967	0.965	0.967	0.965
34	0.967	0.967	0.967	0.967	0.965	0.967	0.967	0.967	0.967	0.967	0.967	0.967	0.965	0.967	0.965	0.967	0.962	0.967	0.965	0.967
35	0.969	0.972	0.969	0.969	0.967	0.969	0.969	0.972	0.969	0.967	0.969	0.969	0.967	0.967	0.967	0.967	0.967	0.967	0.967	0.967
36	0.972	0.972	0.972	0.972	0.972	0.974	0.972	0.972	0.972	0.972	0.972	0.974	0.972	0.972	0.972	0.969	0.969	0.972	0.969	0.972
37	0.974	0.962	0.974	0.967	0.974	0.965	0.974	0.967	0.976	0.965	0.976	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.976	0.974
38	0.974	0.974	0.976	0.976	0.974	0.976	0.976	0.976	0.974	0.976	0.976	0.976	0.974	0.976	0.969	0.974	0.972	0.974	0.967	0.974
39	0.976	0.978	0.978	0.976	0.976	0.978	0.974	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.974	0.976	0.976	0.976	0.976	0.976
40	0.976	0.976	0.976	0.980	0.976	0.980	0.976	0.980	0.978	0.978	0.976	0.976	0.976	0.980	0.976	0.978	0.976	0.978	0.976	0.978
41	0.980	0.980	0.978	0.980	0.978	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.978	0.980	0.978	0.978	0.976	0.980	0.978	0.980
42	0.980	0.980	0.980	0.982	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.978	0.980	0.980	0.980	0.978	0.980	0.978	0.980
43	0.980	0.982	0.980	0.980	0.980	0.982	0.980	0.980	0.980	0.982	0.980	0.982	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.978
44	0.982	0.980	0.982	0.980	0.982	0.978	0.982	0.980	0.982	0.982	0.984	0.982	0.982	0.982	0.980	0.982	0.982	0.982	0.982	0.980
45	0.986	0.990	0.986	0.988	0.986	0.988	0.986	0.988	0.986	0.988	0.986	0.986	0.982	0.986	0.982	0.986	0.982	0.986	0.984	0.986
46	0.992	0.992	0.992	0.990	0.992	0.988	0.990	0.988	0.990	0.988	0.990	0.988	0.990	0.990	0.990	0.988	0.990	0.988	0.990	0.988
47	0.997	0.995	0.994	0.994	0.994	0.992	0.992	0.990	0.992	0.992	0.992	0.990	0.990	0.992	0.992	0.992	0.992	0.992	0.992	0.990
48	1.002	0.999	0.997	0.995	0.995	0.992	0.995	0.994	0.994	0.992	0.994	0.992	0.994	0.992	0.994	0.994	0.992	0.992	0.992	0.992
49	1.011	1.012	1.009	1.002	0.999	0.995	0.995	0.994	0.994	0.992	0.994	0.992	0.994	0.992	0.994	0.988	0.994	0.992	0.994	0.992
50	0.995	0.999	1.007	1.012	1.012	1.007	1.001	0.997	0.995	0.994	0.994	0.994	0.994	0.992	0.994	0.992	0.994	0.992	0.994	0.994
51	0.992	0.984	0.992	0.990	1.001	1.007	1.012	1.004	0.997	0.994	0.994	0.990	0.992	0.988	0.992	0.990	0.992	0.990	0.994	0.988
52	0.995	0.992	0.988	0.990	0.988	0.994	0.999	1.007	1.002	0.992	0.984	0.984	0.980	0.982	0.980	0.982	0.978	0.982	0.982	0.986
53	1.024	1.004	0.992	0.988	0.988	0.988	0.990	0.994	1.002	1.001	0.988	0.976	0.974	0.969	0.969	0.967	0.969	0.972	0.972	0.976
54	1.080	1.038	1.007	0.994	0.986	0.988	0.988	0.992	0.990	1.001	1.001	0.988	0.974	0.969	0.962	0.965	0.965	0.967	0.969	0.976
55	1.123	1.100	1.056	1.015	0.995	0.988	0.984	0.986	0.988	0.990	0.995	1.004	0.992	0.978	0.967	0.967	0.962	0.969	0.969	0.976
56	1.134	1.130	1.114	1.078	1.030	1.004	0.990	0.986	0.982	0.988	0.988	0.994	1.001	0.999	0.980	0.974	0.967	0.972	0.976	0.980
57	1.144	1.142	1.136	1.125	1.097	1.050	1.012	0.997	0.990	0.986	0.984	0.988	0.994	1.001	0.999	0.984	0.976	0.976	0.976	0.980
58	1.147	1.149	1.149	1.147	1.138	1.119	1.075	1.027	1.001	0.994	0.986	0.984	0.982	0.986	0.992	0.999	0.992	0.984	0.980	0.982
59	1.144	1.146	1.147	1.150	1.150	1.147	1.137	1.103	1.045	1.009	0.992	0.986	0.980	0.978	0.976	0.982	0.992	0.995	0.988	0.984
60	1.138	1.142	1.144	1.144	1.147	1.149	1.149	1.145	1.128	1.081	1.027	0.999	0.986	0.982	0.978	0.978	0.980	0.988	0.988	0.988
61	1.138	1.138	1.139	1.140	1.142	1.144	1.145	1.146	1.144	1.136	1.100	1.044	1.004	0.992	0.980	0.980	0.978	0.980	0.980	0.990
62	1.141	1.139	1.140	1.138	1.138	1.136	1.140	1.142	1.144	1.144	1.137	1.111	1.056	1.012	0.992	0.982	0.980	0.976	0.976	0.978
63	1.145	1.142	1.142	1.142	1.141	1.140	1.138	1.136	1.137	1.137	1.137	1.134	1.122	1.083	1.033	0.999	0.986	0.978	0.976	0.976

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 19.20 SEC
INITIAL TEMP 537.7 DEG. R

GROUP 96

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.974	0.974	0.974	0.974	0.974	0.972	0.974	0.976	0.974	0.976	0.974	0.974	0.972	0.974	0.974	0.974	0.974	0.976	0.972	0.974
30	0.967	0.967	0.967	0.967	0.967	0.967	0.967	0.965	0.967	0.967	0.967	0.967	0.967	0.967	0.969	0.969	0.969	0.972	0.967
31	0.965	0.962	0.965	0.962	0.965	0.962	0.962	0.962	0.962	0.962	0.965	0.965	0.965	0.965	0.965	0.967	0.967	0.967	0.967	0.967
32	0.965	0.962	0.965	0.965	0.965	0.965	0.962	0.965	0.962	0.957	0.962	0.962	0.965	0.957	0.965	0.957	0.965	0.957	0.967	0.960
33	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.962	0.965	0.965	0.962	0.965	0.965	0.962	0.965	0.967	0.965	0.965	0.962	0.965
34	0.967	0.965	0.967	0.965	0.965	0.965	0.967	0.962	0.965	0.965	0.957	0.962	0.962	0.962	0.962	0.965	0.962	0.962	0.965	0.965
35	0.967	0.967	0.967	0.967	0.965	0.967	0.967	0.967	0.965	0.967	0.967	0.965	0.965	0.969	0.967	0.967	0.967	0.965	0.965	0.965
36	0.969	0.969	0.969	0.969	0.969	0.969	0.967	0.967	0.967	0.967	0.967	0.969	0.967	0.967	0.967	0.967	0.967	0.967	0.967	0.967
37	0.974	0.974	0.972	0.972	0.974	0.972	0.972	0.974	0.972	0.972	0.974	0.972	0.974	0.972	0.972	0.969	0.972	0.969	0.969	0.969
38	0.969	0.974	0.967	0.974	0.969	0.974	0.969	0.974	0.972	0.974	0.974	0.974	0.974	0.974	0.974	0.972	0.972	0.972	0.972	0.972
39	0.976	0.976	0.976	0.976	0.974	0.976	0.974	0.976	0.974	0.974	0.974	0.974	0.969	0.974	0.969	0.974	0.969	0.974	0.969	0.972
40	0.976	0.978	0.974	0.978	0.976	0.978	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976
41	0.976	0.980	0.976	0.976	0.976	0.978	0.976	0.980	0.978	0.978	0.976	0.976	0.976	0.978	0.976	0.978	0.976	0.978	0.976	0.976
42	0.978	0.978	0.978	0.978	0.978	0.978	0.976	0.980	0.978	0.960	0.976	0.978	0.978	0.978	0.978	0.980	0.976	0.978	0.978	0.978
43	0.980	0.980	0.980	0.980	0.976	0.978	0.976	0.980	0.978	0.978	0.978	0.980	0.976	0.980	0.976	0.978	0.976	0.978	0.976	0.978
44	0.982	0.982	0.982	0.980	0.980	0.982	0.982	0.980	0.980	0.982	0.980	0.980	0.984	0.980	0.980	0.980	0.980	0.980	0.980	0.980
45	0.984	0.988	0.986	0.986	0.984	0.986	0.982	0.988	0.986	0.988	0.984	0.986	0.984	0.986	0.984	0.986	0.984	0.986	0.982	0.986
46	0.986	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.978	0.990	0.980	0.992	0.982	0.990	0.980	0.990	0.980	0.990	0.980
47	0.990	0.990	0.992	0.988	0.992	0.992	0.994	0.988	0.992	0.990	0.992	0.988	0.992	0.990	0.990	0.988	0.992	0.990	0.992	0.992
48	0.992	0.990	0.994	0.992	0.992	0.992	0.992	0.992	0.992	0.990	0.992	0.992	0.992	0.992	0.990	0.990	0.992	0.992	0.992	0.992
49	0.994	0.992	0.992	0.992	0.994	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.994	0.992	0.994	0.992	0.994	0.992
50	0.994	0.994	0.994	0.992	0.992	0.992	0.995	0.992	0.992	0.990	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.994	0.992	0.992
51	0.992	0.992	0.994	0.994	0.992	0.994	0.992	0.992	0.994	0.994	0.994	0.992	0.994	0.992	0.992	0.992	0.994	0.992	0.994	0.992
52	0.982	0.988	0.986	0.992	0.988	0.994	0.992	0.994	0.992	0.994	0.992	0.995	0.992	0.994	0.992	0.995	0.992	0.994	0.992	0.994
53	0.978	0.982	0.986	0.986	0.988	0.988	0.990	0.986	0.990	0.988	0.992	0.986	0.992	0.988	0.992	0.988	0.992	0.988	0.992	0.988
54	0.978	0.984	0.984	0.990	0.988	0.990	0.988	0.992	0.990	0.992	0.990	0.994	0.992	0.994	0.990	0.992	0.990	0.992	0.990	0.992
55	0.978	0.984	0.984	0.992	0.988	0.992	0.990	0.992	0.988	0.994	0.990	0.994	0.992	0.995	0.990	0.992	0.992	0.992	0.990	0.990
56	0.982	0.986	0.986	0.990	0.988	0.992	0.988	0.994	0.990	0.992	0.992	0.994	0.990	0.994	0.992	0.992	0.990	0.992	0.988	0.990
57	0.980	0.986	0.984	0.988	0.986	0.988	0.986	0.990	0.988	0.988	0.988	0.988	0.988	0.988	0.986	0.990	0.986	0.990	0.986	0.986
58	0.980	0.986	0.984	0.990	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.984	0.986	0.988	0.988	0.988	0.984	0.988
59	0.980	0.982	0.980	0.984	0.982	0.984	0.984	0.984	0.984	0.986	0.980	0.984	0.980	0.984	0.980	0.984	0.982	0.984	0.980	0.982
60	0.984	0.982	0.980	0.982	0.980	0.980	0.982	0.978	0.982	0.976	0.982	0.976	0.980	0.978	0.980	0.978	0.980	0.978	0.980	0.980
61	0.988	0.986	0.982	0.982	0.982	0.984	0.980	0.982	0.978	0.980	0.980	0.982	0.978	0.980	0.978	0.980	0.980	0.980	0.980	0.982
62	0.984	0.986	0.984	0.980	0.980	0.980	0.980	0.978	0.978	0.976	0.978	0.976	0.978	0.976	0.978	0.976	0.976	0.980	0.978	0.980
63	0.976	0.982	0.984	0.984	0.980	0.978	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.978	0.978

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 19.20 SEC
GROUP 96 INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.974	0.976	0.974	0.976	0.974	0.976	0.974	0.974	0.974	0.974	0.974	0.974	0.972	0.972	0.972	0.972	0.969	0.969	0.969	0.972
30	0.969	0.969	0.969	0.969	0.969	0.972	0.972	0.969	0.969	0.969	0.969	0.969	0.969	0.967	0.965	0.967	0.967	0.967	0.967	0.965
31	0.967	0.967	0.967	0.967	0.969	0.967	0.967	0.969	0.967	0.967	0.962	0.967	0.967	0.965	0.965	0.965	0.965	0.962	0.965	0.962
32	0.967	0.957	0.967	0.962	0.965	0.960	0.965	0.962	0.965	0.967	0.965	0.965	0.965	0.967	0.965	0.967	0.965	0.965	0.965	0.962
33	0.965	0.962	0.962	0.965	0.962	0.965	0.965	0.962	0.965	0.965	0.965	0.962	0.962	0.960	0.965	0.957	0.962	0.957	0.960	0.960
34	0.965	0.965	0.962	0.969	0.962	0.962	0.962	0.962	0.962	0.962	0.962	0.962	0.962	0.965	0.967	0.962	0.962	0.962	0.962	0.962
35	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.962	0.962	0.962	0.962	0.965	0.965	0.965	0.965	0.965	0.965
36	0.965	0.967	0.965	0.967	0.965	0.967	0.965	0.967	0.965	0.965	0.965	0.965	0.962	0.965	0.962	0.962	0.962	0.965	0.965	0.965
37	0.969	0.972	0.969	0.969	0.969	0.969	0.967	0.969	0.969	0.967	0.967	0.967	0.969	0.967	0.965	0.967	0.967	0.967	0.967	0.967
38	0.972	0.972	0.972	0.974	0.969	0.972	0.969	0.972	0.969	0.972	0.969	0.972	0.969	0.972	0.969	0.972	0.972	0.972	0.972	0.972
39	0.967	0.974	0.967	0.972	0.967	0.972	0.967	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972
40	0.976	0.976	0.974	0.976	0.974	0.976	0.972	0.974	0.974	0.974	0.969	0.974	0.969	0.974	0.969	0.974	0.967	0.974	0.972	0.976
41	0.976	0.976	0.976	0.976	0.974	0.976	0.974	0.976	0.976	0.976	0.974	0.976	0.974	0.976	0.974	0.976	0.976	0.976	0.974	0.976
42	0.976	0.976	0.976	0.978	0.976	0.980	0.976	0.976	0.976	0.976	0.976	0.976	0.974	0.976	0.974	0.976	0.974	0.976	0.976	0.976
43	0.976	0.980	0.976	0.978	0.976	0.978	0.976	0.976	0.978	0.976	0.976	0.976	0.976	0.980	0.976	0.978	0.976	0.978	0.976	0.976
44	0.980	0.980	0.980	0.978	0.980	0.980	0.980	0.980	0.978	0.980	0.978	0.980	0.978	0.980	0.978	0.978	0.978	0.980	0.980	0.980
45	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.984	0.984	0.988	0.986	0.984	0.984	0.986	0.984	0.986
46	0.990	0.984	0.992	0.984	0.992	0.990	0.992	0.992	0.988	0.992	0.992	0.990	0.992	0.992	0.990	0.988	0.990	0.990	0.990	0.982
47	0.990	0.992	0.992	0.992	0.994	0.992	0.994	0.992	0.992	0.990	0.992	0.988	0.992	0.988	0.992	0.992	0.992	0.990	0.992	0.988
48	0.992	0.992	0.995	0.994	0.994	0.992	0.992	0.992	0.994	0.994	0.992	0.994	0.992	0.992	0.992	0.994	0.994	0.992	0.992	0.994	0.992
49	0.994	0.992	0.995	0.994	0.995	0.994	0.992	0.992	0.992	0.992	0.994	0.992	0.994	0.992	0.994	0.992	0.992	0.992	0.992	0.992
50	0.994	0.992	0.994	0.994	0.994	0.994	0.994	0.992	0.994	0.992	0.992	0.992	0.994	0.994	0.994	0.992	0.992	0.992	0.992	0.992
51	0.994	0.992	0.994	0.994	0.994	0.988	0.992	0.990	0.992	0.988	0.990	0.990	0.990	0.988	0.992	0.988	0.990	0.988	0.990	0.990
52	0.992	0.994	0.992	0.992	0.988	0.988	0.988	0.988	0.984	0.984	0.982	0.984	0.984	0.984	0.982	0.984	0.982	0.982	0.980	0.982
53	0.992	0.986	0.990	0.988	0.988	0.982	0.980	0.978	0.976	0.976	0.976	0.974	0.974	0.972	0.974	0.972	0.974	0.972	0.974	0.974
54	0.990	0.992	0.986	0.986	0.982	0.980	0.974	0.974	0.967	0.972	0.965	0.969	0.962	0.967	0.962	0.967	0.962	0.967	0.965	0.967
55	0.988	0.992	0.986	0.988	0.984	0.982	0.976	0.976	0.972	0.972	0.965	0.967	0.965	0.967	0.965	0.965	0.965	0.965	0.962	0.965
56	0.988	0.990	0.988	0.988	0.984	0.984	0.976	0.976	0.974	0.972	0.967	0.969	0.967	0.967	0.967	0.969	0.967	0.967	0.965	0.969
57	0.986	0.990	0.986	0.986	0.982	0.982	0.978	0.976	0.974	0.974	0.972	0.974	0.969	0.972	0.974	0.972	0.969	0.972	0.972	0.972
58	0.986	0.988	0.984	0.986	0.982	0.984	0.980	0.980	0.980	0.978	0.978	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.978
59	0.982	0.984	0.984	0.984	0.982	0.984	0.980	0.980	0.978	0.980	0.978	0.978	0.976	0.980	0.978	0.980	0.978	0.980	0.978	0.980
60	0.982	0.982	0.982	0.980	0.982	0.980	0.980	0.980	0.978	0.980	0.976	0.978	0.980	0.978	0.980	0.978	0.978	0.980	0.978	0.980
61	0.976	0.982	0.980	0.980	0.976	0.980	0.974	0.978	0.976	0.978	0.976	0.976	0.976	0.978	0.976	0.978	0.976	0.980	0.974	0.980
62	0.980	0.980	0.982	0.980	0.980	0.978	0.978	0.976	0.978	0.978	0.978	0.978	0.976	0.976	0.978	0.980	0.976	0.980	0.976	0.980
63	0.978	0.978	0.976	0.976	0.978	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 96

IR SCAN TIME 19.20 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.967	0.967	0.967	0.967	0.967	0.967	0.965	0.967	0.967	0.969
30	0.962	0.965	0.965	0.965	0.965	0.962	0.965	0.965	0.967	0.962
31	0.962	0.962	0.962	0.962	0.962	0.962	0.962	0.962	0.962	0.962
32	0.962	0.962	0.962	0.960	0.962	0.962	0.962	0.962	0.962	0.965
33	0.962	0.960	0.955	0.957	0.960	0.960	0.962	0.962	0.962	0.962
34	0.960	0.962	0.960	0.962	0.960	0.962	0.960	0.962	0.960	0.955
35	0.965	0.962	0.962	0.965	0.965	0.962	0.962	0.962	0.962	0.965
36	0.965	0.967	0.965	0.967	0.962	0.965	0.962	0.967	0.965	0.965
37	0.967	0.967	0.969	0.967	0.967	0.967	0.969	0.967	0.967	0.967
38	0.972	0.972	0.969	0.972	0.969	0.972	0.972	0.972	0.967	0.969
39	0.972	0.974	0.972	0.974	0.974	0.974	0.972	0.969	0.972	0.974
40	0.972	0.974	0.967	0.974	0.969	0.974	0.974	0.974	0.974	0.976
41	0.974	0.976	0.974	0.976	0.974	0.974	0.976	0.974	0.972	0.976
42	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.978	0.976	0.978
43	0.976	0.978	0.976	0.980	0.976	0.980	0.976	0.978	0.976	0.976
44	0.980	0.980	0.978	0.976	0.978	0.980	0.980	0.980	0.980	0.980
45	0.984	0.986	0.984	0.986	0.984	0.986	0.984	0.986	0.984	0.986
46	0.988	0.994	0.997	0.988	0.990	0.986	0.994	0.990	0.988	0.992
47	0.994	0.988	0.992	0.992	0.992	0.992	0.992	0.994	0.992	0.992
48	0.992	0.994	0.992	0.992	0.990	0.990	0.994	0.988	0.994	0.988
49	0.992	0.992	0.994	0.992	0.992	0.992	0.994	0.992	0.994	0.990
50	0.992	0.992	0.992	0.990	0.992	0.990	0.990	0.990	0.992	0.990
51	0.988	0.990	0.990	0.988	0.990	0.988	0.988	0.988	0.988	0.988
52	0.980	0.982	0.980	0.982	0.980	0.982	0.980	0.980	0.980	0.980
53	0.974	0.972	0.974	0.972	0.972	0.974	0.974	0.974	0.972	0.972
54	0.962	0.967	0.965	0.967	0.965	0.965	0.965	0.967	0.965	0.967
55	0.962	0.962	0.962	0.962	0.957	0.965	0.955	0.962	0.955	0.962
56	0.967	0.967	0.965	0.967	0.967	0.965	0.962	0.967	0.962	0.967
57	0.969	0.972	0.969	0.972	0.969	0.972	0.974	0.972	0.969	0.969
58	0.976	0.978	0.976	0.978	0.976	0.976	0.976	0.976	0.976	0.976
59	0.976	0.980	0.976	0.980	0.976	0.978	0.978	0.978	0.978	0.976
60	0.980	0.982	0.980	0.980	0.980	0.980	0.982	0.980	0.980	0.980
61	0.980	0.980	0.978	0.982	0.978	0.982	0.980	0.982	0.980	0.982
62	0.978	0.976	0.980	0.974	0.978	0.976	0.976	0.976	0.980	0.976
63	0.976	0.976	0.976	0.976	0.976	0.976	0.978	0.976	0.976	0.976

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 96

IR SCAN TIME 19.20 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.990	0.988	0.986	0.984	0.984	0.982	0.982	0.982	0.980	0.980	0.984	0.982	0.990	1.015	1.055	1.073	1.081	1.085	1.091	1.093
65	0.982	0.982	0.980	0.980	0.980	0.976	0.978	0.976	0.976	0.976	0.980	0.980	0.995	1.031	1.064	1.075	1.080	1.085	1.089	1.093
66	0.974	0.974	0.974	0.972	0.972	0.972	0.969	0.967	0.967	0.969	0.972	0.974	0.995	1.038	1.066	1.076	1.081	1.085	1.089	1.093
67	0.969	0.967	0.965	0.962	0.962	0.960	0.960	0.960	0.960	0.962	0.962	0.969	0.995	1.044	1.069	1.078	1.083	1.086	1.090	1.093
68	0.962	0.962	0.960	0.957	0.955	0.955	0.955	0.955	0.955	0.955	0.957	0.965	0.999	1.049	1.071	1.079	1.083	1.088	1.092	1.097
69	0.962	0.960	0.955	0.955	0.955	0.952	0.950	0.952	0.950	0.950	0.955	0.965	1.011	1.054	1.071	1.080	1.084	1.089	1.093	1.097
70	0.960	0.960	0.947	0.957	0.947	0.952	0.952	0.952	0.952	0.955	0.955	0.978	1.024	1.059	1.071	1.076	1.081	1.085	1.089	1.092
71	0.957	0.957	0.955	0.955	0.955	0.955	0.952	0.952	0.944	0.952	0.952	0.986	1.030	1.056	1.062	1.071	1.071	1.077	1.079	1.083
72	0.957	0.957	0.955	0.955	0.955	0.955	0.952	0.960	0.952	0.952	0.962	1.001	1.039	1.055	1.059	1.065	1.068	1.071	1.074	1.075
73	0.960	0.957	0.955	0.955	0.952	0.955	0.952	0.952	0.952	0.952	0.967	1.009	1.042	1.054	1.057	1.060	1.064	1.068	1.069	1.071
74	0.955	0.967	0.960	0.955	0.955	0.955	0.952	0.950	0.955	0.952	0.976	1.018	1.044	1.052	1.055	1.061	1.062	1.065	1.067	1.071
75	0.962	0.960	0.957	0.955	0.952	0.952	0.952	0.952	0.950	0.952	0.978	1.023	1.044	1.050	1.056	1.057	1.060	1.064	1.067	1.068
76	0.962	0.962	0.960	0.957	0.955	0.955	0.952	0.950	0.952	0.955	0.982	1.024	1.044	1.050	1.055	1.056	1.061	1.062	1.067	1.067
77	0.972	0.984	0.980	0.984	0.986	0.988	0.978	0.962	0.955	0.960	0.995	1.034	1.047	1.051	1.055	1.058	1.060	1.065	1.066	1.070
78	0.992	0.997	0.995	1.006	1.012	1.002	1.014	0.997	0.972	0.962	1.011	1.035	1.049	1.051	1.055	1.057	1.061	1.062	1.067	1.069
79	1.007	1.006	0.992	1.009	1.018	1.015	1.014	1.030	1.009	0.992	1.023	1.043	1.050	1.052	1.055	1.058	1.062	1.065	1.068	1.071
80	1.026	1.034	1.015	1.014	1.012	1.021	1.024	1.026	1.033	1.023	1.036	1.047	1.051	1.052	1.057	1.060	1.062	1.066	1.069	1.071
81	1.039	1.039	1.033	1.023	1.012	1.009	1.014	1.023	1.034	1.038	1.045	1.049	1.052	1.054	1.058	1.059	1.062	1.065	1.069	1.072
82	1.047	1.043	1.039	1.030	1.015	1.009	0.999	1.002	1.012	1.026	1.044	1.050	1.054	1.055	1.058	1.058	1.062	1.065	1.069	1.069
83	1.052	1.043	1.035	1.030	1.018	1.011	0.994	0.988	0.999	1.024	1.050	1.058	1.060	1.059	1.061	1.061	1.064	1.067	1.069	1.067
84	1.051	1.035	1.035	1.031	1.018	1.006	0.994	0.995	1.004	1.014	1.033	1.040	1.047	1.051	1.055	1.058	1.061	1.064	1.065	1.065
85	1.028	1.030	1.035	1.038	1.026	1.011	1.001	1.011	1.007	1.007	1.004	1.009	1.007	1.009	1.006	1.009	1.009	1.012	1.012	1.017
86	1.004	1.011	1.015	1.017	1.009	1.006	1.006	1.011	1.009	1.002	1.004	1.006	1.006	1.006	1.006	1.002	1.002	1.002	1.004	1.002
87	0.994	0.992	0.994	0.995	0.995	0.995	1.002	1.014	1.011	1.001	1.002	1.002	1.002	1.004	1.009	1.004	1.002	1.004	1.002	1.002
88	0.984	0.982	0.980	0.988	0.992	0.995	1.002	1.009	1.009	1.002	1.002	1.002	1.002	1.002	1.002	0.999	0.999	0.997	0.999	0.997
89	0.974	0.972	0.976	0.984	0.992	0.997	1.002	1.009	1.009	1.006	1.007	1.004	1.002	0.999	0.999	0.995	0.995	0.995	0.995	0.995
90	0.969	0.967	0.972	0.982	0.990	0.995	0.994	1.002	1.009	1.009	1.009	1.007	1.006	1.002	1.001	0.997	0.999	0.997	0.995	0.995
91	0.967	0.969	0.974	0.982	0.990	0.992	0.992	0.997	1.006	1.007	1.007	1.006	1.006	1.004	1.004	1.001	1.001	0.999	0.997	0.995
92	0.969	0.972	0.969	0.976	0.988	0.988	0.990	0.992	1.007	1.007	1.007	1.006	1.006	1.002	1.004	1.002	1.002	1.001	1.001	0.999
93	0.994	0.992	0.988	0.992	0.995	1.001	0.999	1.004	1.009	1.009	1.006	1.011	1.009	1.009	1.009	1.007	1.006	1.006	0.999	0.999
94	1.007	1.009	1.007	1.006	1.007	1.009	1.011	1.011	1.012	1.009	1.009	1.011	1.014	1.014	1.014	1.012	1.011	1.006	1.002	0.995
95	1.021	1.021	1.018	1.020	1.020	1.018	1.017	1.018	1.021	1.018	1.015	1.015	1.018	1.020	1.020	1.018	1.015	1.011	1.004	0.997
96	1.027	1.026	1.024	1.026	1.026	1.023	1.021	1.023	1.024	1.020	1.020	1.021	1.023	1.026	1.027	1.027	1.021	1.015	1.006	1.001
97	1.030	1.028	1.028	1.030	1.028	1.024	1.023	1.023	1.021	1.015	1.017	1.020	1.026	1.027	1.028	1.026	1.023	1.015	1.009	1.006
98	1.035	1.034	1.034	1.033	1.031	1.027	1.024	1.024	1.024	1.015	1.014	1.015	1.023	1.026	1.027	1.027	1.021	1.020	1.015	1.017

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 96

IR SCAN TIME 19.20 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	1.098	1.100	1.106	1.112	1.117	1.121	1.124	1.127	1.132	1.135	1.138	1.140	1.143	1.143	1.143	1.143	1.144	1.145	1.147	1.147
65	1.096	1.100	1.105	1.112	1.115	1.119	1.121	1.120	1.130	1.130	1.136	1.134	1.140	1.138	1.142	1.137	1.144	1.142	1.145	1.141
66	1.095	1.099	1.105	1.110	1.114	1.117	1.120	1.123	1.126	1.129	1.132	1.135	1.138	1.140	1.142	1.144	1.146	1.148	1.147	1.147
67	1.097	1.102	1.108	1.112	1.115	1.119	1.123	1.127	1.131	1.132	1.136	1.140	1.144	1.146	1.147	1.149	1.152	1.155	1.155	1.155
68	1.100	1.107	1.111	1.117	1.120	1.125	1.129	1.134	1.139	1.143	1.144	1.146	1.149	1.152	1.153	1.154	1.155	1.158	1.158	1.159
69	1.101	1.108	1.112	1.117	1.121	1.126	1.130	1.134	1.138	1.142	1.145	1.147	1.147	1.149	1.150	1.152	1.153	1.154	1.152	1.153
70	1.096	1.102	1.106	1.110	1.114	1.117	1.121	1.124	1.127	1.130	1.133	1.138	1.140	1.142	1.142	1.144	1.144	1.146	1.147	1.148
71	1.085	1.092	1.094	1.098	1.100	1.104	1.107	1.110	1.112	1.116	1.117	1.121	1.124	1.127	1.127	1.130	1.132	1.134	1.134	1.136
72	1.079	1.083	1.085	1.088	1.091	1.094	1.093	1.099	1.099	1.103	1.103	1.107	1.108	1.111	1.109	1.111	1.112	1.116	1.117	1.119
73	1.074	1.078	1.079	1.082	1.083	1.087	1.090	1.093	1.094	1.096	1.097	1.099	1.099	1.100	1.100	1.100	1.102	1.103	1.105	1.107
74	1.071	1.075	1.075	1.079	1.081	1.083	1.085	1.089	1.091	1.092	1.093	1.093	1.096	1.097	1.097	1.096	1.097	1.098	1.099	1.099
75	1.070	1.072	1.075	1.079	1.081	1.083	1.085	1.087	1.090	1.090	1.092	1.092	1.093	1.095	1.096	1.096	1.096	1.097	1.096	1.098
76	1.070	1.072	1.074	1.077	1.080	1.083	1.083	1.085	1.087	1.089	1.091	1.092	1.093	1.093	1.094	1.094	1.094	1.095	1.096	1.097
77	1.070	1.073	1.075	1.077	1.081	1.083	1.085	1.088	1.089	1.090	1.092	1.092	1.092	1.092	1.094	1.094	1.093	1.094	1.095	1.096
78	1.071	1.075	1.076	1.079	1.082	1.083	1.085	1.087	1.090	1.091	1.092	1.092	1.093	1.092	1.093	1.094	1.093	1.093	1.094	1.096
79	1.072	1.074	1.077	1.078	1.082	1.082	1.085	1.085	1.089	1.088	1.092	1.090	1.093	1.091	1.093	1.093	1.094	1.093	1.095	1.095
80	1.074	1.076	1.080	1.082	1.083	1.085	1.088	1.089	1.091	1.091	1.092	1.092	1.092	1.093	1.094	1.094	1.095	1.096	1.096	1.096
81	1.075	1.077	1.081	1.083	1.084	1.087	1.089	1.090	1.092	1.093	1.094	1.094	1.094	1.095	1.095	1.096	1.097	1.098	1.099	1.099
82	1.073	1.077	1.081	1.083	1.086	1.089	1.092	1.093	1.095	1.096	1.097	1.098	1.098	1.098	1.099	1.099	1.101	1.100	1.102	1.103
83	1.069	1.073	1.075	1.080	1.083	1.086	1.089	1.093	1.094	1.096	1.097	1.099	1.099	1.099	1.100	1.099	1.101	1.102	1.103	1.104
84	1.067	1.069	1.071	1.074	1.077	1.080	1.084	1.089	1.094	1.097	1.099	1.099	1.100	1.100	1.101	1.101	1.102	1.102	1.103	1.105
85	1.023	1.030	1.034	1.040	1.047	1.051	1.051	1.057	1.060	1.066	1.074	1.079	1.081	1.081	1.079	1.082	1.083	1.086	1.088	1.092
86	1.004	1.002	1.002	0.999	1.002	0.999	1.001	0.997	1.001	0.999	1.002	0.999	1.002	1.001	1.002	1.002	1.001	1.001	1.004	1.002
87	1.002	1.004	1.002	1.002	1.002	1.002	1.002	1.002	1.001	0.997	0.995	0.995	0.997	0.995	0.997	0.997	0.997	0.995	0.997	0.997
88	0.994	0.997	0.997	0.999	0.999	1.001	1.001	1.001	1.001	0.999	0.997	0.995	0.995	0.995	0.994	0.995	0.992	0.992	0.995	0.995
89	0.995	0.995	0.997	0.999	0.999	0.999	1.001	0.997	1.001	0.997	0.999	0.997	0.997	0.995	0.995	0.995	0.997	0.995	0.995	0.994
90	0.994	0.994	0.997	0.997	0.997	0.999	1.001	1.001	1.002	1.002	1.001	1.004	1.006	1.001	0.997	0.997	0.995	0.995	0.995	0.994
91	0.995	0.995	0.995	0.994	0.997	0.997	0.997	0.999	1.002	1.004	1.011	1.033	1.051	1.039	1.014	1.002	0.999	0.997	0.997	0.995
92	0.997	0.995	0.995	0.995	0.995	0.995	0.999	0.999	1.002	1.002	1.002	1.012	1.027	1.024	1.009	1.002	1.001	0.999	0.999	0.999
93	0.990	0.995	0.992	0.999	0.995	1.002	0.997	1.006	1.004	1.009	1.004	1.007	0.999	1.002	0.995	0.999	0.997	0.999	0.995	0.997
94	0.995	0.995	0.999	1.001	1.006	1.006	1.007	1.009	1.009	1.012	1.011	1.009	1.006	1.002	1.001	0.999	0.999	0.994	0.995	0.992
95	0.997	0.999	1.002	1.004	1.006	1.009	1.009	1.012	1.014	1.014	1.014	1.012	1.011	1.007	1.004	1.002	0.999	0.999	0.997	0.997
96	1.001	1.002	1.006	1.009	1.012	1.014	1.015	1.018	1.017	1.017	1.017	1.017	1.015	1.012	1.009	1.006	1.004	1.001	1.001	0.997
97	1.007	1.009	1.011	1.012	1.012	1.012	1.014	1.017	1.015	1.018	1.018	1.020	1.017	1.015	1.012	1.009	1.007	1.004	1.002	0.999
98	1.014	1.015	1.015	1.015	1.015	1.015	1.015	1.017	1.015	1.015	1.017	1.015	1.017	1.015	1.014	1.011	1.007	1.007	1.009	1.007

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 19.20 SEC
INITIAL TEMP 537.7 DEG. R

GROUP 96

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	1.145	1.142	1.144	1.144	1.145	1.145	1.142	1.137	1.134	1.134	1.134	1.132	1.128	1.117	1.083	1.033	1.002	0.984	0.978	0.976
65	1.142	1.140	1.144	1.144	1.143	1.141	1.141	1.140	1.138	1.136	1.135	1.134	1.132	1.128	1.119	1.095	1.050	1.009	0.988	0.980
66	1.147	1.147	1.147	1.150	1.149	1.148	1.147	1.145	1.147	1.146	1.147	1.145	1.145	1.144	1.142	1.134	1.118	1.076	1.024	0.992
67	1.156	1.158	1.159	1.162	1.164	1.164	1.162	1.162	1.161	1.161	1.161	1.160	1.159	1.159	1.159	1.157	1.153	1.144	1.112	1.054
68	1.160	1.161	1.163	1.164	1.163	1.163	1.163	1.164	1.164	1.165	1.167	1.167	1.165	1.164	1.163	1.163	1.162	1.159	1.153	1.137
69	1.155	1.155	1.155	1.155	1.155	1.155	1.155	1.156	1.156	1.157	1.159	1.161	1.164	1.164	1.163	1.165	1.167	1.166	1.165	1.160
70	1.148	1.150	1.151	1.152	1.152	1.152	1.152	1.152	1.151	1.152	1.156	1.157	1.159	1.162	1.160	1.163	1.166	1.169	1.170	1.171
71	1.138	1.140	1.141	1.143	1.145	1.146	1.145	1.147	1.149	1.152	1.155	1.156	1.157	1.156	1.156	1.157	1.160	1.160	1.160	1.161
72	1.120	1.123	1.124	1.126	1.130	1.131	1.133	1.137	1.139	1.141	1.141	1.142	1.145	1.147	1.147	1.146	1.145	1.148	1.148	1.148
73	1.109	1.111	1.111	1.111	1.112	1.114	1.115	1.118	1.118	1.120	1.121	1.125	1.125	1.126	1.125	1.127	1.129	1.133	1.134	1.136
74	1.100	1.101	1.102	1.102	1.103	1.103	1.103	1.103	1.107	1.109	1.109	1.109	1.109	1.111	1.110	1.111	1.112	1.114	1.116	1.117
75	1.098	1.099	1.099	1.099	1.101	1.099	1.099	1.098	1.098	1.098	1.099	1.099	1.099	1.100	1.101	1.102	1.103	1.103	1.105	1.106
76	1.096	1.098	1.097	1.097	1.099	1.099	1.099	1.098	1.097	1.096	1.095	1.095	1.097	1.097	1.097	1.099	1.099	1.099	1.100	1.099
77	1.097	1.097	1.096	1.096	1.097	1.097	1.096	1.096	1.096	1.096	1.096	1.096	1.097	1.096	1.097	1.099	1.099	1.099	1.099	1.101
78	1.096	1.098	1.096	1.096	1.096	1.098	1.097	1.095	1.095	1.095	1.095	1.096	1.096	1.097	1.098	1.099	1.100	1.100	1.102	1.103
79	1.096	1.097	1.098	1.098	1.099	1.098	1.099	1.099	1.098	1.098	1.098	1.097	1.097	1.097	1.097	1.099	1.099	1.101	1.103	1.103
80	1.098	1.098	1.099	1.098	1.099	1.098	1.099	1.099	1.099	1.099	1.100	1.099	1.099	1.099	1.100	1.099	1.102	1.102	1.103	1.103
81	1.100	1.100	1.101	1.102	1.102	1.101	1.102	1.102	1.101	1.101	1.101	1.102	1.102	1.102	1.103	1.104	1.105	1.106	1.105	1.103
82	1.104	1.105	1.105	1.106	1.106	1.106	1.106	1.106	1.106	1.103	1.104	1.103	1.103	1.103	1.103	1.105	1.106	1.106	1.106	1.106
83	1.106	1.108	1.109	1.111	1.110	1.111	1.111	1.110	1.111	1.111	1.111	1.109	1.109	1.109	1.109	1.109	1.109	1.109	1.109	1.108
84	1.107	1.108	1.108	1.109	1.110	1.111	1.111	1.111	1.111	1.111	1.111	1.111	1.111	1.111	1.111	1.111	1.112	1.113	1.113	1.113
85	1.093	1.096	1.096	1.101	1.103	1.103	1.103	1.103	1.104	1.103	1.103	1.103	1.103	1.105	1.105	1.106	1.106	1.108	1.108	1.111
86	1.002	1.002	1.002	1.001	1.004	1.006	1.006	1.006	1.006	1.006	1.011	1.012	1.012	1.015	1.015	1.015	1.012	1.015	1.015	1.020
87	0.997	0.997	0.995	0.994	0.995	0.992	0.994	0.992	0.994	0.992	0.995	0.995	0.995	0.995	0.997	0.999	0.997	0.995	0.995	0.992
88	0.995	0.995	0.995	0.995	0.995	0.992	0.994	0.994	0.990	0.992	0.990	0.990	0.988	0.988	0.990	0.988	0.988	0.984	0.990	0.984
89	0.995	0.995	0.995	0.995	0.994	0.992	0.994	0.990	0.992	0.990	0.992	0.992	0.990	0.994	0.988	0.988	0.988	0.986	0.988	0.988
90	0.995	0.995	0.995	0.994	0.995	0.995	0.995	0.992	0.994	0.990	0.990	0.990	0.992	0.990	0.990	0.986	0.986	0.986	0.986	0.984
91	0.995	0.994	0.997	0.995	0.995	0.995	0.995	0.995	0.994	0.992	0.999	1.020	1.031	1.017	0.999	0.992	0.990	0.988	0.988	0.986
92	0.999	0.999	0.999	0.999	0.997	0.997	0.995	0.995	0.994	0.994	0.995	1.015	1.033	1.020	1.004	0.992	0.988	0.986	0.984	0.984
93	0.995	0.997	0.997	0.999	0.999	1.001	0.999	1.001	0.997	0.997	0.995	0.997	0.995	0.997	0.992	0.992	0.990	0.992	0.988	0.990
94	0.995	0.992	0.997	0.995	0.999	0.999	1.001	0.997	0.997	0.995	0.995	0.992	0.995	0.994	0.992	0.992	0.992	0.988	0.992	0.990
95	0.997	0.997	0.997	0.997	0.999	0.997	0.999	0.999	0.999	0.997	0.995	0.995	0.995	0.995	0.995	0.990	0.992	0.988	0.990	0.986
96	0.997	0.999	0.999	0.997	0.999	0.999	1.001	0.999	1.001	0.999	0.999	0.997	0.997	0.995	0.995	0.995	0.994	0.992	0.992	0.990
97	0.997	0.995	0.997	0.997	0.999	0.997	1.001	0.999	1.001	0.999	0.997	0.995	0.995	0.994	0.995	0.994	0.994	0.992	0.994	0.995
98	1.006	1.004	1.001	0.997	0.999	0.999	1.001	1.002	1.002	1.002	1.001	0.999	0.997	0.995	0.994	0.994	0.994	0.994	0.997	0.995

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 19.20 SEC
INITIAL TEMP 537.7 DEG. R

GROUP 96

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.976	0.978	0.980	0.984	0.982	0.978	0.976	0.974	0.972	0.974	0.972	0.974	0.972	0.974	0.974	0.974	0.972	0.976	0.976	0.976
65	0.974	0.976	0.978	0.978	0.982	0.984	0.978	0.972	0.969	0.967	0.967	0.967	0.967	0.967	0.967	0.967	0.967	0.969	0.969	0.972
66	0.984	0.976	0.976	0.976	0.976	0.980	0.982	0.976	0.967	0.965	0.960	0.962	0.962	0.960	0.962	0.960	0.960	0.962	0.962	0.962
67	1.007	0.988	0.976	0.969	0.974	0.969	0.974	0.976	0.976	0.962	0.957	0.950	0.952	0.950	0.952	0.950	0.955	0.950	0.955	0.955
68	1.091	1.034	0.997	0.982	0.974	0.976	0.976	0.976	0.978	0.960	0.967	0.957	0.950	0.950	0.947	0.950	0.944	0.947	0.944	0.947
69	1.152	1.120	1.060	1.009	0.988	0.976	0.974	0.974	0.974	0.976	0.978	0.972	0.955	0.947	0.944	0.947	0.941	0.938	0.941	0.938
70	1.170	1.165	1.141	1.085	1.023	0.994	0.978	0.976	0.972	0.974	0.974	0.978	0.972	0.957	0.944	0.938	0.938	0.938	0.938	0.941
71	1.160	1.158	1.153	1.138	1.093	1.036	0.995	0.980	0.974	0.974	0.974	0.974	0.976	0.972	0.960	0.944	0.941	0.938	0.938	0.938
72	1.146	1.144	1.143	1.141	1.132	1.103	1.050	1.006	0.984	0.976	0.974	0.974	0.974	0.974	0.972	0.962	0.950	0.944	0.938	0.941
73	1.136	1.136	1.135	1.135	1.135	1.132	1.113	1.068	1.015	0.990	0.978	0.976	0.976	0.976	0.974	0.976	0.967	0.955	0.947	0.944
74	1.117	1.117	1.121	1.120	1.125	1.123	1.125	1.113	1.084	1.028	0.997	0.976	0.976	0.967	0.976	0.965	0.974	0.972	0.962	0.950
75	1.106	1.106	1.108	1.109	1.111	1.112	1.112	1.113	1.109	1.090	1.049	1.006	0.984	0.980	0.976	0.976	0.972	0.972	0.972	0.965
76	1.100	1.100	1.102	1.102	1.103	1.106	1.107	1.107	1.106	1.104	1.095	1.067	1.021	0.994	0.980	0.976	0.976	0.974	0.972	0.972
77	1.101	1.103	1.103	1.103	1.107	1.108	1.107	1.106	1.106	1.106	1.104	1.101	1.082	1.044	1.004	0.986	0.978	0.976	0.972	0.972
78	1.103	1.103	1.106	1.107	1.108	1.108	1.108	1.110	1.109	1.109	1.108	1.108	1.105	1.093	1.060	1.015	0.988	0.980	0.974	0.972
79	1.105	1.107	1.108	1.108	1.107	1.107	1.108	1.109	1.111	1.109	1.110	1.111	1.111	1.111	1.103	1.081	1.040	1.002	0.984	0.976
80	1.105	1.106	1.107	1.107	1.108	1.109	1.110	1.111	1.112	1.112	1.111	1.111	1.111	1.112	1.111	1.110	1.093	1.055	1.009	0.986
81	1.105	1.103	1.107	1.107	1.111	1.108	1.111	1.110	1.111	1.111	1.111	1.111	1.112	1.111	1.114	1.117	1.117	1.103	1.069	1.024
82	1.106	1.107	1.108	1.107	1.108	1.109	1.108	1.109	1.109	1.112	1.112	1.114	1.115	1.115	1.116	1.117	1.117	1.114	1.105	1.080
83	1.109	1.108	1.108	1.108	1.108	1.108	1.108	1.108	1.109	1.111	1.112	1.114	1.117	1.118	1.120	1.120	1.120	1.119	1.116	1.109
84	1.114	1.114	1.113	1.114	1.113	1.113	1.114	1.113	1.114	1.114	1.116	1.114	1.115	1.117	1.120	1.123	1.125	1.126	1.123	1.118
85	1.111	1.112	1.112	1.114	1.114	1.116	1.116	1.118	1.118	1.120	1.120	1.122	1.123	1.123	1.123	1.125	1.125	1.125	1.123	1.120
86	1.018	1.021	1.023	1.024	1.027	1.033	1.036	1.038	1.043	1.043	1.047	1.047	1.050	1.050	1.054	1.055	1.057	1.057	1.058	1.056
87	0.990	0.990	0.992	0.994	0.999	0.999	1.001	1.001	0.995	0.992	0.992	0.995	1.002	1.007	1.006	0.999	0.995	0.992	0.992	0.992
88	0.992	0.984	0.988	0.988	0.994	0.988	0.992	0.988	0.992	0.986	0.990	0.986	0.994	0.992	0.992	0.994	0.988	0.988	0.990	0.988
89	0.988	0.988	0.990	0.988	0.988	0.986	0.986	0.986	0.988	0.988	0.988	0.988	0.986	0.986	0.988	0.990	0.990	0.990	0.992	0.988
90	0.986	0.986	0.986	0.984	0.986	0.986	0.984	0.986	0.986	0.986	0.986	0.986	0.986	0.984	0.990	0.999	0.997	0.990	0.990	0.988
91	0.988	0.984	0.986	0.984	0.984	0.984	0.986	0.984	0.988	0.995	1.012	1.012	0.999	0.988	0.986	0.986	0.984	0.984	0.984	0.984
92	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.986	0.999	1.021	1.027	1.009	0.994	0.986	0.984	0.982	0.984	0.982	0.982
93	0.988	0.988	0.988	0.988	0.986	0.988	0.986	0.988	0.984	0.986	0.986	0.990	0.984	0.988	0.984	0.984	0.982	0.984	0.982	0.984
94	0.990	0.990	0.992	0.988	0.990	0.988	0.990	0.986	0.984	0.988	0.988	0.988	0.988	0.988	0.986	0.988	0.988	0.988	0.988	0.988
95	0.990	0.990	0.992	0.988	0.992	0.986	0.990	0.986	0.990	0.988	0.992	0.992	0.994	0.992	0.992	0.992	0.995	0.992	0.994	0.990
96	0.992	0.990	0.992	0.990	0.992	0.992	0.992	0.988	0.990	0.988	0.990	0.992	0.988	0.988	0.990	0.992	0.994	0.992	0.995	0.992
97	0.995	0.992	0.992	0.992	0.994	0.990	0.992	0.992	0.990	0.988	0.990	0.992	0.990	0.988	0.994	0.995	0.999	0.999	0.997	0.995
98	0.997	0.995	0.994	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.990	0.990	0.990	0.997	1.007	1.011	1.007	1.002	1.001

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 19.20 SEC
GROUP 96 INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.974	0.974	0.974	0.974	0.972	0.974	0.974	0.974	0.976	0.974	0.974	0.972
65	0.972	0.972	0.969	0.972	0.969	0.969	0.969	0.969	0.967	0.967	0.967	0.967	0.969	0.967	0.967	0.967	0.967	0.965	0.967	0.965
66	0.962	0.962	0.965	0.962	0.960	0.962	0.962	0.962	0.960	0.962	0.960	0.962	0.960	0.962	0.957	0.960	0.960	0.962	0.960	0.960
67	0.952	0.955	0.955	0.955	0.955	0.955	0.952	0.952	0.952	0.952	0.952	0.952	0.952	0.955	0.952	0.952	0.952	0.955	0.955	0.952
68	0.947	0.944	0.941	0.947	0.941	0.947	0.938	0.947	0.941	0.947	0.938	0.947	0.941	0.944	0.938	0.947	0.941	0.947	0.947	0.950
69	0.941	0.944	0.938	0.947	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.944	0.938	0.938	0.932
70	0.938	0.938	0.938	0.941	0.938	0.941	0.938	0.941	0.938	0.938	0.935	0.938	0.938	0.938	0.938	0.941	0.938	0.938	0.938	0.938
71	0.938	0.938	0.935	0.944	0.935	0.941	0.938	0.938	0.935	0.938	0.935	0.938	0.938	0.938	0.935	0.935	0.935	0.938	0.935	0.938
72	0.938	0.938	0.938	0.941	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.941	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.941
73	0.938	0.944	0.938	0.938	0.938	0.938	0.938	0.938	0.935	0.938	0.935	0.941	0.938	0.944	0.938	0.941	0.947	0.947	0.919	0.938
74	0.944	0.941	0.941	0.941	0.938	0.938	0.938	0.938	0.941	0.938	0.941	0.935	0.938	0.938	0.941	0.938	0.938	0.938	0.938	0.944
75	0.957	0.944	0.941	0.935	0.938	0.932	0.938	0.935	0.938	0.938	0.938	0.935	0.938	0.932	0.938	0.935	0.938	0.938	0.938	0.938
76	0.974	0.972	0.960	0.947	0.944	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.935	0.938	0.932
77	0.974	0.974	0.976	0.974	0.962	0.952	0.944	0.944	0.941	0.944	0.938	0.938	0.938	0.938	0.938	0.941	0.941	0.944	0.938	0.941
78	0.972	0.972	0.974	0.974	0.976	0.974	0.967	0.957	0.950	0.944	0.938	0.941	0.938	0.938	0.941	0.938	0.938	0.938	0.938	0.938
79	0.972	0.972	0.972	0.972	0.972	0.974	0.974	0.974	0.972	0.967	0.957	0.952	0.947	0.944	0.944	0.944	0.938	0.938	0.938	0.938
80	0.974	0.972	0.972	0.974	0.972	0.974	0.974	0.974	0.976	0.976	0.976	0.976	0.974	0.967	0.962	0.955	0.952	0.950	0.947	0.944
81	0.995	0.980	0.974	0.974	0.972	0.969	0.972	0.974	0.974	0.974	0.976	0.978	0.980	0.980	0.980	0.976	0.978	0.974	0.974	0.967
82	1.040	0.999	0.984	0.969	0.972	0.967	0.972	0.967	0.974	0.972	0.976	0.976	0.978	0.960	0.980	0.980	0.982	0.982	0.982	0.982
83	1.093	1.056	1.015	0.988	0.976	0.974	0.974	0.974	0.972	0.974	0.976	0.976	0.976	0.980	0.978	0.969	0.980	0.967	0.980	0.972
84	1.112	1.103	1.079	1.038	1.002	0.984	0.974	0.972	0.972	0.972	0.974	0.976	0.976	0.976	0.978	0.980	0.978	0.976	0.976	0.976
85	1.117	1.112	1.103	1.084	1.049	1.011	0.984	0.978	0.976	0.976	0.976	0.976	0.976	0.980	0.978	0.978	0.978	0.978	0.976	0.976
86	1.055	1.051	1.049	1.042	1.030	1.012	0.997	0.988	0.988	0.986	0.986	0.982	0.978	0.976	0.976	0.976	0.976	0.978	0.976	0.978
87	0.990	0.988	0.988	0.986	0.986	0.986	0.988	0.992	0.995	0.997	0.994	0.984	0.976	0.974	0.972	0.972	0.972	0.974	0.974	0.976
88	0.986	0.986	0.988	0.988	0.988	0.984	0.978	0.976	0.980	0.984	0.982	0.978	0.978	0.978	0.976	0.976	0.976	0.976	0.976	0.974
89	0.988	0.988	0.990	0.988	0.986	0.984	0.978	0.976	0.976	0.978	0.980	0.980	0.980	0.980	0.980	0.978	0.980	0.978	0.978	0.978
90	0.997	0.999	0.994	0.988	0.988	0.984	0.980	0.976	0.976	0.980	0.980	0.980	0.978	0.976	0.978	0.976	0.978	0.976	0.976	0.976
91	0.984	0.984	0.984	0.982	0.980	0.980	0.978	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976
92	0.980	0.982	0.980	0.980	0.976	0.976	0.974	0.974	0.976	0.974	0.974	0.976	0.976	0.976	0.976	0.974	0.974	0.974	0.974	0.976
93	0.984	0.984	0.980	0.960	0.978	0.980	0.976	0.978	0.976	0.978	0.976	0.976	0.976	0.978	0.976	0.976	0.976	0.978	0.978	0.980
94	0.986	0.984	0.984	0.980	0.980	0.978	0.978	0.976	0.978	0.980	0.978	0.978	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.978
95	0.990	0.988	0.988	0.984	0.982	0.980	0.980	0.980	0.980	0.980	0.980	0.978	0.980	0.978	0.980	0.980	0.980	0.980	0.980	0.980
96	0.992	0.988	0.990	0.984	0.982	0.980	0.982	0.980	0.982	0.982	0.984	0.982	0.982	0.980	0.982	0.980	0.982	0.982	0.982	0.980
97	0.992	0.992	0.990	0.988	0.986	0.984	0.984	0.982	0.982	0.982	0.982	0.980	0.980	0.978	0.982	0.978	0.982	0.978	0.980	0.976
98	1.002	1.004	1.001	0.992	0.986	0.986	0.984	0.984	0.982	0.986	0.986	0.984	0.984	0.984	0.984	0.982	0.982	0.982	0.982	0.982

NASA/RI OH90 TRANSITION TEST
V41B-P4A
AKO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 96

IR SCAN TIME 19.20 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.972	0.974	0.974	0.974	0.972	0.974	0.974	0.974	0.974	0.974
65	0.969	0.967	0.967	0.969	0.967	0.967	0.969	0.967	0.969	0.967
66	0.960	0.962	0.960	0.960	0.957	0.957	0.957	0.960	0.960	0.960
67	0.952	0.955	0.952	0.952	0.952	0.952	0.952	0.955	0.955	0.955
68	0.944	0.947	0.944	0.950	0.944	0.947	0.944	0.950	0.947	0.950
69	0.944	0.932	0.941	0.932	0.941	0.935	0.938	0.935	0.944	0.935
70	0.938	0.944	0.938	0.944	0.938	0.938	0.935	0.938	0.938	0.941
71	0.938	0.938	0.938	0.938	0.938	0.938	0.935	0.938	0.935	0.938
72	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.944	0.938	0.941
73	0.944	0.938	0.938	0.938	0.938	0.947	0.935	0.938	0.941	0.938
74	0.938	0.938	0.938	0.938	0.938	0.938	0.941	0.938	0.941	0.938
75	0.938	0.938	0.941	0.938	0.938	0.938	0.938	0.938	0.938	0.938
76	0.938	0.932	0.938	0.935	0.938	0.935	0.938	0.935	0.941	0.938
77	0.938	0.944	0.938	0.938	0.938	0.944	0.938	0.938	0.938	0.938
78	0.938	0.944	0.941	0.938	0.938	0.938	0.938	0.938	0.941	0.938
79	0.938	0.938	0.941	0.938	0.938	0.938	0.941	0.938	0.941	0.941
80	0.944	0.947	0.938	0.947	0.938	0.944	0.941	0.944	0.944	0.938
81	0.965	0.960	0.955	0.952	0.947	0.947	0.944	0.944	0.944	0.938
82	0.980	0.980	0.976	0.976	0.974	0.969	0.965	0.962	0.960	0.957
83	0.978	0.969	0.978	0.969	0.980	0.972	0.978	0.972	0.976	0.969
84	0.976	0.976	0.978	0.976	0.978	0.978	0.978	0.980	0.980	0.980
85	0.976	0.980	0.978	0.980	0.978	0.980	0.978	0.980	0.980	0.982
86	0.978	0.978	0.976	0.978	0.980	0.976	0.978	0.980	0.978	0.980
87	0.976	0.976	0.976	0.978	0.978	0.980	0.980	0.980	0.980	0.980
88	0.974	0.976	0.980	0.976	0.980	0.980	0.980	0.980	0.980	0.980
89	0.976	0.976	0.976	0.978	0.980	0.978	0.980	0.984	0.980	0.982
90	0.978	0.976	0.976	0.976	0.978	0.976	0.980	0.976	0.980	0.980
91	0.976	0.978	0.976	0.978	0.978	0.976	0.976	0.978	0.978	0.980
92	0.976	0.978	0.976	0.978	0.976	0.978	0.976	0.978	0.976	0.978
93	0.976	0.980	0.980	0.980	0.978	0.980	0.980	0.980	0.980	0.980
94	0.976	0.980	0.978	0.980	0.978	0.982	0.982	0.982	0.984	0.982
95	0.978	0.980	0.980	0.980	0.980	0.980	0.984	0.982	0.984	0.984
96	0.980	0.980	0.980	0.980	0.984	0.984	0.984	0.986	0.986	0.986
97	0.980	0.976	0.980	0.978	0.982	0.980	0.984	0.984	0.988	0.986
98	0.980	0.980	0.982	0.982	0.982	0.984	0.984	0.984	0.986	0.986

NASA/RI 0H90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREFR
IR SCAN TIME 19.20 SEC
GROUP 96 HREFR = 0.147E-01

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	0.010	0.008	0.010	0.009	0.009	0.007	0.007	0.005	0.009	0.005	0.006	0.005	0.003	0.004	0.004	0.004	0.004	0.005	0.004	0.004
30	0.009	0.008	0.008	0.007	0.008	0.005	0.005	0.006	0.005	0.004	0.006	0.004	0.004	0.002	0.004	0.003	0.004	0.002	0.003	0.000
31	0.008	0.008	0.006	0.006	0.005	0.005	0.005	0.005	0.005	0.005	0.004	0.003	0.004	0.002	0.003	0.002	0.003	0.002	0.002	0.002
32	0.007	0.008	0.008	0.005	0.005	0.004	0.004	0.004	0.004	0.003	0.003	0.002	0.002	0.002	0.003	0.003	0.002	0.002	0.003	0.004
33	0.007	0.007	0.006	0.005	0.005	0.004	0.004	0.003	0.004	0.002	0.004	0.003	0.002	0.003	0.003	0.003	0.004	0.004	0.005	0.005
34	0.006	0.006	0.004	0.005	0.004	0.003	0.002	0.000	0.002	0.002	0.002	0.002	0.003	0.003	0.004	0.004	0.005	0.005	0.005	0.005
35	0.005	0.003	0.004	0.004	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.004	0.003	0.005	0.005	0.004	0.004	0.003	0.003
36	0.004	0.004	0.003	0.003	0.003	0.003	0.003	0.004	0.003	0.004	0.004	0.005	0.004	0.005	0.004	0.004	0.004	0.004	0.004	0.004
37	0.003	0.004	0.004	0.004	0.005	0.005	0.004	0.004	0.004	0.004	0.004	0.005	0.004	0.002	0.002	0.002	0.002	0.002	0.002	0.002
38	0.005	0.005	0.005	0.005	0.005	0.004	0.005	0.005	0.004	0.005	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	0.006	0.006	0.005	0.006	0.005	0.005	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.006	0.006	0.006	0.005	0.006	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.007	0.006	0.005	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
42	0.006	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
43	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
44	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
45	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.008
46	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.023	0.048
47	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.008	0.038	0.060
48	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.017	0.049	0.068
49	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.024	0.053	0.069
50	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.004	0.028	0.054	0.065
51	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.034	0.055	0.066
52	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.006	0.038	0.056	0.065
53	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.010	0.042	0.057	0.063
54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.019	0.048	0.057	0.064
55	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.030	0.051	0.057	0.063
56	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.007	0.038	0.054	0.058	0.063
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.016	0.042	0.054	0.057	0.063
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.022	0.046	0.056	0.060	0.063
59	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.030	0.050	0.057	0.061	0.064
60	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.004	0.034	0.051	0.057	0.061	0.063
61	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.012	0.042	0.054	0.059	0.062	0.066
62	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.024	0.048	0.054	0.060	0.063	0.066
63	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.005	0.034	0.051	0.056	0.061	0.064	0.066

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 19.20 SEC
HREF = 0.147E-01

GROUP 96

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	0.000	0.003	0.000	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.000	0.004	0.004	0.005	0.004	0.006
30	0.002	0.000	0.002	0.002	0.003	0.002	0.002	0.002	0.004	0.004	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.003	0.004	0.004
31	0.002	0.003	0.002	0.002	0.004	0.004	0.005	0.005	0.005	0.006	0.006	0.005	0.005	0.003	0.002	0.002	0.002	0.002	0.002	0.002
32	0.004	0.005	0.005	0.005	0.006	0.006	0.008	0.005	0.004	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
33	0.005	0.006	0.006	0.005	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.005	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
36	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
37	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
42	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
43	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
44	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
45	0.010	0.014	0.013	0.013	0.011	0.010	0.006	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
46	0.062	0.070	0.078	0.084	0.091	0.094	0.094	0.089	0.080	0.063	0.040	0.018	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
47	0.070	0.077	0.081	0.084	0.088	0.096	0.105	0.114	0.117	0.120	0.101	0.063	0.033	0.018	0.009	0.004	0.004	0.004	0.004	0.004
48	0.078	0.084	0.089	0.092	0.092	0.092	0.092	0.094	0.098	0.103	0.105	0.092	0.061	0.028	0.010	0.006	0.006	0.006	0.007	0.004
49	0.078	0.084	0.092	0.097	0.102	0.103	0.102	0.098	0.094	0.090	0.091	0.093	0.088	0.065	0.032	0.009	0.000	0.000	0.000	0.005
50	0.073	0.079	0.085	0.092	0.101	0.106	0.110	0.109	0.106	0.100	0.092	0.086	0.084	0.081	0.067	0.038	0.011	0.000	0.000	0.000
51	0.071	0.075	0.081	0.086	0.094	0.098	0.103	0.106	0.110	0.109	0.105	0.098	0.092	0.083	0.077	0.066	0.043	0.015	0.003	0.003
52	0.070	0.075	0.079	0.083	0.087	0.092	0.095	0.097	0.099	0.102	0.103	0.105	0.103	0.099	0.093	0.085	0.074	0.057	0.030	0.008
53	0.067	0.072	0.077	0.081	0.086	0.089	0.092	0.094	0.097	0.098	0.099	0.098	0.100	0.099	0.099	0.096	0.092	0.084	0.069	0.042
54	0.067	0.072	0.075	0.081	0.084	0.087	0.089	0.092	0.095	0.098	0.098	0.099	0.098	0.097	0.097	0.097	0.096	0.095	0.090	0.080
55	0.066	0.070	0.074	0.078	0.080	0.084	0.085	0.088	0.091	0.095	0.098	0.100	0.100	0.099	0.098	0.097	0.095	0.096	0.095	0.095
56	0.065	0.068	0.072	0.077	0.078	0.080	0.082	0.086	0.090	0.094	0.095	0.097	0.098	0.099	0.100	0.101	0.101	0.102	0.101	0.100
57	0.064	0.068	0.072	0.075	0.076	0.079	0.080	0.083	0.088	0.091	0.092	0.095	0.095	0.097	0.097	0.100	0.102	0.105	0.106	0.107
58	0.066	0.068	0.073	0.076	0.078	0.080	0.082	0.084	0.087	0.091	0.091	0.094	0.092	0.094	0.095	0.097	0.098	0.102	0.104	0.107
59	0.066	0.070	0.074	0.077	0.080	0.082	0.083	0.086	0.088	0.092	0.094	0.096	0.097	0.097	0.097	0.097	0.097	0.098	0.101	0.104
60	0.066	0.068	0.074	0.077	0.081	0.083	0.086	0.088	0.092	0.094	0.097	0.099	0.098	0.098	0.100	0.101	0.100	0.098	0.098	0.099
61	0.068	0.071	0.074	0.078	0.082	0.086	0.087	0.090	0.094	0.097	0.099	0.101	0.101	0.103	0.102	0.103	0.101	0.102	0.100	0.101
62	0.069	0.072	0.075	0.079	0.083	0.086	0.088	0.090	0.094	0.097	0.099	0.100	0.102	0.102	0.104	0.104	0.104	0.103	0.103	0.103
63	0.070	0.072	0.076	0.080	0.084	0.087	0.089	0.091	0.095	0.098	0.101	0.103	0.105	0.105	0.106	0.104	0.104	0.105	0.107	0.107

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREFR
IR SCAN TIME 19.20 SEC
HREFR = 0.147E-01

GROUP 96

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	0.006	0.006	0.004	0.005	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
32	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
36	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
37	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
42	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
43	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
44	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
46	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
47	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
48	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
49	0.007	0.008	0.006	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
50	0.000	0.000	0.005	0.008	0.008	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
51	0.003	0.003	0.003	0.003	0.000	0.005	0.008	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
52	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.005	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
53	0.016	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54	0.056	0.026	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
55	0.088	0.071	0.038	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
56	0.098	0.095	0.082	0.054	0.020	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57	0.106	0.104	0.099	0.091	0.068	0.034	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	0.108	0.110	0.110	0.108	0.101	0.086	0.052	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59	0.105	0.107	0.108	0.111	0.111	0.108	0.100	0.073	0.031	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
60	0.101	0.104	0.105	0.106	0.108	0.110	0.110	0.107	0.092	0.056	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
61	0.101	0.101	0.102	0.103	0.104	0.106	0.106	0.107	0.105	0.100	0.071	0.030	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
62	0.103	0.102	0.103	0.101	0.101	0.101	0.103	0.104	0.105	0.105	0.100	0.079	0.038	0.008	0.008	0.008	0.008	0.008	0.008	0.008
63	0.107	0.104	0.104	0.104	0.103	0.102	0.101	0.100	0.100	0.100	0.100	0.096	0.088	0.058	0.022	0.022	0.022	0.022	0.022	0.022

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 19.20 SEC
HREF = 0.147E-01

GROUP 96

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
32	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
36	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
37	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
42	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
43	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
44	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
46	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
47	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
48	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
49	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
51	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
52	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
53	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
55	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
60	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
61	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
62	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
63	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 19.20 SEC
HREF = 0.147E-01

GROUP 96

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
32	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
36	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
37	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
42	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
43	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
44	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
46	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
47	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
48	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
49	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
51	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
52	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
53	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
55	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
60	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
61	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
62	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
63	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 19.20 SEC
HREF = 0.147E-01

GROUP 96

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
32	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
36	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
37	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
42	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
43	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
44	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
46	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
47	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
48	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
49	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
51	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
52	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
53	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
55	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
60	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
61	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
62	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
63	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 19.20 SEC
HREF = 0.147E-01

GROUP 96

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.010	0.038	0.051	0.056	0.060	0.064	0.066
65	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.021	0.044	0.052	0.056	0.060	0.063	0.066
66	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.026	0.045	0.053	0.056	0.060	0.063	0.066
67	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.030	0.048	0.054	0.058	0.061	0.063	0.066
68	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.033	0.049	0.055	0.058	0.062	0.065	0.068
69	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.007	0.037	0.049	0.056	0.059	0.063	0.066	0.068
70	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.016	0.041	0.049	0.054	0.056	0.060	0.063	0.065
71	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.020	0.038	0.043	0.049	0.049	0.054	0.055	0.058
72	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.000	0.026	0.038	0.041	0.045	0.047	0.049	0.051	0.052
73	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.006	0.028	0.037	0.039	0.042	0.044	0.047	0.048	0.049
74	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.012	0.030	0.036	0.038	0.042	0.043	0.045	0.046	0.049
75	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.015	0.030	0.034	0.038	0.039	0.042	0.044	0.046	0.047
76	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.016	0.030	0.034	0.038	0.038	0.042	0.043	0.046	0.046
77	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.023	0.032	0.035	0.038	0.040	0.042	0.045	0.045	0.048
78	0.003	0.003	0.003	0.004	0.008	0.002	0.009	0.009	0.009	0.009	0.007	0.024	0.033	0.035	0.038	0.039	0.042	0.043	0.046	0.048
79	0.005	0.004	0.004	0.006	0.012	0.010	0.009	0.020	0.006	0.006	0.015	0.029	0.034	0.036	0.038	0.040	0.043	0.045	0.047	0.049
80	0.017	0.023	0.010	0.009	0.008	0.014	0.016	0.017	0.022	0.015	0.025	0.032	0.035	0.036	0.039	0.042	0.043	0.045	0.048	0.049
81	0.026	0.026	0.022	0.015	0.008	0.006	0.009	0.015	0.023	0.026	0.031	0.033	0.036	0.037	0.040	0.041	0.043	0.045	0.048	0.050
82	0.032	0.029	0.026	0.020	0.010	0.006	0.006	0.002	0.008	0.017	0.030	0.034	0.037	0.038	0.040	0.040	0.043	0.045	0.048	0.048
83	0.036	0.029	0.024	0.020	0.012	0.007	0.007	0.007	0.007	0.016	0.034	0.040	0.042	0.041	0.042	0.042	0.044	0.046	0.048	0.046
84	0.035	0.024	0.024	0.021	0.012	0.004	0.004	0.004	0.003	0.009	0.022	0.027	0.032	0.035	0.038	0.040	0.042	0.044	0.045	0.045
85	0.019	0.020	0.024	0.026	0.017	0.007	0.000	0.007	0.005	0.005	0.003	0.006	0.005	0.006	0.004	0.006	0.006	0.008	0.008	0.011
86	0.003	0.007	0.010	0.011	0.006	0.004	0.004	0.007	0.006	0.002	0.003	0.004	0.004	0.004	0.004	0.002	0.002	0.002	0.003	0.002
87	0.008	0.008	0.008	0.008	0.008	0.008	0.002	0.009	0.007	0.000	0.002	0.002	0.002	0.003	0.006	0.003	0.002	0.003	0.002	0.002
88	0.004	0.004	0.004	0.004	0.004	0.004	0.002	0.006	0.006	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
89	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.006	0.006	0.004	0.005	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.006	0.006	0.006	0.005	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000
91	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.005	0.005	0.004	0.004	0.003	0.003	0.000	0.000	0.000	0.000	0.000
92	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.005	0.005	0.005	0.004	0.004	0.002	0.003	0.002	0.002	0.000	0.000	0.000
93	0.006	0.006	0.006	0.006	0.006	0.000	0.000	0.003	0.006	0.006	0.004	0.007	0.006	0.006	0.006	0.005	0.004	0.004	0.004	0.004
94	0.005	0.006	0.005	0.004	0.005	0.006	0.007	0.007	0.008	0.006	0.006	0.007	0.009	0.009	0.009	0.008	0.007	0.004	0.002	0.002
95	0.014	0.014	0.012	0.013	0.013	0.012	0.011	0.012	0.014	0.012	0.010	0.010	0.012	0.013	0.013	0.012	0.010	0.007	0.003	0.003
96	0.018	0.017	0.016	0.017	0.017	0.015	0.014	0.015	0.016	0.013	0.013	0.014	0.015	0.017	0.018	0.018	0.014	0.010	0.004	0.000
97	0.020	0.019	0.019	0.020	0.019	0.016	0.015	0.015	0.014	0.010	0.011	0.013	0.017	0.018	0.019	0.017	0.015	0.010	0.006	0.004
98	0.024	0.023	0.023	0.022	0.021	0.018	0.016	0.016	0.016	0.010	0.009	0.010	0.015	0.017	0.018	0.018	0.014	0.013	0.010	0.011

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 19.20 SEC
GROUP 96 HREF = 0.147E-01

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	0.069	0.071	0.075	0.080	0.084	0.087	0.090	0.092	0.096	0.098	0.101	0.102	0.105	0.105	0.105	0.105	0.106	0.107	0.108	0.108
65	0.068	0.071	0.075	0.080	0.083	0.086	0.087	0.086	0.094	0.094	0.100	0.097	0.102	0.101	0.104	0.100	0.106	0.104	0.106	0.103
66	0.067	0.070	0.075	0.079	0.082	0.084	0.086	0.089	0.091	0.094	0.096	0.098	0.101	0.103	0.104	0.105	0.107	0.109	0.108	0.108
67	0.069	0.072	0.077	0.080	0.083	0.086	0.089	0.092	0.095	0.096	0.099	0.102	0.106	0.107	0.108	0.110	0.112	0.115	0.115	0.115
68	0.071	0.076	0.080	0.084	0.087	0.091	0.094	0.098	0.102	0.105	0.105	0.107	0.110	0.112	0.113	0.114	0.115	0.117	0.117	0.118
69	0.072	0.077	0.080	0.084	0.087	0.091	0.095	0.098	0.101	0.104	0.106	0.108	0.108	0.110	0.111	0.113	0.113	0.114	0.113	0.113
70	0.068	0.072	0.075	0.079	0.082	0.084	0.087	0.090	0.092	0.094	0.097	0.101	0.102	0.104	0.104	0.105	0.105	0.107	0.108	0.109
71	0.060	0.065	0.067	0.069	0.071	0.074	0.076	0.079	0.080	0.083	0.084	0.087	0.090	0.092	0.092	0.095	0.096	0.097	0.097	0.100
72	0.055	0.058	0.060	0.062	0.064	0.067	0.066	0.070	0.070	0.074	0.074	0.076	0.077	0.079	0.078	0.080	0.080	0.083	0.084	0.086
73	0.051	0.054	0.055	0.057	0.058	0.061	0.063	0.066	0.067	0.068	0.068	0.070	0.070	0.071	0.071	0.071	0.072	0.074	0.075	0.076
74	0.049	0.052	0.052	0.055	0.056	0.058	0.060	0.063	0.064	0.065	0.065	0.066	0.068	0.068	0.068	0.068	0.068	0.069	0.070	0.070
75	0.048	0.050	0.052	0.055	0.056	0.058	0.060	0.061	0.063	0.063	0.065	0.065	0.066	0.067	0.068	0.068	0.068	0.068	0.068	0.069
76	0.048	0.050	0.051	0.054	0.056	0.058	0.058	0.060	0.061	0.063	0.064	0.065	0.065	0.066	0.067	0.067	0.067	0.067	0.068	0.068
77	0.048	0.051	0.052	0.054	0.056	0.058	0.060	0.062	0.063	0.063	0.065	0.065	0.065	0.067	0.067	0.066	0.067	0.067	0.067	0.068
78	0.049	0.052	0.053	0.055	0.057	0.058	0.060	0.061	0.063	0.064	0.065	0.065	0.065	0.065	0.065	0.067	0.066	0.066	0.067	0.068
79	0.050	0.051	0.054	0.054	0.057	0.057	0.060	0.060	0.063	0.062	0.065	0.063	0.065	0.064	0.066	0.066	0.067	0.065	0.067	0.067
80	0.051	0.053	0.056	0.057	0.058	0.060	0.062	0.063	0.064	0.064	0.065	0.065	0.065	0.065	0.067	0.067	0.067	0.068	0.068	0.068
81	0.052	0.054	0.056	0.058	0.059	0.061	0.063	0.063	0.065	0.066	0.067	0.067	0.067	0.067	0.067	0.068	0.068	0.069	0.070	0.070
82	0.051	0.054	0.056	0.058	0.061	0.063	0.065	0.066	0.067	0.068	0.068	0.069	0.069	0.069	0.070	0.070	0.072	0.071	0.072	0.073
83	0.048	0.051	0.052	0.056	0.058	0.061	0.063	0.065	0.067	0.068	0.068	0.070	0.070	0.070	0.071	0.070	0.072	0.072	0.073	0.074
84	0.046	0.048	0.049	0.051	0.054	0.056	0.059	0.063	0.067	0.068	0.070	0.070	0.071	0.071	0.072	0.072	0.072	0.072	0.074	0.075
85	0.015	0.020	0.023	0.027	0.032	0.035	0.035	0.039	0.042	0.047	0.051	0.055	0.056	0.056	0.055	0.057	0.058	0.061	0.062	0.065
86	0.003	0.002	0.002	0.002	0.002	0.002	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.000	0.002	0.002	0.000	0.000	0.003	0.002
87	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88	0.002	0.002	0.002	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
89	0.002	0.002	0.002	0.002	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.000	0.003	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.003	0.007	0.022	0.035	0.026	0.009	0.002	0.002	0.002	0.002	0.002
92	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.008	0.018	0.016	0.006	0.002	0.000	0.000	0.000	0.000
93	0.004	0.004	0.004	0.004	0.004	0.002	0.002	0.004	0.003	0.006	0.003	0.005	0.005	0.002	0.002	0.002	0.002	0.002	0.002	0.002
94	0.002	0.002	0.002	0.000	0.004	0.004	0.005	0.006	0.006	0.008	0.007	0.006	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000
95	0.003	0.003	0.002	0.003	0.004	0.006	0.006	0.008	0.009	0.009	0.009	0.008	0.007	0.005	0.003	0.002	0.002	0.002	0.002	0.002
96	0.000	0.002	0.004	0.006	0.008	0.009	0.010	0.012	0.011	0.011	0.011	0.011	0.010	0.008	0.006	0.004	0.003	0.000	0.000	0.000
97	0.005	0.006	0.007	0.008	0.008	0.008	0.009	0.011	0.010	0.012	0.012	0.013	0.011	0.010	0.008	0.006	0.005	0.003	0.002	0.002
98	0.009	0.010	0.010	0.010	0.010	0.010	0.010	0.011	0.010	0.010	0.011	0.010	0.011	0.010	0.009	0.007	0.005	0.005	0.006	0.005

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 19.20 SEC
HRFR = 0.147E-01

GROUP 96

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	0.106	0.104	0.105	0.105	0.106	0.106	0.104	0.100	0.098	0.097	0.097	0.096	0.093	0.084	0.058	0.022	0.002	0.002	0.002	0.002
65	0.104	0.102	0.106	0.105	0.105	0.103	0.103	0.102	0.101	0.099	0.098	0.097	0.096	0.092	0.086	0.067	0.034	0.006	0.006	0.006
66	0.108	0.108	0.108	0.111	0.110	0.109	0.106	0.107	0.108	0.107	0.108	0.107	0.107	0.106	0.104	0.098	0.085	0.053	0.016	0.016
67	0.116	0.117	0.118	0.120	0.123	0.123	0.121	0.121	0.120	0.120	0.120	0.119	0.118	0.118	0.118	0.117	0.114	0.105	0.080	0.037
68	0.119	0.120	0.122	0.122	0.122	0.121	0.122	0.122	0.123	0.124	0.125	0.125	0.124	0.123	0.122	0.122	0.121	0.118	0.114	0.100
69	0.115	0.115	0.115	0.115	0.115	0.115	0.115	0.116	0.116	0.116	0.118	0.120	0.122	0.122	0.122	0.123	0.125	0.124	0.123	0.119
70	0.109	0.111	0.112	0.113	0.113	0.112	0.112	0.113	0.112	0.112	0.116	0.116	0.118	0.121	0.119	0.121	0.124	0.127	0.127	0.128
71	0.101	0.103	0.103	0.105	0.106	0.107	0.107	0.108	0.110	0.112	0.115	0.116	0.116	0.116	0.116	0.116	0.119	0.119	0.119	0.120
72	0.086	0.088	0.090	0.092	0.094	0.095	0.097	0.100	0.102	0.103	0.103	0.104	0.106	0.108	0.108	0.107	0.106	0.109	0.109	0.109
73	0.078	0.079	0.080	0.080	0.080	0.082	0.083	0.085	0.085	0.087	0.087	0.091	0.090	0.091	0.090	0.092	0.094	0.097	0.097	0.100
74	0.071	0.072	0.072	0.072	0.073	0.074	0.074	0.074	0.076	0.078	0.078	0.078	0.078	0.079	0.079	0.079	0.080	0.082	0.083	0.084
75	0.069	0.070	0.070	0.070	0.072	0.070	0.070	0.069	0.069	0.069	0.070	0.070	0.070	0.071	0.072	0.072	0.073	0.074	0.075	0.075
76	0.068	0.069	0.068	0.068	0.070	0.070	0.070	0.069	0.068	0.068	0.067	0.067	0.068	0.068	0.068	0.070	0.070	0.070	0.071	0.070
77	0.068	0.068	0.068	0.068	0.068	0.068	0.068	0.068	0.068	0.068	0.068	0.068	0.068	0.068	0.068	0.070	0.070	0.070	0.070	0.072
78	0.068	0.069	0.068	0.068	0.068	0.069	0.068	0.067	0.067	0.067	0.067	0.068	0.068	0.068	0.069	0.070	0.071	0.071	0.072	0.073
79	0.068	0.068	0.069	0.069	0.070	0.069	0.070	0.070	0.069	0.069	0.069	0.068	0.068	0.068	0.068	0.070	0.070	0.072	0.073	0.073
80	0.069	0.069	0.070	0.069	0.070	0.069	0.070	0.070	0.070	0.070	0.071	0.070	0.070	0.070	0.071	0.070	0.072	0.072	0.074	0.074
81	0.071	0.071	0.072	0.072	0.072	0.072	0.072	0.072	0.072	0.072	0.072	0.072	0.072	0.072	0.073	0.074	0.075	0.075	0.075	0.074
82	0.074	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.074	0.074	0.074	0.073	0.073	0.074	0.075	0.075	0.075	0.075	0.075
83	0.075	0.077	0.078	0.079	0.079	0.079	0.079	0.079	0.079	0.079	0.079	0.078	0.078	0.078	0.078	0.078	0.078	0.078	0.078	0.077
84	0.076	0.077	0.077	0.078	0.079	0.079	0.079	0.079	0.079	0.079	0.080	0.079	0.079	0.079	0.080	0.080	0.080	0.081	0.081	0.081
85	0.066	0.068	0.069	0.072	0.073	0.074	0.074	0.074	0.074	0.074	0.073	0.074	0.074	0.075	0.075	0.075	0.075	0.077	0.077	0.079
86	0.002	0.002	0.002	0.000	0.003	0.004	0.004	0.004	0.004	0.004	0.007	0.008	0.008	0.010	0.010	0.010	0.008	0.010	0.010	0.013
87	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
89	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.013	0.021	0.011	0.011	0.011	0.011	0.011	0.011	0.011
91	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.010	0.022	0.013	0.003	0.003	0.003	0.003	0.003	0.003
92	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
93	0.002	0.002	0.002	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
94	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
96	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97	0.002	0.002	0.002	0.002	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
98	0.004	0.003	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 19.20 SEC
GROUP 96 HREF = 0.147E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
65	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
66	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016
67	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
68	0.064	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023
69	0.113	0.086	0.042	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
70	0.127	0.124	0.103	0.060	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
71	0.119	0.117	0.113	0.101	0.066	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025
72	0.107	0.106	0.105	0.103	0.096	0.074	0.034	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
73	0.100	0.100	0.098	0.098	0.098	0.096	0.081	0.047	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
74	0.084	0.084	0.087	0.087	0.090	0.089	0.091	0.081	0.059	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019
75	0.075	0.075	0.077	0.078	0.080	0.080	0.080	0.081	0.078	0.063	0.033	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
76	0.071	0.071	0.072	0.072	0.074	0.075	0.076	0.076	0.075	0.074	0.067	0.046	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
77	0.072	0.073	0.073	0.074	0.076	0.077	0.076	0.075	0.075	0.075	0.074	0.072	0.057	0.030	0.003	0.003	0.003	0.003	0.003	0.003
78	0.073	0.074	0.075	0.076	0.077	0.077	0.077	0.079	0.078	0.078	0.077	0.077	0.075	0.066	0.042	0.010	0.010	0.010	0.010	0.010
79	0.075	0.076	0.077	0.077	0.076	0.076	0.077	0.078	0.079	0.078	0.079	0.080	0.079	0.079	0.074	0.056	0.027	0.002	0.002	0.002
80	0.075	0.075	0.076	0.076	0.077	0.078	0.079	0.079	0.080	0.080	0.079	0.079	0.080	0.080	0.079	0.066	0.038	0.006	0.006	0.006
81	0.075	0.074	0.076	0.076	0.079	0.077	0.079	0.079	0.080	0.079	0.080	0.079	0.080	0.080	0.082	0.084	0.084	0.074	0.048	0.016
82	0.075	0.076	0.077	0.076	0.077	0.078	0.077	0.078	0.078	0.080	0.080	0.082	0.083	0.083	0.083	0.084	0.084	0.082	0.075	0.056
83	0.078	0.077	0.077	0.077	0.077	0.077	0.077	0.077	0.078	0.079	0.080	0.082	0.084	0.085	0.086	0.086	0.086	0.086	0.083	0.078
84	0.082	0.082	0.081	0.082	0.081	0.081	0.082	0.081	0.082	0.082	0.083	0.082	0.083	0.084	0.087	0.089	0.091	0.091	0.088	0.085
85	0.079	0.080	0.080	0.082	0.082	0.083	0.083	0.085	0.085	0.086	0.087	0.088	0.088	0.089	0.089	0.090	0.090	0.090	0.089	0.087
86	0.012	0.014	0.015	0.016	0.018	0.022	0.025	0.026	0.029	0.029	0.032	0.032	0.034	0.034	0.037	0.038	0.039	0.039	0.040	0.038
87	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.005	0.004	0.004	0.004	0.004	0.004	0.004
88	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
89	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
92	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.014	0.018	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
93	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
94	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
96	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
98	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.007	0.005	0.002	0.000

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 19.20 SEC
GROUP 96 HREF = 0.147E-01

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
65	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
66	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016
67	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
68	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023
69	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
70	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
71	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025
72	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
73	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
74	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019
75	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
76	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
77	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
78	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
79	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
80	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
81	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016
82	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027
83	0.066	0.038	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
84	0.060	0.074	0.055	0.026	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
85	0.084	0.080	0.074	0.059	0.033	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
86	0.038	0.035	0.033	0.028	0.020	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
87	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
88	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
89	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
92	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
93	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
94	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
96	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
98	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 19.20 SEC
HRFR = 0.147E-01

GROUP 96

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
65	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
66	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016
67	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
68	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023
69	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
70	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
71	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025
72	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
73	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
74	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019
75	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
76	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
77	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
78	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
79	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
80	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
81	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016
82	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027
83	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
84	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
85	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
86	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
87	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
88	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
89	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
92	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
93	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
94	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
96	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
98	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

GROUP	* * * * MODEL DESCRIPTION * * * * TITLE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
97	RSI AFT	0.01	0.000	-10.00	40.00	0.053	0	58	49

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/F FT-1	HREF BTU/FT2-SEC-R	INITIAL TEMP DEG R
7.90	105.59	1266.67	93.95	0.0117	3754.	0.105E-04	0.756E-07	0.520E+06	0.147E-01	537.7

IR CAMERA INFORMATION

MOUNTING LOCATION	260
F STOP	1.8
LENS-DEG	15
SENSITIVITY	200.
BLACK LEVEL VOLTAGE	0.6663
LINE SCAN PHI	90
MODEL EMISSIVITY	0.96
REF EMISSIVITY	0.94
WINDOW FACTOR	0.860

TIME RECORDS

LIFT OFF	0.00
CENTER LINE	1.99
IR SCAN TIME	15.21
DELTA TIME,SEC	14.09
PHOTO 1 TIME	59
PHOTO 2 TIME	0
PHOTO 3 TIME	0
PHOTO 4 TIME	0

REFERENCE TARGET INFORMATION

TCR5	502.29
TCR6	-228.49

DIGITAL DATA AREA PRINTOUT LOCATION

LINE 29 THROUGH 98
POINT 1 THROUGH 110

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 97

IR SCAN TIME 14.09 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	1.011	1.011	1.007	1.006	1.006	1.009	1.006	1.007	1.006	1.007	1.006	1.001	1.006	1.007	1.004	1.001	1.001	1.002	1.002	0.997
30	1.009	1.011	1.009	1.009	1.006	1.007	1.006	1.009	1.004	1.006	1.004	1.004	1.002	1.004	1.001	1.004	1.001	1.001	0.999	1.001
31	1.009	1.009	1.007	1.006	1.007	1.006	1.006	1.006	1.004	1.002	1.006	1.002	1.002	1.002	1.001	1.001	0.999	0.999	0.999	0.999
32	1.009	1.007	1.007	1.006	1.006	1.006	1.004	1.004	1.002	1.001	1.001	1.001	1.001	1.001	0.999	0.999	1.002	0.999	1.001	1.001
33	1.007	1.006	1.006	1.004	1.004	1.002	1.002	1.001	0.999	0.999	1.001	1.001	0.999	0.997	1.001	1.001	1.002	1.001	1.004	1.004
34	1.006	1.004	1.001	1.002	0.999	0.999	0.997	0.999	0.997	0.999	0.997	0.999	0.999	1.002	1.001	1.004	1.002	1.004	1.004	1.004
35	1.006	0.997	1.002	0.994	1.002	0.994	1.004	0.995	1.002	0.995	1.004	0.997	1.002	0.999	1.004	1.004	1.002	1.001	0.997	0.994
36	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.002	1.002	1.002	1.004	1.004	1.002	1.002	0.997	0.994	0.986	0.984	0.976
37	1.001	1.001	1.004	1.002	1.004	1.001	1.002	1.002	1.004	1.002	1.004	1.002	1.001	0.994	0.990	0.984	0.978	0.976	0.974	0.974
38	1.004	1.004	1.004	1.006	1.002	1.006	1.004	1.006	1.002	1.002	0.997	0.995	0.986	0.984	0.978	0.978	0.976	0.974	0.974	0.976
39	1.006	1.007	1.006	1.006	1.004	1.002	1.002	1.001	0.997	0.990	0.984	0.980	0.976	0.976	0.976	0.976	0.976	0.976	0.978	0.976
40	0.960	0.972	0.978	0.969	0.967	0.967	0.965	0.962	0.967	0.967	0.969	0.988	1.033	1.066	1.076	1.081	1.085	1.087	1.088	1.092
41	0.980	1.020	1.014	1.009	1.001	0.994	0.988	0.976	0.967	0.967	0.969	0.994	1.038	1.068	1.076	1.080	1.083	1.087	1.088	1.092
42	0.997	1.047	1.024	1.014	1.020	1.007	0.994	0.997	0.976	0.969	0.965	0.995	1.037	1.067	1.074	1.079	1.080	1.085	1.086	1.091
43	1.009	1.049	1.039	1.043	1.026	1.007	1.007	1.004	0.999	0.978	0.976	1.001	1.047	1.067	1.073	1.078	1.081	1.084	1.086	1.090
44	1.018	1.052	1.071	1.069	1.049	1.018	1.007	1.009	1.006	0.997	0.984	1.017	1.052	1.069	1.073	1.077	1.080	1.083	1.084	1.088
45	1.020	1.089	1.130	1.090	1.073	1.039	1.006	0.999	1.001	1.007	1.006	1.028	1.058	1.072	1.073	1.076	1.077	1.080	1.082	1.085
46	0.960	0.955	0.957	0.955	0.957	0.957	0.960	0.962	0.967	0.960	0.972	0.969	0.982	0.986	1.033	1.076	1.105	1.110	1.118	1.120
47	0.957	0.955	0.955	0.952	0.955	0.957	0.960	0.960	0.962	0.965	0.969	0.974	0.978	0.994	1.044	1.087	1.105	1.112	1.116	1.120
48	0.957	0.955	0.955	0.952	0.955	0.957	0.957	0.960	0.962	0.962	0.967	0.972	0.978	1.002	1.055	1.092	1.105	1.111	1.115	1.118
49	0.960	0.955	0.957	0.952	0.957	0.957	0.962	0.962	0.962	0.965	0.967	0.974	0.978	1.009	1.061	1.093	1.104	1.108	1.112	1.115
50	0.960	0.955	0.955	0.952	0.952	0.957	0.960	0.960	0.960	0.962	0.965	0.969	0.978	1.014	1.065	1.091	1.099	1.104	1.108	1.111
51	0.960	0.955	0.955	0.955	0.955	0.957	0.957	0.960	0.960	0.962	0.965	0.967	0.978	1.017	1.065	1.088	1.095	1.099	1.104	1.107
52	0.960	0.962	0.950	0.957	0.947	0.955	0.957	0.962	0.962	0.962	0.967	0.972	0.982	1.023	1.066	1.084	1.092	1.096	1.099	1.102
53	0.960	0.957	0.955	0.957	0.952	0.960	0.965	0.965	0.962	0.962	0.965	0.972	0.992	1.031	1.069	1.084	1.088	1.092	1.097	1.098
54	0.955	0.957	0.955	0.952	0.952	0.957	0.955	0.960	0.960	0.965	0.965	0.969	0.994	1.042	1.072	1.082	1.085	1.089	1.093	1.095
55	0.957	0.955	0.952	0.952	0.955	0.957	0.957	0.960	0.960	0.962	0.967	0.974	1.006	1.050	1.073	1.080	1.084	1.088	1.091	1.094
56	0.957	0.955	0.955	0.955	0.955	0.955	0.957	0.962	0.960	0.962	0.967	0.978	1.015	1.057	1.075	1.081	1.084	1.087	1.090	1.094
57	0.957	0.955	0.952	0.952	0.955	0.957	0.957	0.960	0.962	0.967	0.967	0.988	1.026	1.064	1.076	1.081	1.084	1.087	1.090	1.093
58	0.960	0.972	0.978	0.969	0.967	0.967	0.965	0.962	0.967	0.967	0.969	0.988	1.033	1.066	1.076	1.081	1.085	1.087	1.088	1.092
59	0.980	1.020	1.014	1.009	1.001	0.994	0.988	0.976	0.967	0.967	0.969	0.994	1.038	1.068	1.076	1.080	1.083	1.087	1.088	1.092
60	0.997	1.047	1.024	1.014	1.020	1.007	0.994	0.997	0.976	0.969	0.965	0.995	1.037	1.067	1.074	1.079	1.080	1.085	1.086	1.091
61	1.009	1.049	1.039	1.043	1.026	1.007	1.007	1.004	0.999	0.978	0.976	1.001	1.047	1.067	1.073	1.078	1.081	1.084	1.086	1.090
62	1.018	1.052	1.071	1.069	1.049	1.018	1.007	1.009	1.006	0.997	0.984	1.017	1.052	1.069	1.073	1.077	1.080	1.083	1.084	1.088
63	1.020	1.089	1.130	1.090	1.073	1.039	1.006	0.999	1.001	1.007	1.006	1.028	1.058	1.072	1.073	1.076	1.077	1.080	1.082	1.085

NASA/R1 OH90 TRANSITION TEST
V41B-P4A
APO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 97

IR SCAN TIME 14.09 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	1.001	0.997	0.999	0.997	0.999	0.995	0.999	0.997	1.001	0.997	0.999	0.997	1.001	0.999	1.002	1.004	1.004	1.004	1.004	1.004
30	0.999	1.001	0.999	1.001	1.001	1.001	1.001	1.001	1.001	1.004	1.004	1.004	1.004	1.006	1.006	1.006	1.002	1.004	0.994	0.999
31	0.999	0.999	1.002	1.001	1.004	1.004	1.004	1.004	1.004	1.006	1.004	1.002	1.002	0.999	0.997	0.990	0.990	0.986	0.986	0.980
32	1.004	1.004	1.006	1.006	1.006	1.004	1.006	1.001	1.001	0.994	0.994	0.990	0.986	0.982	0.978	0.976	0.972	0.965	0.965	0.965
33	1.004	1.004	1.004	1.002	1.001	0.997	0.994	0.988	0.986	0.980	0.976	0.969	0.967	0.965	0.965	0.965	0.965	0.965	0.965	0.965
34	1.001	0.997	0.995	0.990	0.986	0.980	0.976	0.969	0.969	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.967	0.965	0.965	0.965
35	0.988	0.982	0.978	0.974	0.969	0.967	0.969	0.967	0.967	0.967	0.967	0.967	0.967	0.967	0.969	0.967	0.967	0.969	0.965	0.965
36	0.974	0.969	0.969	0.965	0.969	0.967	0.969	0.965	0.972	0.967	0.967	0.965	0.969	0.969	0.969	0.969	0.969	0.969	0.969	0.969
37	0.974	0.972	0.974	0.972	0.972	0.969	0.972	0.972	0.972	0.972	0.972	0.972	0.969	0.972	0.969	0.965	0.972	0.960	0.972	0.962
38	0.974	0.974	0.974	0.976	0.972	0.974	0.974	0.976	0.974	0.976	0.974	0.976	0.974	0.974	0.974	0.976	0.974	0.976	0.974	0.976
39	0.976	0.976	0.976	0.976	0.974	0.976	0.976	0.976	0.976	0.976	0.976	0.978	0.978	0.978	0.976	0.976	0.976	0.976	0.976	0.976
40	1.093	1.095	1.096	1.098	1.102	1.106	1.107	1.108	1.109	1.111	1.111	1.112	1.112	1.113	1.114	1.115	1.113	1.114	1.115	1.115
41	1.094	1.096	1.097	1.099	1.102	1.105	1.107	1.110	1.111	1.112	1.113	1.113	1.112	1.111	1.113	1.115	1.112	1.113	1.114	1.115
42	1.093	1.097	1.098	1.099	1.101	1.105	1.107	1.109	1.111	1.112	1.112	1.113	1.113	1.112	1.112	1.114	1.112	1.112	1.113	1.115
43	1.093	1.096	1.099	1.099	1.104	1.104	1.108	1.107	1.111	1.110	1.112	1.111	1.113	1.111	1.113	1.112	1.114	1.112	1.114	1.115
44	1.091	1.095	1.097	1.102	1.103	1.106	1.108	1.111	1.111	1.112	1.112	1.113	1.111	1.113	1.112	1.115	1.114	1.116	1.116	1.118
45	1.088	1.093	1.095	1.098	1.101	1.104	1.107	1.109	1.110	1.111	1.111	1.112	1.111	1.113	1.113	1.114	1.115	1.116	1.116	1.118
46	1.125	1.125	1.131	1.134	1.141	1.144	1.146	1.148	1.150	1.153	1.156	1.158	1.160	1.161	1.162	1.162	1.165	1.167	1.169	1.168
47	1.124	1.127	1.130	1.135	1.140	1.143	1.145	1.142	1.150	1.148	1.154	1.151	1.156	1.156	1.158	1.155	1.162	1.159	1.163	1.160
48	1.121	1.125	1.129	1.134	1.138	1.140	1.143	1.145	1.148	1.149	1.150	1.153	1.155	1.156	1.156	1.156	1.159	1.159	1.159	1.159
49	1.118	1.121	1.126	1.130	1.134	1.135	1.138	1.140	1.144	1.145	1.145	1.148	1.151	1.152	1.152	1.153	1.154	1.155	1.155	1.155
50	1.113	1.117	1.120	1.124	1.128	1.130	1.133	1.134	1.138	1.140	1.142	1.141	1.144	1.146	1.148	1.149	1.150	1.150	1.152	1.153
51	1.109	1.111	1.116	1.119	1.121	1.124	1.128	1.130	1.131	1.134	1.136	1.138	1.139	1.140	1.140	1.141	1.143	1.144	1.144	1.145
52	1.104	1.108	1.111	1.115	1.115	1.118	1.120	1.123	1.124	1.126	1.128	1.131	1.132	1.134	1.134	1.135	1.135	1.137	1.137	1.138
53	1.100	1.103	1.108	1.111	1.112	1.114	1.115	1.118	1.120	1.121	1.124	1.123	1.126	1.126	1.128	1.128	1.129	1.130	1.131	1.132
54	1.097	1.099	1.103	1.107	1.107	1.108	1.112	1.113	1.117	1.116	1.118	1.118	1.119	1.119	1.119	1.118	1.121	1.122	1.126	1.125
55	1.096	1.098	1.101	1.103	1.104	1.107	1.109	1.113	1.115	1.115	1.115	1.116	1.117	1.117	1.118	1.117	1.117	1.118	1.118	1.120
56	1.094	1.096	1.099	1.101	1.104	1.106	1.107	1.110	1.113	1.114	1.113	1.113	1.116	1.115	1.115	1.115	1.115	1.115	1.116	1.118
57	1.094	1.095	1.096	1.099	1.103	1.108	1.107	1.108	1.111	1.112	1.112	1.112	1.112	1.114	1.114	1.114	1.115	1.115	1.115	1.116
58	1.093	1.095	1.096	1.098	1.102	1.106	1.107	1.108	1.109	1.111	1.111	1.112	1.112	1.113	1.114	1.115	1.113	1.114	1.115	1.115
59	1.094	1.096	1.097	1.099	1.102	1.105	1.107	1.110	1.111	1.112	1.113	1.113	1.112	1.111	1.113	1.115	1.112	1.113	1.114	1.115
60	1.093	1.097	1.098	1.099	1.101	1.105	1.107	1.109	1.111	1.112	1.112	1.113	1.113	1.112	1.112	1.114	1.112	1.112	1.113	1.115
61	1.093	1.096	1.099	1.099	1.104	1.104	1.108	1.107	1.111	1.110	1.112	1.111	1.113	1.111	1.113	1.112	1.114	1.112	1.114	1.115
62	1.091	1.095	1.097	1.102	1.103	1.106	1.108	1.111	1.111	1.112	1.112	1.113	1.111	1.113	1.112	1.115	1.114	1.116	1.116	1.118
63	1.088	1.093	1.095	1.098	1.101	1.104	1.107	1.109	1.110	1.111	1.111	1.112	1.111	1.113	1.113	1.114	1.115	1.116	1.116	1.118

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 97

IR SCAN TIME 14.09 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	1.004	1.002	1.002	1.001	0.999	0.995	0.995	0.994	0.990	0.986	0.984	0.982	0.980	0.978	0.978	0.976	0.974	0.972	0.972	0.969
30	0.990	0.995	0.986	0.986	0.978	0.980	0.976	0.978	0.969	0.969	0.962	0.967	0.962	0.967	0.967	0.967	0.967	0.967	0.965	0.965
31	0.976	0.974	0.969	0.967	0.965	0.965	0.965	0.965	0.962	0.965	0.960	0.960	0.962	0.965	0.962	0.960	0.962	0.957	0.962	0.957
32	0.965	0.965	0.965	0.960	0.965	0.962	0.962	0.965	0.965	0.965	0.965	0.962	0.960	0.960	0.965	0.962	0.962	0.962	0.962	0.962
33	0.965	0.965	0.965	0.965	0.965	0.962	0.965	0.965	0.967	0.965	0.960	0.965	0.962	0.962	0.962	0.960	0.962	0.962	0.960	0.960
34	0.965	0.967	0.967	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.962	0.962	0.965	0.962	0.962	0.962
35	0.965	0.967	0.967	0.967	0.967	0.967	0.969	0.967	0.967	0.967	0.967	0.965	0.967	0.965	0.967	0.967	0.967	0.965	0.965	0.965
36	0.967	0.969	0.969	0.969	0.969	0.969	0.969	0.969	0.969	0.969	0.969	0.969	0.969	0.967	0.969	0.969	0.967	0.967	0.969	0.967
37	0.972	0.960	0.974	0.965	0.972	0.960	0.972	0.962	0.972	0.962	0.974	0.972	0.972	0.972	0.974	0.972	0.972	0.972	0.972	0.972
38	0.976	0.974	0.972	0.974	0.974	0.974	0.969	0.976	0.974	0.974	0.972	0.972	0.974	0.972	0.969	0.974	0.969	0.974	0.967	0.974
39	0.976	0.976	0.976	0.978	0.976	0.974	0.976	0.974	0.976	0.974	0.976	0.976	0.974	0.976	0.974	0.974	0.974	0.974	0.974	0.976
40	1.115	1.115	1.115	1.116	1.116	1.116	1.116	1.115	1.114	1.115	1.116	1.117	1.118	1.119	1.120	1.120	1.120	1.120	1.120	1.121
41	1.115	1.115	1.115	1.115	1.115	1.115	1.114	1.115	1.115	1.115	1.115	1.116	1.116	1.118	1.118	1.118	1.119	1.120	1.120	1.120
42	1.115	1.117	1.116	1.116	1.116	1.115	1.115	1.114	1.113	1.113	1.115	1.115	1.116	1.116	1.117	1.118	1.119	1.120	1.120	1.122
43	1.116	1.117	1.118	1.118	1.118	1.118	1.117	1.115	1.115	1.115	1.115	1.114	1.115	1.115	1.116	1.118	1.119	1.120	1.122	1.123
44	1.118	1.119	1.118	1.119	1.118	1.119	1.118	1.118	1.118	1.118	1.117	1.118	1.115	1.118	1.116	1.118	1.118	1.121	1.122	1.123
45	1.118	1.120	1.120	1.122	1.121	1.121	1.121	1.120	1.120	1.122	1.120	1.120	1.120	1.120	1.120	1.122	1.121	1.122	1.122	1.123
46	1.168	1.170	1.171	1.173	1.173	1.171	1.168	1.166	1.167	1.165	1.162	1.149	1.105	1.039	1.002	0.982	0.976	0.969	0.969	0.972
47	1.163	1.164	1.168	1.168	1.168	1.169	1.170	1.169	1.168	1.168	1.168	1.164	1.153	1.116	1.052	1.004	0.984	0.972	0.969	0.969
48	1.159	1.159	1.162	1.164	1.163	1.162	1.164	1.165	1.168	1.168	1.170	1.170	1.168	1.158	1.125	1.061	1.006	0.980	0.972	0.965
49	1.156	1.157	1.158	1.160	1.159	1.159	1.161	1.163	1.164	1.164	1.165	1.168	1.170	1.170	1.164	1.136	1.077	1.015	0.986	0.972
50	1.154	1.156	1.157	1.156	1.156	1.156	1.158	1.160	1.163	1.164	1.166	1.166	1.168	1.169	1.170	1.167	1.149	1.098	1.031	0.990
51	1.149	1.149	1.149	1.150	1.152	1.153	1.153	1.153	1.155	1.158	1.161	1.162	1.163	1.167	1.168	1.167	1.164	1.153	1.112	1.047
52	1.139	1.141	1.142	1.144	1.144	1.146	1.146	1.148	1.151	1.153	1.156	1.158	1.157	1.157	1.160	1.160	1.159	1.156	1.149	1.120
53	1.133	1.134	1.134	1.135	1.137	1.137	1.140	1.142	1.144	1.145	1.147	1.147	1.149	1.149	1.151	1.151	1.152	1.150	1.150	1.146
54	1.126	1.127	1.128	1.128	1.128	1.129	1.132	1.132	1.132	1.132	1.134	1.136	1.138	1.138	1.140	1.144	1.146	1.147	1.147	1.146
55	1.121	1.122	1.122	1.121	1.122	1.122	1.121	1.122	1.123	1.124	1.125	1.125	1.125	1.126	1.132	1.135	1.138	1.138	1.140	1.139
56	1.117	1.118	1.118	1.118	1.118	1.118	1.116	1.118	1.120	1.120	1.120	1.121	1.122	1.123	1.127	1.128	1.128	1.130	1.128	1.130
57	1.116	1.117	1.117	1.118	1.116	1.115	1.114	1.115	1.115	1.116	1.117	1.119	1.120	1.121	1.122	1.123	1.124	1.123	1.123	1.123
58	1.115	1.115	1.115	1.116	1.116	1.116	1.116	1.115	1.114	1.115	1.116	1.117	1.118	1.119	1.120	1.120	1.120	1.120	1.120	1.121
59	1.115	1.115	1.115	1.115	1.115	1.115	1.114	1.115	1.115	1.115	1.115	1.116	1.116	1.118	1.118	1.118	1.119	1.120	1.120	1.120
60	1.115	1.117	1.116	1.116	1.116	1.115	1.115	1.114	1.113	1.113	1.115	1.115	1.116	1.116	1.117	1.118	1.119	1.120	1.120	1.122
61	1.116	1.117	1.118	1.118	1.118	1.118	1.117	1.115	1.115	1.115	1.115	1.114	1.115	1.115	1.116	1.118	1.119	1.120	1.122	1.123
62	1.118	1.119	1.118	1.119	1.118	1.119	1.118	1.118	1.118	1.118	1.117	1.118	1.115	1.118	1.116	1.118	1.118	1.121	1.122	1.123
63	1.119	1.120	1.120	1.122	1.121	1.121	1.121	1.120	1.120	1.122	1.120	1.120	1.120	1.120	1.120	1.122	1.121	1.122	1.122	1.123

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 97

IR SCAN TIME 14.09 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.969	0.969	0.969	0.967	0.967	0.972	0.965	0.967	0.965	0.967	0.967	0.967	0.967	0.967	0.967	0.969	0.967	0.967	0.967	0.969
30	0.962	0.965	0.965	0.967	0.962	0.965	0.965	0.965	0.962	0.965	0.965	0.969	0.965	0.965	0.965	0.967	0.965	0.967	0.967	0.967
31	0.960	0.957	0.962	0.960	0.962	0.957	0.962	0.957	0.960	0.957	0.960	0.960	0.965	0.965	0.962	0.962	0.962	0.965	0.962	0.965
32	0.962	0.962	0.962	0.960	0.960	0.960	0.960	0.960	0.962	0.965	0.960	0.960	0.960	0.952	0.962	0.952	0.960	0.955	0.962	0.955
33	0.962	0.962	0.962	0.960	0.960	0.960	0.960	0.960	0.960	0.960	0.960	0.960	0.960	0.960	0.960	0.962	0.960	0.960	0.960	0.957
34	0.962	0.965	0.962	0.960	0.960	0.962	0.962	0.962	0.962	0.962	0.965	0.960	0.960	0.960	0.960	0.960	0.962	0.960	0.960	0.957
35	0.965	0.967	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.967	0.965	0.962	0.965	0.962	0.965	0.962	0.965	0.960	0.965	0.965
36	0.965	0.969	0.969	0.965	0.967	0.967	0.967	0.965	0.965	0.965	0.965	0.965	0.967	0.965	0.965	0.965	0.965	0.965	0.965	0.965
37	0.969	0.969	0.969	0.969	0.972	0.969	0.967	0.969	0.969	0.969	0.969	0.969	0.969	0.967	0.967	0.967	0.967	0.967	0.969	0.965
38	0.967	0.974	0.967	0.974	0.969	0.974	0.967	0.972	0.967	0.972	0.972	0.972	0.972	0.969	0.972	0.972	0.969	0.969	0.967	0.972
39	0.974	0.974	0.974	0.974	0.974	0.974	0.972	0.974	0.972	0.974	0.972	0.969	0.972	0.969	0.974	0.969	0.972	0.967	0.972	0.967
40	1.120	1.121	1.122	1.123	1.120	1.118	1.100	1.057	1.006	0.982	0.972	0.967	0.965	0.969	0.969	0.965	0.952	0.947	0.941	0.941
41	1.122	1.124	1.124	1.122	1.121	1.120	1.117	1.108	1.072	1.023	0.988	0.976	0.967	0.969	0.969	0.969	0.969	0.960	0.950	0.947
42	1.123	1.125	1.124	1.125	1.124	1.123	1.121	1.120	1.114	1.091	1.044	1.002	0.978	0.967	0.965	0.967	0.969	0.972	0.969	0.965
43	1.125	1.123	1.123	1.124	1.126	1.124	1.123	1.123	1.123	1.119	1.102	1.061	1.014	0.986	0.972	0.967	0.965	0.965	0.969	0.969
44	1.123	1.125	1.125	1.127	1.126	1.128	1.126	1.126	1.124	1.125	1.121	1.109	1.072	1.023	0.988	0.976	0.967	0.969	0.967	0.969
45	1.123	1.128	1.126	1.128	1.128	1.130	1.128	1.128	1.126	1.127	1.124	1.127	1.115	1.080	1.027	0.997	0.978	0.972	0.965	0.967
46	0.974	0.976	0.978	0.976	0.976	0.976	0.974	0.972	0.972	0.974	0.974	0.974	0.972	0.976	0.974	0.976	0.976	0.976	0.976	0.978
47	0.972	0.974	0.974	0.972	0.972	0.969	0.967	0.967	0.969	0.969	0.967	0.967	0.967	0.967	0.967	0.969	0.967	0.969	0.969	0.969
48	0.967	0.969	0.974	0.972	0.967	0.962	0.960	0.960	0.960	0.960	0.960	0.957	0.960	0.960	0.960	0.960	0.960	0.960	0.962	0.960
49	0.967	0.967	0.967	0.967	0.967	0.955	0.955	0.950	0.952	0.947	0.952	0.947	0.952	0.947	0.952	0.947	0.952	0.950	0.955	0.955
50	0.974	0.967	0.962	0.965	0.969	0.962	0.955	0.950	0.947	0.947	0.944	0.941	0.944	0.944	0.944	0.941	0.947	0.947	0.947	0.947
51	0.997	0.978	0.967	0.965	0.962	0.967	0.962	0.952	0.947	0.941	0.947	0.941	0.941	0.941	0.941	0.938	0.941	0.938	0.941	0.938
52	1.060	1.006	0.980	0.972	0.967	0.967	0.967	0.965	0.952	0.947	0.941	0.941	0.938	0.941	0.938	0.941	0.935	0.941	0.938	0.938
53	1.125	1.080	1.012	0.988	0.972	0.967	0.965	0.967	0.967	0.957	0.947	0.941	0.938	0.941	0.941	0.941	0.941	0.935	0.941	0.944
54	1.143	1.128	1.081	1.021	0.990	0.974	0.967	0.965	0.962	0.965	0.955	0.947	0.941	0.938	0.935	0.941	0.938	0.935	0.941	0.938
55	1.140	1.139	1.129	1.090	1.030	0.990	0.974	0.969	0.965	0.967	0.965	0.957	0.947	0.941	0.941	0.938	0.938	0.938	0.941	0.938
56	1.130	1.131	1.129	1.125	1.092	1.042	0.994	0.980	0.962	0.967	0.962	0.969	0.960	0.952	0.938	0.944	0.932	0.941	0.941	0.941
57	1.124	1.126	1.125	1.125	1.119	1.097	1.044	1.001	0.978	0.969	0.965	0.967	0.969	0.969	0.957	0.947	0.941	0.941	0.938	0.941
58	1.120	1.121	1.122	1.123	1.120	1.118	1.100	1.057	1.006	0.982	0.972	0.967	0.965	0.969	0.969	0.965	0.952	0.947	0.941	0.941
59	1.122	1.124	1.124	1.122	1.121	1.120	1.117	1.108	1.072	1.023	0.988	0.976	0.967	0.969	0.969	0.969	0.969	0.960	0.950	0.947
60	1.123	1.125	1.124	1.125	1.124	1.123	1.121	1.120	1.114	1.091	1.044	1.002	0.978	0.967	0.965	0.967	0.969	0.972	0.969	0.965
61	1.125	1.123	1.123	1.124	1.126	1.124	1.123	1.123	1.123	1.119	1.102	1.061	1.014	0.986	0.972	0.967	0.965	0.965	0.969	0.969
62	1.123	1.125	1.125	1.127	1.126	1.128	1.126	1.126	1.124	1.125	1.121	1.109	1.072	1.023	0.988	0.976	0.967	0.969	0.967	0.969
63	1.123	1.128	1.126	1.128	1.128	1.130	1.128	1.128	1.126	1.127	1.124	1.127	1.115	1.080	1.027	0.997	0.978	0.972	0.965	0.967

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 97

IR SCAN TIME 14.09 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.969	0.969	0.969	0.967	0.967	0.967	0.969	0.967	0.967	0.967	0.969	0.967	0.967	0.967	0.967	0.965	0.965	0.965	0.965	0.965
30	0.967	0.967	0.967	0.967	0.967	0.967	0.967	0.969	0.965	0.967	0.965	0.967	0.965	0.965	0.965	0.965	0.965	0.962	0.962	0.965
31	0.962	0.962	0.965	0.965	0.965	0.965	0.965	0.965	0.962	0.962	0.965	0.962	0.965	0.962	0.962	0.962	0.962	0.962	0.962	0.960
32	0.960	0.952	0.962	0.955	0.962	0.957	0.962	0.957	0.962	0.962	0.962	0.962	0.960	0.960	0.962	0.962	0.962	0.952	0.962	0.960
33	0.960	0.960	0.960	0.960	0.960	0.960	0.960	0.960	0.957	0.960	0.957	0.957	0.960	0.955	0.960	0.955	0.957	0.955	0.957	0.957
34	0.960	0.960	0.960	0.957	0.960	0.960	0.957	0.957	0.960	0.957	0.960	0.960	0.960	0.960	0.960	0.960	0.960	0.960	0.957	0.960
35	0.962	0.962	0.962	0.965	0.960	0.962	0.962	0.962	0.960	0.960	0.962	0.960	0.960	0.960	0.962	0.960	0.960	0.960	0.962	0.960
36	0.965	0.965	0.965	0.965	0.960	0.962	0.965	0.965	0.965	0.965	0.962	0.962	0.962	0.965	0.962	0.960	0.965	0.965	0.962	0.962
37	0.969	0.967	0.967	0.965	0.967	0.967	0.967	0.967	0.967	0.965	0.967	0.967	0.967	0.967	0.965	0.965	0.967	0.965	0.965	0.965
38	0.967	0.969	0.969	0.969	0.969	0.969	0.967	0.969	0.967	0.969	0.967	0.969	0.969	0.967	0.967	0.969	0.967	0.967	0.967	0.969
39	0.972	0.967	0.972	0.967	0.969	0.967	0.969	0.969	0.972	0.969	0.972	0.967	0.969	0.969	0.972	0.969	0.969	0.969	0.969	0.969
40	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.938	0.941	0.941	0.941	0.938	0.941	0.938	0.941	0.932	0.941
41	0.941	0.941	0.941	0.941	0.941	0.944	0.938	0.941	0.941	0.941	0.938	0.941	0.938	0.944	0.941	0.941	0.941	0.941	0.938	0.941
42	0.950	0.947	0.944	0.944	0.941	0.941	0.941	0.941	0.941	0.941	0.938	0.941	0.938	0.941	0.938	0.941	0.935	0.941	0.938	0.941
43	0.969	0.965	0.957	0.952	0.941	0.941	0.941	0.941	0.935	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941
44	0.969	0.974	0.972	0.974	0.965	0.960	0.955	0.950	0.947	0.947	0.938	0.941	0.938	0.941	0.938	0.941	0.941	0.941	0.941	0.941
45	0.965	0.972	0.972	0.976	0.976	0.978	0.976	0.974	0.967	0.965	0.957	0.955	0.950	0.947	0.947	0.941	0.941	0.944	0.941	0.941
46	0.978	0.974	0.978	0.976	0.978	0.976	0.978	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976
47	0.972	0.967	0.972	0.969	0.972	0.969	0.969	0.969	0.969	0.967	0.967	0.969	0.969	0.967	0.969	0.969	0.969	0.969	0.967	0.967
48	0.962	0.960	0.962	0.960	0.960	0.960	0.960	0.962	0.962	0.962	0.960	0.960	0.960	0.960	0.960	0.960	0.960	0.960	0.965	0.960
49	0.952	0.952	0.952	0.952	0.952	0.955	0.952	0.952	0.952	0.952	0.955	0.952	0.952	0.952	0.952	0.955	0.955	0.952	0.950	0.950
50	0.944	0.941	0.944	0.941	0.944	0.941	0.944	0.941	0.941	0.941	0.944	0.941	0.941	0.944	0.941	0.941	0.941	0.947	0.947	0.947
51	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.938	0.941	0.938	0.941	0.935	0.941	0.938	0.941	0.941	0.938	0.938	0.941	0.929
52	0.938	0.941	0.938	0.941	0.938	0.941	0.938	0.941	0.938	0.938	0.938	0.941	0.938	0.938	0.938	0.938	0.935	0.938	0.938	0.941
53	0.938	0.938	0.938	0.941	0.941	0.947	0.941	0.935	0.938	0.947	0.938	0.938	0.941	0.935	0.935	0.935	0.938	0.938	0.938	0.935
54	0.941	0.935	0.938	0.938	0.935	0.938	0.938	0.938	0.938	0.938	0.941	0.938	0.941	0.938	0.938	0.938	0.938	0.938	0.941	0.938
55	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.935	0.935	0.938	0.938	0.935	0.938	0.935
56	0.941	0.941	0.938	0.941	0.938	0.941	0.941	0.941	0.938	0.941	0.938	0.941	0.938	0.941	0.938	0.941	0.941	0.941	0.938	0.941
57	0.932	0.941	0.935	0.941	0.932	0.941	0.935	0.941	0.935	0.941	0.935	0.941	0.938	0.941	0.932	0.941	0.938	0.941	0.941	0.941
58	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.938	0.941	0.941	0.941	0.938	0.941	0.938	0.941	0.932	0.941
59	0.941	0.941	0.941	0.941	0.941	0.944	0.938	0.941	0.941	0.941	0.938	0.941	0.938	0.944	0.941	0.941	0.941	0.941	0.938	0.941
60	0.950	0.947	0.944	0.944	0.941	0.941	0.941	0.941	0.941	0.941	0.938	0.941	0.938	0.941	0.938	0.941	0.935	0.941	0.938	0.941
61	0.969	0.965	0.957	0.952	0.941	0.941	0.941	0.941	0.935	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941
62	0.969	0.974	0.972	0.974	0.965	0.960	0.955	0.950	0.947	0.947	0.938	0.941	0.938	0.941	0.938	0.941	0.941	0.941	0.941	0.941
63	0.965	0.972	0.972	0.976	0.976	0.978	0.976	0.974	0.967	0.965	0.957	0.955	0.950	0.947	0.947	0.941	0.941	0.944	0.941	0.941

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 97

IR SCAN TIME 14.09 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.965	0.965	0.965	0.965	0.965	0.967	0.962	0.962	0.967	0.965
30	0.962	0.962	0.962	0.965	0.960	0.962	0.960	0.960	0.960	0.962
31	0.955	0.960	0.960	0.957	0.960	0.960	0.960	0.957	0.957	0.957
32	0.960	0.957	0.960	0.960	0.960	0.960	0.960	0.960	0.960	0.960
33	0.960	0.957	0.957	0.955	0.957	0.955	0.957	0.960	0.957	0.960
34	0.960	0.960	0.957	0.960	0.957	0.960	0.960	0.957	0.957	0.952
35	0.960	0.960	0.957	0.960	0.960	0.960	0.960	0.957	0.960	0.957
36	0.962	0.965	0.965	0.962	0.960	0.962	0.960	0.960	0.962	0.965
37	0.967	0.965	0.967	0.965	0.965	0.965	0.965	0.965	0.965	0.967
38	0.967	0.969	0.969	0.969	0.967	0.967	0.967	0.967	0.969	0.969
39	0.969	0.969	0.972	0.969	0.969	0.972	0.969	0.969	0.972	0.969
40	0.935	0.941	0.935	0.941	0.935	0.941	0.935	0.944	0.935	0.941
41	0.938	0.941	0.941	0.938	0.941	0.941	0.941	0.941	0.941	0.941
42	0.938	0.944	0.938	0.944	0.938	0.941	0.941	0.941	0.941	0.941
43	0.941	0.941	0.944	0.941	0.941	0.941	0.941	0.941	0.941	0.941
44	0.941	0.941	0.938	0.941	0.938	0.944	0.938	0.947	0.941	0.941
45	0.941	0.944	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.944
46	0.976	0.974	0.974	0.976	0.974	0.974	0.974	0.976	0.976	0.976
47	0.969	0.967	0.969	0.969	0.967	0.969	0.969	0.969	0.967	0.967
48	0.960	0.962	0.962	0.957	0.957	0.960	0.960	0.960	0.962	0.960
49	0.952	0.952	0.952	0.952	0.952	0.952	0.950	0.952	0.952	0.952
50	0.947	0.947	0.947	0.947	0.947	0.947	0.947	0.947	0.944	0.947
51	0.944	0.932	0.941	0.932	0.941	0.935	0.941	0.932	0.941	0.935
52	0.938	0.941	0.935	0.938	0.935	0.941	0.935	0.941	0.938	0.941
53	0.938	0.935	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938
54	0.938	0.935	0.938	0.938	0.941	0.941	0.938	0.938	0.938	0.935
55	0.938	0.938	0.938	0.938	0.938	0.935	0.938	0.941	0.941	0.938
56	0.938	0.941	0.941	0.941	0.938	0.941	0.941	0.941	0.941	0.941
57	0.938	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.938	0.941
58	0.935	0.941	0.935	0.941	0.935	0.941	0.935	0.944	0.935	0.941
59	0.938	0.941	0.941	0.938	0.941	0.941	0.941	0.941	0.941	0.941
60	0.938	0.944	0.938	0.944	0.938	0.941	0.941	0.941	0.941	0.941
61	0.941	0.941	0.944	0.941	0.941	0.941	0.941	0.941	0.941	0.941
62	0.941	0.941	0.938	0.941	0.938	0.944	0.938	0.947	0.941	0.941
63	0.941	0.944	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.944

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 97

IR SCAN TIME 14.09 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.960	0.955	0.957	0.955	0.957	0.957	0.960	0.962	0.967	0.960	0.972	0.969	0.982	0.986	1.033	1.076	1.105	1.110	1.118	1.120
65	0.957	0.955	0.955	0.952	0.955	0.957	0.960	0.960	0.962	0.965	0.969	0.974	0.978	0.994	1.044	1.087	1.105	1.112	1.116	1.120
66	0.957	0.955	0.955	0.952	0.955	0.957	0.957	0.960	0.962	0.962	0.967	0.972	0.978	1.002	1.055	1.092	1.105	1.111	1.115	1.118
67	0.960	0.955	0.957	0.952	0.957	0.957	0.962	0.962	0.962	0.965	0.967	0.974	0.978	1.009	1.061	1.093	1.104	1.108	1.112	1.115
68	0.960	0.955	0.955	0.952	0.952	0.957	0.960	0.960	0.960	0.962	0.965	0.969	0.978	1.014	1.065	1.091	1.099	1.104	1.108	1.111
69	0.960	0.955	0.955	0.955	0.955	0.957	0.957	0.960	0.960	0.962	0.965	0.967	0.978	1.017	1.065	1.088	1.095	1.099	1.104	1.107
70	0.960	0.962	0.950	0.957	0.947	0.955	0.957	0.962	0.962	0.962	0.967	0.972	0.982	1.023	1.066	1.084	1.092	1.096	1.099	1.102
71	0.960	0.957	0.955	0.957	0.952	0.960	0.965	0.965	0.962	0.962	0.965	0.972	0.992	1.031	1.069	1.084	1.088	1.092	1.097	1.098
72	0.955	0.957	0.955	0.952	0.952	0.957	0.955	0.960	0.960	0.965	0.965	0.969	0.994	1.042	1.072	1.082	1.085	1.089	1.093	1.095
73	0.957	0.955	0.952	0.952	0.955	0.957	0.957	0.960	0.960	0.962	0.967	0.974	1.006	1.050	1.073	1.080	1.084	1.088	1.091	1.094
74	0.957	0.955	0.955	0.955	0.955	0.955	0.957	0.962	0.960	0.962	0.967	0.978	1.015	1.057	1.075	1.081	1.084	1.087	1.090	1.094
75	0.957	0.955	0.952	0.952	0.955	0.957	0.957	0.960	0.962	0.967	0.967	0.988	1.026	1.064	1.076	1.081	1.084	1.087	1.090	1.093
76	0.960	0.972	0.978	0.969	0.967	0.967	0.965	0.962	0.967	0.967	0.969	0.988	1.033	1.066	1.076	1.081	1.085	1.087	1.088	1.092
77	0.980	1.020	1.014	1.009	1.001	0.994	0.988	0.976	0.967	0.967	0.969	0.994	1.038	1.068	1.076	1.080	1.083	1.087	1.088	1.092
78	0.997	1.047	1.024	1.014	1.020	1.007	0.994	0.997	0.976	0.969	0.965	0.995	1.037	1.067	1.074	1.079	1.080	1.085	1.086	1.091
79	1.009	1.049	1.039	1.043	1.026	1.007	1.007	1.004	0.999	0.978	0.976	1.001	1.047	1.067	1.073	1.078	1.081	1.084	1.086	1.090
80	1.018	1.052	1.071	1.069	1.049	1.018	1.007	1.009	1.006	0.997	0.984	1.017	1.052	1.069	1.073	1.077	1.080	1.083	1.084	1.088
81	1.020	1.089	1.130	1.090	1.073	1.039	1.006	0.999	1.001	1.007	1.006	1.028	1.058	1.072	1.073	1.076	1.077	1.080	1.082	1.085
82	1.038	1.070	1.104	1.076	1.070	1.045	1.017	0.997	0.986	0.992	1.006	1.037	1.063	1.072	1.074	1.077	1.078	1.082	1.084	1.085
83	1.049	1.037	1.043	1.047	1.060	1.045	1.020	0.997	0.990	0.997	1.012	1.045	1.077	1.086	1.087	1.086	1.084	1.084	1.084	1.086
84	1.024	1.017	1.021	1.035	1.050	1.058	1.044	1.014	1.007	1.020	1.023	1.020	1.024	1.028	1.034	1.043	1.049	1.058	1.061	1.068
85	1.002	1.004	1.007	1.026	1.037	1.052	1.042	1.020	1.007	1.020	1.014	1.009	1.004	1.009	1.006	1.009	1.004	1.006	1.001	1.007
86	0.997	0.995	0.997	1.001	1.009	1.009	1.009	1.004	1.011	1.014	1.017	1.006	1.006	1.006	1.007	1.006	1.009	1.004	1.006	1.006
87	0.990	0.994	0.990	0.994	0.994	0.995	0.994	1.001	1.011	1.020	1.017	1.006	1.001	1.004	1.002	1.004	1.004	1.006	1.002	1.002
88	0.988	0.992	0.992	0.994	0.994	0.997	0.997	1.002	1.011	1.023	1.017	1.007	1.001	1.004	1.001	1.002	0.997	0.999	0.995	0.999
89	0.988	0.992	0.994	0.997	0.995	0.997	0.994	0.997	1.001	1.017	1.014	1.007	1.004	1.004	1.001	1.001	0.997	0.999	0.997	0.999
90	0.988	0.990	0.994	0.994	0.995	0.992	0.994	0.990	0.995	1.006	1.009	1.006	1.004	1.002	1.001	0.999	0.997	0.999	0.997	0.997
91	0.990	0.994	0.997	0.997	0.994	0.995	0.994	0.994	0.990	1.001	1.006	1.007	1.002	1.004	1.001	1.002	1.001	0.999	0.997	0.997
92	0.997	0.997	0.990	0.997	0.990	0.999	0.992	1.001	0.990	1.001	1.004	1.007	0.999	1.004	0.999	1.001	0.997	1.001	0.997	0.999
93	1.006	1.006	1.004	1.006	1.002	1.006	1.007	1.011	1.007	1.011	1.007	1.006	1.001	1.002	1.002	1.002	0.999	0.999	0.994	0.997
94	1.011	1.009	1.007	1.012	1.011	1.012	1.012	1.015	1.014	1.017	1.014	1.011	1.004	1.004	1.002	1.002	1.001	1.002	0.999	1.001
95	1.012	1.012	1.012	1.015	1.017	1.018	1.017	1.017	1.017	1.021	1.020	1.014	1.007	1.004	1.007	1.006	1.007	1.006	1.006	1.004
96	1.014	1.012	1.014	1.015	1.018	1.020	1.018	1.018	1.018	1.023	1.023	1.014	1.009	1.011	1.009	1.012	1.012	1.012	1.007	1.009
97	1.014	1.014	1.017	1.017	1.021	1.020	1.021	1.020	1.021	1.026	1.023	1.012	1.007	1.011	1.011	1.017	1.015	1.014	1.011	1.007
98	1.015	1.015	1.015	1.018	1.017	1.021	1.015	1.018	1.021	1.026	1.023	1.017	1.007	1.009	1.007	1.012	1.015	1.012	1.021	1.009

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
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MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 97

IR SCAN TIME 14.09 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	1.125	1.125	1.131	1.134	1.141	1.144	1.146	1.148	1.150	1.153	1.156	1.158	1.160	1.161	1.162	1.162	1.165	1.167	1.169	1.168
65	1.124	1.127	1.130	1.135	1.140	1.143	1.145	1.142	1.150	1.148	1.154	1.151	1.156	1.156	1.158	1.155	1.162	1.159	1.163	1.160
66	1.121	1.125	1.129	1.134	1.138	1.140	1.143	1.145	1.148	1.149	1.150	1.153	1.155	1.156	1.156	1.156	1.159	1.159	1.159	1.159
67	1.118	1.121	1.126	1.130	1.134	1.135	1.138	1.140	1.144	1.145	1.145	1.148	1.151	1.152	1.152	1.153	1.154	1.155	1.155	1.155
68	1.113	1.117	1.120	1.124	1.128	1.130	1.133	1.134	1.138	1.140	1.142	1.141	1.144	1.146	1.148	1.149	1.150	1.150	1.152	1.153
69	1.109	1.111	1.116	1.119	1.121	1.124	1.128	1.130	1.131	1.134	1.136	1.138	1.139	1.140	1.140	1.141	1.143	1.144	1.144	1.145
70	1.104	1.108	1.111	1.115	1.115	1.118	1.120	1.123	1.124	1.126	1.128	1.131	1.132	1.134	1.134	1.135	1.135	1.137	1.137	1.138
71	1.100	1.103	1.108	1.111	1.112	1.114	1.115	1.118	1.120	1.121	1.124	1.123	1.126	1.126	1.128	1.128	1.129	1.130	1.131	1.132
72	1.097	1.099	1.103	1.107	1.107	1.108	1.112	1.113	1.117	1.116	1.118	1.118	1.119	1.119	1.119	1.118	1.121	1.122	1.126	1.125
73	1.096	1.098	1.101	1.103	1.104	1.107	1.109	1.113	1.115	1.115	1.115	1.116	1.117	1.117	1.118	1.117	1.117	1.118	1.118	1.120
74	1.094	1.096	1.099	1.101	1.104	1.106	1.107	1.110	1.113	1.114	1.113	1.113	1.116	1.115	1.115	1.115	1.115	1.115	1.116	1.118
75	1.094	1.095	1.096	1.099	1.103	1.108	1.107	1.108	1.111	1.112	1.112	1.112	1.112	1.114	1.114	1.114	1.115	1.115	1.115	1.116
76	1.093	1.095	1.096	1.098	1.102	1.106	1.107	1.108	1.109	1.111	1.111	1.112	1.112	1.113	1.114	1.115	1.113	1.114	1.115	1.115
77	1.094	1.096	1.097	1.099	1.102	1.105	1.107	1.110	1.111	1.112	1.113	1.113	1.112	1.111	1.113	1.115	1.112	1.113	1.114	1.115
78	1.093	1.097	1.098	1.099	1.101	1.105	1.107	1.109	1.111	1.112	1.112	1.113	1.113	1.112	1.112	1.114	1.112	1.112	1.113	1.115
79	1.093	1.096	1.099	1.099	1.104	1.104	1.108	1.107	1.111	1.110	1.112	1.111	1.113	1.111	1.113	1.112	1.114	1.112	1.114	1.115
80	1.091	1.095	1.097	1.102	1.103	1.106	1.108	1.111	1.111	1.112	1.112	1.113	1.111	1.113	1.112	1.115	1.114	1.116	1.116	1.118
81	1.088	1.093	1.095	1.098	1.101	1.104	1.107	1.109	1.110	1.111	1.111	1.112	1.111	1.113	1.113	1.114	1.115	1.116	1.116	1.118
82	1.088	1.090	1.093	1.097	1.100	1.103	1.107	1.109	1.111	1.111	1.111	1.113	1.112	1.112	1.111	1.113	1.114	1.115	1.116	1.118
83	1.084	1.082	1.084	1.088	1.091	1.095	1.098	1.103	1.108	1.111	1.112	1.112	1.112	1.112	1.113	1.113	1.113	1.113	1.115	1.115
84	1.071	1.074	1.077	1.081	1.084	1.089	1.094	1.099	1.107	1.112	1.116	1.118	1.118	1.118	1.115	1.118	1.117	1.118	1.118	1.120
85	1.004	1.004	1.011	1.014	1.017	1.026	1.028	1.031	1.035	1.042	1.047	1.057	1.061	1.068	1.067	1.071	1.073	1.077	1.082	1.086
86	1.004	0.997	0.997	0.994	0.999	0.994	0.995	0.990	0.994	0.994	0.994	0.994	0.995	0.994	0.997	0.994	0.997	0.995	0.994	0.994
87	0.999	1.001	0.997	0.997	0.997	0.997	0.995	0.997	0.994	0.994	0.990	0.992	0.990	0.994	0.988	0.992	0.990	0.992	0.990	0.994
88	0.995	0.995	0.994	0.992	0.990	0.994	0.990	0.995	0.992	0.994	0.990	0.994	0.990	0.992	0.990	0.990	0.986	0.990	0.988	0.988
89	0.995	0.995	0.992	0.992	0.990	0.994	0.990	0.994	0.990	0.994	0.990	0.994	0.992	0.992	0.988	0.990	0.988	0.992	0.988	0.990
90	0.997	0.995	0.994	0.992	0.990	0.992	0.990	0.994	0.994	0.995	0.995	0.999	1.012	1.017	1.002	0.994	0.990	0.990	0.988	0.990
91	0.997	0.999	0.997	0.995	0.994	0.994	0.990	0.992	0.990	0.994	0.995	1.014	1.050	1.064	1.034	1.007	0.997	0.995	0.992	0.994
92	0.997	0.999	0.997	0.997	0.995	0.997	0.992	0.994	0.990	0.992	0.990	0.994	1.004	1.012	1.004	0.997	0.994	0.994	0.994	0.997
93	0.994	0.999	0.992	0.997	0.990	0.994	0.988	0.992	0.986	0.992	0.986	0.992	0.988	0.990	0.986	0.994	0.990	0.994	0.990	0.994
94	0.997	1.001	0.997	0.999	0.995	0.997	0.994	0.995	0.990	0.994	0.992	0.994	0.990	0.994	0.990	0.994	0.990	0.994	0.990	0.994
95	1.001	1.001	0.999	0.999	0.999	0.995	0.995	0.994	0.994	0.992	0.992	0.994	0.994	0.990	0.988	0.990	0.994	0.990	0.994	0.992
96	1.002	1.001	1.001	1.001	0.997	0.999	0.995	0.997	0.994	0.994	0.992	0.994	0.992	0.992	0.988	0.992	0.990	0.994	0.992	0.992
97	1.004	1.006	1.001	1.002	1.001	1.001	0.997	1.001	0.999	1.001	0.999	0.997	0.995	0.994	0.990	0.988	0.990	0.992	0.992	0.992
98	1.009	1.007	1.009	1.007	1.002	1.007	1.007	1.002	1.007	1.006	1.006	0.999	0.997	0.999	0.995	0.988	0.997	1.001	1.014	1.021

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 97

IR SCAN TIME 14.09 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	1.168	1.170	1.171	1.173	1.173	1.171	1.168	1.166	1.167	1.165	1.162	1.149	1.105	1.039	1.002	0.982	0.976	0.969	0.969	0.972
65	1.163	1.164	1.168	1.168	1.168	1.169	1.170	1.169	1.168	1.168	1.168	1.164	1.153	1.116	1.052	1.004	0.984	0.972	0.969	0.969
66	1.159	1.159	1.162	1.164	1.163	1.162	1.164	1.165	1.168	1.168	1.170	1.170	1.168	1.158	1.125	1.061	1.006	0.980	0.972	0.965
67	1.156	1.157	1.158	1.160	1.159	1.159	1.161	1.163	1.164	1.164	1.166	1.168	1.170	1.170	1.164	1.136	1.077	1.015	0.986	0.972
68	1.154	1.156	1.157	1.156	1.156	1.156	1.158	1.160	1.163	1.164	1.166	1.166	1.168	1.169	1.170	1.167	1.149	1.098	1.031	0.990
69	1.149	1.149	1.149	1.150	1.152	1.153	1.153	1.153	1.155	1.158	1.161	1.162	1.163	1.167	1.168	1.167	1.164	1.153	1.112	1.047
70	1.139	1.141	1.142	1.144	1.144	1.146	1.146	1.148	1.151	1.153	1.156	1.158	1.157	1.157	1.160	1.160	1.159	1.156	1.149	1.120
71	1.133	1.134	1.134	1.135	1.137	1.137	1.140	1.142	1.144	1.145	1.147	1.147	1.149	1.149	1.151	1.151	1.152	1.150	1.150	1.146
72	1.126	1.127	1.128	1.128	1.128	1.129	1.132	1.132	1.132	1.132	1.134	1.136	1.138	1.138	1.140	1.144	1.146	1.147	1.147	1.146
73	1.121	1.122	1.122	1.121	1.122	1.122	1.121	1.122	1.123	1.124	1.125	1.125	1.125	1.126	1.132	1.135	1.138	1.138	1.140	1.139
74	1.117	1.118	1.118	1.118	1.118	1.118	1.116	1.118	1.120	1.120	1.120	1.121	1.122	1.123	1.127	1.128	1.128	1.130	1.128	1.130
75	1.116	1.117	1.117	1.118	1.116	1.115	1.114	1.115	1.115	1.118	1.117	1.119	1.120	1.121	1.122	1.123	1.124	1.123	1.123	1.123
76	1.115	1.115	1.115	1.116	1.116	1.116	1.116	1.115	1.114	1.115	1.116	1.117	1.118	1.119	1.120	1.120	1.120	1.120	1.120	1.121
77	1.115	1.115	1.115	1.115	1.115	1.115	1.114	1.115	1.115	1.115	1.115	1.116	1.116	1.118	1.118	1.118	1.119	1.120	1.120	1.120
78	1.115	1.117	1.116	1.116	1.116	1.115	1.115	1.114	1.113	1.113	1.115	1.115	1.116	1.116	1.117	1.118	1.119	1.120	1.120	1.122
79	1.116	1.117	1.118	1.118	1.118	1.118	1.117	1.115	1.115	1.115	1.115	1.114	1.115	1.115	1.116	1.118	1.119	1.120	1.122	1.123
80	1.118	1.119	1.118	1.119	1.118	1.119	1.118	1.118	1.118	1.118	1.117	1.118	1.115	1.118	1.116	1.118	1.118	1.121	1.122	1.123
81	1.118	1.120	1.120	1.122	1.121	1.121	1.121	1.120	1.120	1.122	1.120	1.120	1.120	1.120	1.120	1.122	1.121	1.122	1.122	1.123
82	1.118	1.119	1.120	1.121	1.120	1.121	1.120	1.121	1.120	1.120	1.120	1.120	1.119	1.122	1.122	1.124	1.124	1.125	1.124	1.125
83	1.117	1.118	1.118	1.120	1.120	1.120	1.120	1.120	1.120	1.120	1.120	1.120	1.121	1.123	1.123	1.124	1.125	1.125	1.125	1.125
84	1.122	1.121	1.122	1.122	1.122	1.121	1.120	1.120	1.118	1.119	1.117	1.118	1.118	1.120	1.120	1.122	1.123	1.125	1.125	1.126
85	1.091	1.095	1.099	1.104	1.108	1.110	1.110	1.110	1.111	1.111	1.111	1.113	1.113	1.114	1.113	1.115	1.114	1.118	1.118	1.118
86	0.995	0.995	0.997	0.997	1.001	1.002	1.004	1.004	1.006	1.011	1.014	1.012	1.015	1.017	1.017	1.017	1.020	1.024	1.027	1.031
87	0.989	0.992	0.988	0.992	0.988	0.992	0.990	0.994	0.992	0.995	0.994	0.997	0.995	0.999	0.995	0.999	0.997	0.997	0.995	0.997
88	0.988	0.990	0.988	0.990	0.990	0.990	0.988	0.990	0.988	0.990	0.988	0.990	0.990	0.992	0.990	0.992	0.990	0.994	0.986	0.995
89	0.988	0.990	0.986	0.988	0.988	0.988	0.986	0.986	0.986	0.988	0.988	0.990	0.990	0.992	0.988	0.992	0.990	0.994	0.994	0.995
90	0.990	0.990	0.988	0.990	0.988	0.990	0.988	0.992	0.988	0.990	0.994	0.997	0.994	0.994	0.990	0.992	0.986	0.990	0.988	0.990
91	0.988	0.990	0.986	0.988	0.988	0.990	0.988	0.992	0.992	1.012	1.038	1.038	1.014	1.001	0.994	0.992	0.992	0.990	0.988	0.992
92	0.995	0.997	0.997	0.997	0.992	0.992	0.992	0.992	0.990	1.001	1.020	1.026	1.011	0.999	0.992	0.994	0.990	0.992	0.990	0.994
93	0.992	0.994	0.992	0.994	0.992	0.994	0.994	0.995	0.994	0.997	0.995	0.997	0.995	0.997	0.994	0.997	0.994	0.997	0.995	0.995
94	0.988	0.992	0.988	0.992	0.990	0.997	0.994	0.995	0.992	0.995	0.994	0.997	0.994	0.997	0.995	0.997	0.994	0.997	0.997	1.001
95	0.992	0.992	0.992	0.992	0.994	0.994	0.994	0.994	0.994	0.995	0.995	0.997	0.997	0.997	0.997	0.995	0.997	0.995	0.997	0.997
96	0.988	0.994	0.992	0.995	0.992	0.995	0.995	0.997	0.997	0.997	0.995	0.997	0.997	0.999	0.999	1.001	0.999	1.001	0.999	1.004
97	0.988	0.994	0.990	0.994	0.990	0.995	0.994	0.997	0.995	0.999	0.995	0.999	0.997	0.999	0.997	0.999	0.999	1.002	1.002	1.006
98	1.014	1.004	0.999	0.995	0.999	0.997	0.992	1.001	1.002	0.997	1.004	0.995	1.002	1.004	0.999	1.002	1.002	1.006	1.006	1.006

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
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VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 97

IR SCAN TIME 14.09 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.974	0.976	0.978	0.976	0.976	0.976	0.974	0.972	0.972	0.974	0.974	0.974	0.972	0.976	0.974	0.976	0.976	0.976	0.976	0.978
65	0.972	0.974	0.974	0.972	0.972	0.969	0.967	0.967	0.969	0.969	0.967	0.967	0.967	0.967	0.967	0.969	0.967	0.969	0.969	0.969
66	0.967	0.969	0.974	0.972	0.967	0.962	0.960	0.960	0.960	0.960	0.960	0.957	0.960	0.960	0.960	0.960	0.960	0.960	0.962	0.960
67	0.967	0.967	0.967	0.967	0.967	0.955	0.955	0.950	0.952	0.947	0.952	0.947	0.952	0.947	0.952	0.947	0.952	0.950	0.955	0.955
68	0.974	0.967	0.962	0.965	0.969	0.962	0.955	0.950	0.947	0.947	0.944	0.941	0.944	0.944	0.944	0.941	0.947	0.947	0.947	0.947
69	0.997	0.978	0.967	0.965	0.962	0.967	0.962	0.952	0.947	0.941	0.947	0.941	0.941	0.941	0.941	0.938	0.941	0.938	0.941	0.938
70	1.060	1.006	0.990	0.972	0.967	0.967	0.967	0.965	0.952	0.947	0.941	0.941	0.938	0.941	0.938	0.941	0.935	0.941	0.938	0.938
71	1.125	1.080	1.012	0.988	0.972	0.967	0.965	0.967	0.967	0.957	0.947	0.941	0.938	0.941	0.941	0.941	0.941	0.935	0.941	0.944
72	1.143	1.128	1.081	1.021	0.990	0.974	0.967	0.965	0.962	0.965	0.955	0.947	0.941	0.938	0.935	0.941	0.938	0.935	0.941	0.938
73	1.140	1.139	1.129	1.090	1.030	0.990	0.974	0.969	0.965	0.967	0.965	0.957	0.947	0.941	0.941	0.938	0.938	0.938	0.941	0.938
74	1.130	1.131	1.129	1.125	1.092	1.042	0.994	0.980	0.962	0.967	0.962	0.969	0.960	0.952	0.938	0.944	0.932	0.941	0.941	0.941
75	1.124	1.126	1.125	1.125	1.119	1.097	1.044	1.001	0.978	0.969	0.965	0.967	0.969	0.969	0.957	0.947	0.941	0.941	0.938	0.941
76	1.120	1.121	1.122	1.123	1.120	1.118	1.100	1.057	1.006	0.982	0.972	0.967	0.965	0.969	0.969	0.965	0.952	0.947	0.941	0.941
77	1.122	1.124	1.124	1.122	1.121	1.120	1.117	1.108	1.072	1.023	0.988	0.976	0.967	0.969	0.969	0.969	0.969	0.960	0.950	0.947
78	1.123	1.125	1.124	1.125	1.124	1.123	1.121	1.120	1.114	1.091	1.044	1.002	0.978	0.967	0.965	0.967	0.969	0.972	0.969	0.965
79	1.125	1.123	1.123	1.124	1.126	1.124	1.123	1.123	1.123	1.119	1.102	1.061	1.014	0.986	0.972	0.967	0.965	0.965	0.969	0.969
80	1.123	1.125	1.125	1.127	1.126	1.128	1.126	1.126	1.124	1.125	1.121	1.109	1.072	1.023	0.988	0.976	0.967	0.969	0.967	0.969
81	1.123	1.128	1.126	1.128	1.128	1.130	1.128	1.128	1.126	1.127	1.124	1.127	1.115	1.080	1.027	0.997	0.978	0.972	0.965	0.967
82	1.125	1.126	1.127	1.127	1.126	1.128	1.129	1.131	1.132	1.131	1.131	1.132	1.130	1.118	1.086	1.040	1.002	0.982	0.969	0.969
83	1.126	1.127	1.127	1.127	1.127	1.128	1.129	1.131	1.133	1.135	1.135	1.134	1.133	1.130	1.118	1.093	1.047	1.007	0.984	0.976
84	1.126	1.128	1.128	1.129	1.130	1.131	1.131	1.133	1.133	1.135	1.138	1.140	1.139	1.136	1.131	1.123	1.100	1.061	1.015	0.992
85	1.120	1.122	1.124	1.127	1.128	1.130	1.132	1.134	1.136	1.137	1.138	1.140	1.141	1.140	1.137	1.134	1.125	1.110	1.074	1.033
86	1.035	1.037	1.047	1.050	1.054	1.058	1.063	1.067	1.072	1.076	1.079	1.084	1.086	1.088	1.089	1.088	1.086	1.082	1.072	1.048
87	0.999	1.004	1.004	1.007	1.006	1.004	0.997	1.001	1.007	1.014	1.012	1.009	1.006	1.007	1.004	1.006	1.006	1.006	1.002	1.002
88	0.994	0.997	0.994	0.997	0.992	0.995	0.990	0.995	0.990	0.997	0.994	0.997	0.994	0.999	0.997	0.997	0.995	0.999	0.999	0.999
89	0.990	0.994	0.990	0.992	0.992	0.994	0.992	0.994	0.990	0.992	0.994	0.997	0.999	1.002	1.001	1.001	0.999	1.002	0.997	0.999
90	0.988	0.994	0.990	0.994	0.990	0.994	0.992	0.992	0.990	0.994	0.997	1.006	1.006	1.006	1.004	1.012	1.011	1.007	1.001	1.002
91	0.988	0.992	0.990	0.992	0.992	1.001	1.015	1.023	1.011	1.001	0.995	0.997	0.997	1.001	1.001	1.004	1.002	1.004	1.001	1.002
92	0.992	0.994	0.990	0.992	0.992	1.001	1.020	1.035	1.021	1.009	0.999	1.001	0.999	1.002	1.002	1.004	1.002	1.004	1.002	1.002
93	0.994	0.997	0.994	0.994	0.994	0.997	0.999	1.001	0.999	1.001	0.999	1.002	1.002	1.007	1.007	1.007	1.007	1.009	1.007	1.007
94	0.999	1.001	0.999	0.999	0.999	1.001	1.001	1.004	1.004	1.004	1.004	1.007	1.009	1.012	1.014	1.017	1.017	1.017	1.015	1.017
95	0.999	1.001	1.001	0.999	1.002	1.001	1.006	1.004	1.007	1.007	1.009	1.012	1.015	1.017	1.020	1.021	1.024	1.021	1.021	1.020
96	1.002	1.004	1.002	1.006	1.004	1.007	1.007	1.009	1.007	1.011	1.011	1.014	1.015	1.021	1.024	1.028	1.027	1.026	1.026	1.024
97	1.002	1.006	1.006	1.007	1.007	1.011	1.011	1.014	1.014	1.012	1.012	1.017	1.021	1.028	1.033	1.035	1.035	1.035	1.030	1.030
98	1.009	1.009	1.004	1.011	1.011	1.012	1.012	1.017	1.011	1.012	1.017	1.028	1.030	1.037	1.039	1.042	1.040	1.039	1.035	1.034

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 97

IR SCAN TIME 14.09 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.978	0.974	0.978	0.976	0.978	0.976	0.978	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976
65	0.972	0.967	0.972	0.969	0.972	0.969	0.969	0.969	0.969	0.967	0.967	0.969	0.969	0.967	0.969	0.969	0.969	0.969	0.967	0.967
66	0.962	0.960	0.962	0.960	0.960	0.960	0.960	0.962	0.962	0.962	0.960	0.960	0.960	0.960	0.960	0.960	0.960	0.960	0.965	0.960
67	0.952	0.952	0.952	0.952	0.952	0.955	0.952	0.952	0.952	0.952	0.955	0.952	0.952	0.952	0.952	0.955	0.955	0.952	0.950	0.950
68	0.944	0.941	0.944	0.941	0.944	0.941	0.944	0.941	0.941	0.941	0.944	0.941	0.941	0.941	0.944	0.941	0.941	0.947	0.947	0.947
69	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.938	0.941	0.938	0.941	0.935	0.941	0.938	0.941	0.941	0.938	0.938	0.941	0.929
70	0.938	0.941	0.938	0.941	0.938	0.941	0.938	0.941	0.938	0.938	0.938	0.941	0.938	0.938	0.938	0.938	0.935	0.938	0.938	0.941
71	0.938	0.938	0.938	0.941	0.941	0.947	0.941	0.935	0.938	0.947	0.938	0.938	0.941	0.935	0.935	0.935	0.938	0.938	0.938	0.935
72	0.941	0.935	0.938	0.938	0.935	0.938	0.938	0.938	0.938	0.938	0.941	0.938	0.941	0.938	0.938	0.938	0.938	0.938	0.941	0.938
73	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.935	0.935	0.938	0.938	0.935	0.938	0.935
74	0.941	0.941	0.938	0.941	0.938	0.941	0.941	0.941	0.938	0.941	0.938	0.941	0.938	0.941	0.938	0.941	0.941	0.941	0.938	0.941
75	0.932	0.941	0.935	0.941	0.932	0.941	0.935	0.941	0.935	0.941	0.935	0.941	0.938	0.941	0.932	0.941	0.938	0.941	0.941	0.941
76	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.938	0.941	0.941	0.941	0.938	0.941	0.938	0.941	0.932	0.941
77	0.941	0.941	0.941	0.941	0.941	0.944	0.938	0.941	0.941	0.941	0.938	0.941	0.938	0.944	0.941	0.941	0.941	0.941	0.938	0.941
78	0.950	0.947	0.944	0.944	0.941	0.941	0.941	0.941	0.941	0.941	0.938	0.941	0.938	0.941	0.938	0.941	0.935	0.941	0.938	0.941
79	0.969	0.965	0.957	0.952	0.941	0.941	0.941	0.941	0.935	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941
80	0.969	0.974	0.972	0.974	0.965	0.960	0.955	0.950	0.947	0.947	0.938	0.941	0.938	0.941	0.938	0.941	0.941	0.941	0.941	0.941
81	0.965	0.972	0.972	0.976	0.976	0.978	0.976	0.974	0.967	0.965	0.957	0.955	0.950	0.947	0.947	0.941	0.941	0.944	0.941	0.941
82	0.962	0.965	0.965	0.972	0.974	0.978	0.978	0.982	0.982	0.982	0.978	0.978	0.976	0.972	0.967	0.965	0.957	0.955	0.950	0.950
83	0.972	0.969	0.972	0.978	0.980	0.986	0.986	0.988	0.988	0.988	0.986	0.986	0.984	0.986	0.982	0.982	0.972	0.978	0.969	0.969
84	0.978	0.976	0.976	0.978	0.978	0.984	0.984	0.990	0.990	0.992	0.988	0.988	0.986	0.990	0.986	0.986	0.986	0.988	0.984	0.986
85	1.001	0.988	0.982	0.982	0.982	0.988	0.990	0.990	0.990	0.997	0.990	0.990	0.990	0.992	0.986	0.990	0.984	0.988	0.986	0.986
86	1.017	0.999	0.992	0.990	0.990	0.990	0.994	0.995	0.995	0.995	0.995	0.994	0.995	0.994	0.992	0.994	0.992	0.994	0.990	0.988
87	1.001	1.006	1.004	1.007	0.999	0.995	0.990	0.988	0.988	0.990	0.990	0.990	0.990	0.992	0.990	0.994	0.992	0.994	0.990	0.992
88	0.995	0.995	0.994	0.997	0.994	0.992	0.994	0.986	0.986	0.986	0.986	0.990	0.988	0.990	0.990	0.992	0.992	0.992	0.994	0.995
89	0.992	0.994	0.988	0.992	0.988	0.992	0.988	0.992	0.988	0.990	0.986	0.992	0.990	0.990	0.992	0.990	0.990	0.994	0.994	0.994
90	0.997	0.995	0.992	0.994	0.994	0.995	0.994	0.997	0.994	0.994	0.992	0.995	0.992	0.994	0.988	0.994	0.990	0.995	0.992	0.994
91	0.999	0.999	0.994	0.995	0.994	0.999	0.995	0.999	0.997	0.999	0.997	0.999	0.997	0.999	0.997	0.997	0.995	0.999	0.995	0.997
92	1.001	1.001	0.997	1.001	0.999	1.002	1.001	1.004	1.004	1.006	1.002	1.002	1.001	1.004	1.004	1.004	1.004	1.004	1.001	1.002
93	1.006	1.007	1.006	1.007	1.009	1.011	1.007	1.011	1.009	1.011	1.011	1.011	1.011	1.012	1.011	1.012	1.011	1.011	1.009	1.009
94	1.014	1.015	1.017	1.017	1.015	1.017	1.017	1.018	1.017	1.018	1.017	1.020	1.017	1.020	1.018	1.020	1.017	1.021	1.015	1.017
95	1.023	1.021	1.021	1.024	1.026	1.026	1.026	1.027	1.026	1.027	1.027	1.028	1.028	1.031	1.030	1.031	1.031	1.033	1.034	1.034
96	1.024	1.027	1.028	1.028	1.028	1.034	1.031	1.037	1.035	1.042	1.042	1.047	1.049	1.051	1.052	1.055	1.054	1.056	1.055	1.056
97	1.028	1.031	1.033	1.035	1.037	1.040	1.044	1.048	1.049	1.052	1.055	1.059	1.060	1.066	1.064	1.067	1.066	1.068	1.067	1.069
98	1.031	1.034	1.037	1.038	1.042	1.044	1.049	1.051	1.055	1.057	1.060	1.061	1.064	1.065	1.067	1.066	1.067	1.067	1.067	1.068

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 97

IR SCAN TIME 14.09 SEC
INITIAL TEMP 537.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.976	0.974	0.974	0.976	0.974	0.974	0.974	0.976	0.976	0.976
65	0.969	0.967	0.969	0.969	0.967	0.969	0.969	0.969	0.967	0.967
66	0.960	0.962	0.962	0.957	0.957	0.960	0.960	0.960	0.962	0.960
67	0.952	0.952	0.952	0.952	0.952	0.952	0.950	0.952	0.952	0.952
68	0.947	0.947	0.947	0.947	0.947	0.947	0.947	0.947	0.944	0.947
69	0.944	0.932	0.941	0.932	0.941	0.935	0.941	0.932	0.941	0.935
70	0.938	0.941	0.935	0.938	0.935	0.941	0.935	0.941	0.938	0.941
71	0.938	0.935	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938
72	0.938	0.935	0.938	0.938	0.941	0.941	0.938	0.938	0.938	0.935
73	0.938	0.938	0.938	0.938	0.938	0.935	0.938	0.941	0.941	0.938
74	0.938	0.941	0.941	0.941	0.938	0.941	0.941	0.941	0.941	0.941
75	0.938	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.938	0.941
76	0.935	0.941	0.935	0.941	0.935	0.941	0.935	0.944	0.935	0.941
77	0.938	0.941	0.941	0.938	0.941	0.941	0.941	0.941	0.941	0.941
78	0.938	0.944	0.938	0.944	0.938	0.941	0.941	0.941	0.941	0.941
79	0.941	0.941	0.944	0.941	0.941	0.941	0.941	0.941	0.941	0.941
80	0.941	0.941	0.938	0.941	0.938	0.944	0.938	0.947	0.941	0.941
81	0.941	0.944	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.944
82	0.947	0.947	0.941	0.947	0.941	0.944	0.941	0.941	0.941	0.947
83	0.960	0.962	0.950	0.955	0.944	0.950	0.941	0.947	0.938	0.947
84	0.982	0.982	0.978	0.978	0.974	0.969	0.965	0.960	0.957	0.957
85	0.986	0.990	0.988	0.986	0.988	0.989	0.982	0.982	0.978	0.976
86	0.990	0.988	0.988	0.990	0.994	0.990	0.994	0.990	0.992	0.988
87	0.990	0.994	0.992	0.997	0.997	0.999	0.997	0.997	0.994	0.997
88	0.992	0.997	0.997	1.001	1.001	1.001	0.999	1.001	0.997	0.999
89	0.994	0.997	0.997	1.001	0.999	1.002	0.999	1.001	1.001	1.001
90	0.990	0.997	0.997	0.999	0.995	1.001	0.997	1.002	0.999	1.002
91	0.995	0.997	0.997	0.999	0.997	1.001	1.001	1.004	1.004	1.006
92	1.001	1.002	1.001	1.004	1.002	1.006	1.004	1.007	1.007	1.011
93	1.007	1.009	1.007	1.009	1.007	1.011	1.011	1.014	1.014	1.017
94	1.015	1.017	1.017	1.020	1.018	1.020	1.021	1.023	1.024	1.026
95	1.034	1.034	1.035	1.035	1.038	1.035	1.038	1.035	1.038	1.038
96	1.052	1.052	1.052	1.054	1.052	1.056	1.056	1.057	1.057	1.058
97	1.064	1.065	1.063	1.064	1.064	1.067	1.066	1.070	1.072	1.077
98	1.068	1.068	1.070	1.069	1.069	1.073	1.076	1.091	1.122	1.160

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 14.09 SEC
HRFR = 0.147E-01

GROUP 97

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	0.008	0.008	0.006	0.004	0.004	0.007	0.004	0.006	0.004	0.006	0.004	0.001	0.004	0.006	0.003	0.001	0.001	0.002	0.002	0.002
30	0.007	0.008	0.007	0.007	0.004	0.006	0.004	0.007	0.003	0.004	0.003	0.003	0.002	0.003	0.001	0.003	0.001	0.001	0.001	0.001
31	0.007	0.007	0.006	0.004	0.006	0.004	0.004	0.004	0.003	0.002	0.004	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001
32	0.007	0.006	0.006	0.004	0.004	0.004	0.003	0.003	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.001	0.001
33	0.006	0.004	0.004	0.003	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.003	0.003
34	0.004	0.003	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.003	0.002	0.003	0.003	0.003
35	0.004	0.004	0.002	0.002	0.002	0.002	0.003	0.003	0.002	0.002	0.003	0.003	0.002	0.002	0.003	0.003	0.002	0.001	0.001	0.001
36	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002
37	0.001	0.001	0.003	0.002	0.003	0.001	0.002	0.002	0.003	0.002	0.003	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.003	0.003	0.003	0.004	0.002	0.004	0.003	0.004	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
39	0.004	0.006	0.004	0.004	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
40	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.025	0.052	0.061	0.065	0.069	0.071	0.072	0.075
41	0.004	0.015	0.011	0.007	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.030	0.054	0.061	0.064	0.067	0.071	0.072	0.075
42	0.018	0.037	0.019	0.011	0.015	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.029	0.053	0.059	0.064	0.064	0.069	0.070	0.074
43	0.007	0.039	0.031	0.034	0.020	0.006	0.006	0.003	0.003	0.003	0.003	0.001	0.037	0.053	0.059	0.063	0.065	0.068	0.070	0.073
44	0.014	0.041	0.057	0.055	0.039	0.014	0.006	0.007	0.004	0.004	0.004	0.013	0.041	0.055	0.059	0.062	0.064	0.067	0.068	0.072
45	0.015	0.072	0.109	0.073	0.059	0.031	0.004	0.004	0.001	0.006	0.004	0.022	0.046	0.058	0.059	0.061	0.062	0.064	0.066	0.069
46	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.025	0.061	0.086	0.091	0.098	0.100
47	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.035	0.071	0.086	0.093	0.096	0.100
48	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.043	0.075	0.086	0.092	0.095	0.098
49	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.007	0.049	0.075	0.085	0.089	0.093	0.096
50	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.011	0.052	0.074	0.081	0.086	0.089	0.091
51	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.013	0.052	0.072	0.078	0.081	0.085	0.088
52	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.018	0.052	0.068	0.075	0.078	0.081	0.084
53	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.024	0.055	0.068	0.072	0.075	0.079	0.080
54	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.033	0.058	0.066	0.069	0.072	0.075	0.078
55	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.004	0.040	0.059	0.064	0.068	0.072	0.074	0.077
56	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.012	0.045	0.060	0.065	0.068	0.071	0.073	0.077
57	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.020	0.051	0.061	0.065	0.068	0.071	0.073	0.075
58	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.025	0.052	0.061	0.065	0.069	0.071	0.072	0.075
59	0.004	0.015	0.011	0.007	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.030	0.054	0.061	0.064	0.067	0.071	0.072	0.075
60	0.018	0.037	0.019	0.011	0.015	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.029	0.053	0.059	0.064	0.064	0.069	0.070	0.074
61	0.007	0.039	0.031	0.034	0.020	0.006	0.006	0.003	0.003	0.003	0.003	0.001	0.037	0.053	0.059	0.063	0.065	0.068	0.070	0.073
62	0.014	0.041	0.057	0.055	0.039	0.014	0.006	0.007	0.004	0.004	0.004	0.013	0.041	0.055	0.059	0.062	0.064	0.067	0.068	0.072
63	0.015	0.072	0.109	0.073	0.059	0.031	0.004	0.004	0.001	0.006	0.004	0.022	0.046	0.058	0.059	0.061	0.062	0.064	0.066	0.069

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 14.09 SEC
HREF = 0.147E-01

GROUP 97

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.003	0.003	0.003	0.003	0.003
30	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.003	0.003	0.003	0.004	0.004	0.004	0.002	0.003	0.003	0.003
31	0.001	0.001	0.002	0.001	0.003	0.003	0.003	0.003	0.003	0.004	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
32	0.003	0.003	0.004	0.004	0.004	0.003	0.004	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.003	0.003	0.003	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
39	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
40	0.075	0.078	0.078	0.080	0.084	0.087	0.088	0.089	0.090	0.091	0.092	0.093	0.093	0.094	0.094	0.095	0.094	0.094	0.095	0.095
41	0.077	0.078	0.079	0.081	0.084	0.086	0.088	0.091	0.092	0.093	0.094	0.094	0.093	0.092	0.094	0.095	0.093	0.094	0.094	0.095
42	0.075	0.079	0.080	0.081	0.083	0.086	0.088	0.090	0.091	0.093	0.093	0.094	0.094	0.093	0.093	0.094	0.093	0.093	0.094	0.095
43	0.076	0.078	0.081	0.081	0.085	0.085	0.089	0.088	0.091	0.091	0.093	0.091	0.094	0.091	0.094	0.093	0.094	0.093	0.094	0.096
44	0.074	0.078	0.079	0.084	0.084	0.087	0.089	0.091	0.092	0.093	0.093	0.094	0.092	0.094	0.093	0.095	0.094	0.096	0.096	0.098
45	0.072	0.075	0.078	0.080	0.083	0.086	0.088	0.090	0.091	0.092	0.092	0.093	0.092	0.094	0.094	0.094	0.095	0.096	0.096	0.098
46	0.105	0.105	0.110	0.113	0.119	0.122	0.124	0.126	0.128	0.131	0.134	0.136	0.137	0.139	0.139	0.139	0.143	0.145	0.147	0.146
47	0.104	0.106	0.109	0.114	0.118	0.121	0.123	0.121	0.128	0.126	0.132	0.129	0.134	0.133	0.136	0.133	0.139	0.137	0.140	0.138
48	0.101	0.104	0.108	0.113	0.117	0.119	0.121	0.124	0.126	0.127	0.128	0.131	0.133	0.133	0.133	0.134	0.137	0.137	0.136	0.136
49	0.098	0.101	0.106	0.109	0.113	0.114	0.116	0.119	0.122	0.123	0.124	0.126	0.129	0.129	0.129	0.131	0.132	0.133	0.132	0.133
50	0.094	0.097	0.100	0.104	0.107	0.109	0.112	0.113	0.116	0.119	0.121	0.119	0.122	0.124	0.126	0.127	0.128	0.128	0.129	0.131
51	0.090	0.092	0.096	0.099	0.101	0.104	0.107	0.109	0.110	0.113	0.114	0.117	0.118	0.118	0.118	0.119	0.121	0.122	0.122	0.124
52	0.085	0.089	0.092	0.095	0.096	0.098	0.100	0.103	0.104	0.106	0.107	0.110	0.111	0.113	0.113	0.114	0.114	0.116	0.116	0.117
53	0.082	0.084	0.089	0.092	0.093	0.094	0.096	0.098	0.100	0.101	0.104	0.103	0.106	0.106	0.107	0.107	0.108	0.109	0.110	0.111
54	0.079	0.081	0.084	0.088	0.088	0.089	0.093	0.094	0.097	0.096	0.098	0.098	0.099	0.099	0.099	0.098	0.101	0.102	0.106	0.104
55	0.078	0.080	0.083	0.084	0.086	0.088	0.090	0.094	0.095	0.096	0.096	0.096	0.097	0.097	0.098	0.097	0.097	0.098	0.098	0.100
56	0.077	0.078	0.081	0.083	0.085	0.087	0.088	0.091	0.094	0.094	0.094	0.094	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.098
57	0.077	0.078	0.078	0.081	0.084	0.089	0.088	0.089	0.091	0.093	0.093	0.093	0.093	0.094	0.094	0.094	0.095	0.096	0.095	0.096
58	0.075	0.078	0.078	0.080	0.084	0.087	0.088	0.089	0.090	0.091	0.092	0.093	0.093	0.094	0.094	0.095	0.094	0.094	0.095	0.095
59	0.077	0.078	0.079	0.081	0.084	0.086	0.088	0.091	0.092	0.093	0.094	0.094	0.093	0.092	0.094	0.095	0.093	0.094	0.094	0.095
60	0.075	0.079	0.080	0.081	0.083	0.086	0.088	0.090	0.091	0.093	0.093	0.094	0.094	0.093	0.093	0.094	0.093	0.093	0.094	0.095
61	0.076	0.078	0.081	0.081	0.085	0.085	0.089	0.088	0.091	0.091	0.093	0.091	0.094	0.091	0.094	0.093	0.094	0.093	0.094	0.096
62	0.074	0.078	0.079	0.084	0.084	0.087	0.089	0.091	0.092	0.093	0.093	0.094	0.092	0.094	0.093	0.095	0.094	0.096	0.096	0.098
63	0.072	0.075	0.078	0.080	0.083	0.086	0.088	0.090	0.091	0.092	0.092	0.093	0.092	0.094	0.094	0.094	0.095	0.096	0.096	0.098

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 14.09 SEC
HRFR = 0.147E-01

GROUP 97

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
30	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
31	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
32	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
39	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
40	0.095	0.096	0.095	0.096	0.096	0.096	0.096	0.095	0.094	0.095	0.096	0.097	0.098	0.099	0.100	0.100	0.100	0.100	0.100	0.101
41	0.095	0.096	0.095	0.096	0.095	0.095	0.094	0.096	0.095	0.096	0.096	0.096	0.096	0.098	0.098	0.098	0.099	0.100	0.100	0.100
42	0.095	0.097	0.096	0.096	0.096	0.096	0.095	0.094	0.094	0.094	0.095	0.096	0.096	0.096	0.097	0.098	0.099	0.100	0.100	0.102
43	0.096	0.097	0.098	0.098	0.098	0.098	0.097	0.096	0.096	0.096	0.096	0.094	0.095	0.095	0.096	0.098	0.099	0.100	0.102	0.103
44	0.098	0.099	0.098	0.099	0.098	0.099	0.098	0.098	0.098	0.098	0.097	0.098	0.096	0.098	0.096	0.098	0.098	0.101	0.102	0.103
45	0.098	0.100	0.100	0.102	0.101	0.101	0.101	0.100	0.100	0.102	0.100	0.100	0.100	0.100	0.100	0.102	0.101	0.102	0.102	0.102
46	0.145	0.147	0.149	0.150	0.150	0.149	0.146	0.143	0.144	0.142	0.139	0.127	0.086	0.031	0.002	0.002	0.002	0.002	0.002	0.002
47	0.140	0.141	0.145	0.145	0.145	0.147	0.147	0.146	0.146	0.145	0.146	0.142	0.131	0.096	0.041	0.003	0.003	0.003	0.003	0.003
48	0.136	0.137	0.139	0.141	0.140	0.140	0.141	0.143	0.146	0.146	0.147	0.147	0.146	0.135	0.105	0.049	0.004	0.004	0.004	0.004
49	0.134	0.135	0.136	0.137	0.137	0.137	0.139	0.140	0.141	0.142	0.143	0.146	0.148	0.147	0.141	0.115	0.062	0.012	0.012	0.012
50	0.132	0.134	0.135	0.134	0.133	0.133	0.135	0.138	0.141	0.142	0.143	0.143	0.146	0.147	0.147	0.144	0.127	0.080	0.024	0.024
51	0.127	0.127	0.127	0.128	0.129	0.131	0.131	0.131	0.133	0.136	0.139	0.139	0.140	0.144	0.146	0.144	0.141	0.131	0.093	0.037
52	0.118	0.119	0.121	0.122	0.122	0.124	0.124	0.126	0.129	0.131	0.133	0.136	0.135	0.135	0.137	0.137	0.136	0.134	0.127	0.100
53	0.112	0.113	0.113	0.114	0.116	0.116	0.119	0.121	0.122	0.123	0.125	0.125	0.127	0.127	0.129	0.129	0.129	0.128	0.128	0.124
54	0.106	0.106	0.107	0.107	0.107	0.108	0.111	0.111	0.111	0.111	0.113	0.115	0.116	0.116	0.118	0.122	0.124	0.125	0.125	0.124
55	0.101	0.102	0.102	0.101	0.102	0.102	0.101	0.102	0.103	0.104	0.105	0.105	0.105	0.106	0.111	0.114	0.116	0.117	0.118	0.118
56	0.097	0.098	0.098	0.098	0.098	0.098	0.096	0.098	0.100	0.100	0.100	0.101	0.102	0.103	0.106	0.107	0.107	0.109	0.107	0.109
57	0.096	0.097	0.097	0.098	0.096	0.096	0.094	0.095	0.096	0.098	0.097	0.099	0.100	0.101	0.102	0.103	0.104	0.103	0.102	0.103
58	0.095	0.096	0.095	0.096	0.096	0.096	0.096	0.095	0.094	0.095	0.096	0.097	0.098	0.099	0.100	0.100	0.100	0.100	0.100	0.101
59	0.095	0.096	0.095	0.096	0.095	0.095	0.094	0.096	0.095	0.096	0.096	0.096	0.096	0.098	0.098	0.098	0.099	0.100	0.100	0.100
60	0.095	0.097	0.096	0.096	0.096	0.096	0.095	0.094	0.094	0.094	0.095	0.096	0.096	0.097	0.098	0.099	0.100	0.100	0.100	0.102
61	0.096	0.097	0.098	0.098	0.098	0.098	0.097	0.096	0.096	0.096	0.096	0.094	0.095	0.095	0.096	0.098	0.099	0.100	0.102	0.103
62	0.098	0.099	0.098	0.099	0.098	0.099	0.098	0.098	0.098	0.098	0.097	0.098	0.096	0.098	0.096	0.098	0.098	0.101	0.102	0.103
63	0.098	0.100	0.100	0.102	0.101	0.101	0.101	0.100	0.100	0.102	0.100	0.100	0.100	0.100	0.100	0.102	0.101	0.102	0.102	0.102

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 14.09 SEC
GROUP 97 HRFR = 0.147E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
30	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
31	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
32	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
39	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
40	0.100	0.101	0.102	0.102	0.100	0.098	0.082	0.045	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
41	0.102	0.104	0.104	0.102	0.101	0.100	0.097	0.089	0.058	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
42	0.103	0.105	0.104	0.104	0.104	0.103	0.101	0.100	0.094	0.074	0.035	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
43	0.104	0.103	0.103	0.104	0.106	0.104	0.103	0.103	0.102	0.099	0.084	0.049	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
44	0.103	0.104	0.105	0.106	0.106	0.107	0.106	0.106	0.104	0.104	0.101	0.090	0.058	0.018	0.018	0.018	0.018	0.018	0.018	0.018
45	0.103	0.107	0.106	0.107	0.107	0.109	0.107	0.107	0.106	0.106	0.104	0.106	0.096	0.064	0.021	0.021	0.021	0.021	0.021	0.021
46	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
47	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
48	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
49	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
50	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024
51	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037
52	0.048	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
53	0.105	0.064	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
54	0.121	0.107	0.065	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016
55	0.118	0.118	0.108	0.073	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023
56	0.109	0.110	0.108	0.104	0.075	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033
57	0.104	0.106	0.104	0.104	0.099	0.079	0.035	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
58	0.100	0.101	0.102	0.102	0.100	0.098	0.082	0.045	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
59	0.102	0.104	0.104	0.102	0.101	0.100	0.097	0.089	0.058	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
60	0.103	0.105	0.104	0.104	0.104	0.103	0.101	0.100	0.094	0.074	0.035	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
61	0.104	0.103	0.103	0.104	0.106	0.104	0.103	0.103	0.102	0.099	0.084	0.049	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
62	0.103	0.104	0.105	0.106	0.106	0.107	0.106	0.106	0.104	0.104	0.101	0.090	0.058	0.018	0.018	0.018	0.018	0.018	0.018	0.018
63	0.103	0.107	0.106	0.107	0.107	0.109	0.107	0.107	0.106	0.106	0.104	0.106	0.096	0.064	0.021	0.021	0.021	0.021	0.021	0.021

IR HEAT TRANSFER COEFFICIENT - H(,9TO)/HRFR
IR SCAN TIME 14.09 SEC
HRFR = 0.147E-01

GROUP 97

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
30	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
31	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
32	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
39	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
40	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
41	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
42	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
43	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
44	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
45	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021
46	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
47	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
48	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
49	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
50	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024
51	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037
52	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
53	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
54	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016
55	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023
56	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033
57	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
58	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
59	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
60	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
61	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
62	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
63	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 14.09 SEC
HRFR = 0.147E-01

GROUP 97

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
30	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
31	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
32	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
39	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
40	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
41	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
42	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
43	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
44	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
45	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021
46	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
47	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
48	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
49	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
50	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024
51	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037
52	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
53	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
54	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016
55	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023
56	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033
57	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
58	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
59	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
60	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
61	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
62	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
63	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 14.09 SEC
HRFR = 0.147E-01

GROUP 97

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.025	0.061	0.086	0.091	0.098	0.100
65	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.035	0.071	0.086	0.093	0.096	0.100
66	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.043	0.075	0.086	0.092	0.095	0.098
67	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.007	0.049	0.075	0.085	0.089	0.093	0.096
68	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.011	0.052	0.074	0.081	0.086	0.089	0.091
69	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.013	0.052	0.072	0.078	0.081	0.085	0.088
70	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.018	0.052	0.068	0.075	0.078	0.081	0.084
71	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.024	0.055	0.068	0.072	0.075	0.079	0.080
72	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.033	0.058	0.066	0.069	0.072	0.075	0.078
73	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.004	0.040	0.059	0.064	0.068	0.072	0.074	0.077
74	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.012	0.045	0.060	0.065	0.068	0.071	0.073	0.077
75	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.020	0.051	0.061	0.065	0.068	0.071	0.073	0.075
76	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.025	0.052	0.061	0.065	0.069	0.071	0.072	0.075
77	0.004	0.015	0.011	0.007	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.030	0.054	0.061	0.064	0.067	0.071	0.072	0.075
78	0.018	0.037	0.019	0.011	0.015	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.029	0.053	0.059	0.064	0.064	0.069	0.070	0.074
79	0.007	0.039	0.031	0.034	0.020	0.006	0.006	0.003	0.003	0.003	0.003	0.001	0.037	0.053	0.059	0.063	0.065	0.068	0.070	0.073
80	0.014	0.041	0.057	0.055	0.039	0.014	0.006	0.007	0.004	0.004	0.004	0.013	0.041	0.055	0.059	0.062	0.064	0.067	0.068	0.072
81	0.015	0.072	0.109	0.073	0.059	0.031	0.004	0.004	0.001	0.006	0.004	0.022	0.046	0.058	0.059	0.061	0.062	0.064	0.066	0.069
82	0.030	0.056	0.085	0.061	0.056	0.036	0.013	0.013	0.013	0.013	0.004	0.029	0.050	0.058	0.059	0.062	0.063	0.066	0.068	0.069
83	0.039	0.029	0.034	0.037	0.048	0.036	0.015	0.015	0.015	0.015	0.009	0.036	0.062	0.070	0.071	0.070	0.068	0.068	0.068	0.070
84	0.019	0.013	0.016	0.027	0.040	0.046	0.035	0.011	0.006	0.015	0.018	0.015	0.019	0.022	0.026	0.034	0.039	0.046	0.049	0.054
85	0.002	0.003	0.006	0.020	0.029	0.041	0.033	0.015	0.006	0.015	0.011	0.007	0.003	0.007	0.004	0.007	0.003	0.004	0.001	0.006
86	0.001	0.001	0.001	0.001	0.007	0.007	0.007	0.003	0.008	0.011	0.013	0.004	0.004	0.004	0.006	0.004	0.007	0.003	0.004	0.004
87	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.001	0.008	0.015	0.013	0.004	0.001	0.003	0.002	0.003	0.003	0.004	0.002	0.002
88	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.002	0.008	0.018	0.013	0.006	0.001	0.003	0.001	0.002	0.002	0.002	0.002	0.002
89	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.013	0.011	0.006	0.003	0.003	0.001	0.001	0.001	0.001	0.001	0.001
90	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.004	0.007	0.004	0.003	0.002	0.001	0.001	0.001	0.001	0.001	0.001
91	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.004	0.006	0.002	0.003	0.001	0.002	0.001	0.001	0.001	0.001
92	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.001	0.001	0.001	0.003	0.006	0.006	0.003	0.003	0.001	0.001	0.001	0.001	0.001
93	0.004	0.004	0.003	0.004	0.002	0.004	0.006	0.008	0.006	0.008	0.006	0.004	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002
94	0.008	0.007	0.006	0.009	0.008	0.009	0.009	0.012	0.011	0.013	0.011	0.008	0.003	0.003	0.002	0.002	0.001	0.002	0.002	0.001
95	0.009	0.009	0.009	0.012	0.013	0.014	0.013	0.013	0.013	0.016	0.015	0.011	0.006	0.003	0.006	0.004	0.006	0.004	0.004	0.003
96	0.011	0.009	0.011	0.012	0.014	0.015	0.014	0.014	0.014	0.018	0.018	0.011	0.007	0.008	0.007	0.009	0.009	0.009	0.006	0.007
97	0.011	0.011	0.013	0.013	0.016	0.015	0.016	0.015	0.016	0.020	0.018	0.009	0.006	0.008	0.008	0.013	0.012	0.011	0.008	0.006
98	0.012	0.012	0.012	0.014	0.013	0.016	0.012	0.014	0.016	0.020	0.018	0.013	0.006	0.007	0.006	0.009	0.012	0.009	0.016	0.007

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 14.09 SEC
HRFR = 0.147E-01

GROUP 97

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	0.105	0.105	0.110	0.113	0.119	0.122	0.124	0.126	0.128	0.131	0.134	0.136	0.137	0.139	0.139	0.139	0.143	0.145	0.147	0.146
65	0.104	0.106	0.109	0.114	0.118	0.121	0.123	0.121	0.128	0.126	0.132	0.129	0.134	0.133	0.136	0.133	0.139	0.137	0.140	0.138
66	0.101	0.104	0.108	0.113	0.117	0.119	0.121	0.124	0.126	0.127	0.128	0.131	0.133	0.133	0.133	0.134	0.137	0.137	0.136	0.136
67	0.098	0.101	0.106	0.109	0.113	0.114	0.116	0.119	0.122	0.123	0.124	0.126	0.129	0.129	0.129	0.131	0.132	0.133	0.132	0.133
68	0.094	0.097	0.100	0.104	0.107	0.109	0.112	0.113	0.116	0.119	0.121	0.119	0.122	0.124	0.126	0.127	0.128	0.128	0.129	0.131
69	0.090	0.092	0.096	0.099	0.101	0.104	0.107	0.109	0.110	0.113	0.114	0.117	0.118	0.118	0.118	0.119	0.121	0.122	0.122	0.124
70	0.085	0.089	0.092	0.095	0.096	0.098	0.100	0.103	0.104	0.106	0.107	0.110	0.111	0.113	0.113	0.114	0.114	0.116	0.116	0.117
71	0.082	0.084	0.089	0.092	0.093	0.094	0.096	0.098	0.100	0.101	0.104	0.103	0.106	0.106	0.107	0.107	0.108	0.109	0.110	0.111
72	0.079	0.081	0.084	0.088	0.088	0.089	0.093	0.094	0.097	0.096	0.098	0.098	0.099	0.099	0.099	0.098	0.101	0.102	0.106	0.104
73	0.078	0.080	0.083	0.084	0.086	0.088	0.090	0.094	0.095	0.096	0.096	0.096	0.097	0.097	0.098	0.097	0.097	0.098	0.098	0.100
74	0.077	0.078	0.081	0.083	0.085	0.087	0.088	0.091	0.094	0.094	0.094	0.094	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.098
75	0.077	0.078	0.078	0.081	0.084	0.089	0.088	0.089	0.091	0.093	0.093	0.093	0.093	0.094	0.094	0.094	0.095	0.096	0.095	0.096
76	0.075	0.078	0.078	0.080	0.084	0.087	0.088	0.089	0.090	0.091	0.092	0.093	0.093	0.094	0.094	0.095	0.094	0.094	0.095	0.095
77	0.077	0.078	0.079	0.081	0.084	0.086	0.088	0.091	0.092	0.093	0.094	0.094	0.093	0.092	0.094	0.095	0.093	0.094	0.094	0.095
78	0.075	0.079	0.080	0.081	0.083	0.086	0.088	0.090	0.091	0.093	0.093	0.094	0.094	0.093	0.093	0.094	0.093	0.093	0.094	0.095
79	0.076	0.078	0.081	0.081	0.085	0.085	0.089	0.088	0.091	0.091	0.093	0.091	0.094	0.091	0.094	0.093	0.094	0.093	0.094	0.096
80	0.074	0.078	0.079	0.084	0.084	0.087	0.089	0.091	0.092	0.093	0.093	0.094	0.092	0.094	0.093	0.095	0.094	0.096	0.096	0.098
81	0.072	0.075	0.078	0.080	0.083	0.086	0.089	0.090	0.091	0.092	0.092	0.093	0.092	0.094	0.094	0.094	0.095	0.096	0.096	0.098
82	0.072	0.073	0.075	0.079	0.082	0.084	0.088	0.090	0.092	0.092	0.092	0.094	0.093	0.093	0.092	0.094	0.094	0.095	0.096	0.098
83	0.068	0.066	0.068	0.072	0.074	0.078	0.080	0.084	0.089	0.092	0.093	0.093	0.093	0.093	0.094	0.094	0.094	0.094	0.095	0.096
84	0.057	0.059	0.062	0.065	0.068	0.072	0.077	0.081	0.088	0.093	0.096	0.098	0.098	0.098	0.096	0.098	0.097	0.098	0.098	0.100
85	0.003	0.003	0.008	0.011	0.013	0.020	0.022	0.024	0.027	0.033	0.037	0.045	0.049	0.054	0.053	0.057	0.059	0.062	0.066	0.070
86	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
87	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
88	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
89	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
90	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.009	0.013	0.002	0.002	0.002	0.002	0.002	0.002
91	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.011	0.040	0.051	0.026	0.006	0.006	0.006	0.006	0.006
92	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.009	0.003	0.003	0.003	0.003	0.003	0.003
93	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
94	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
95	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
96	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
97	0.003	0.004	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
98	0.007	0.006	0.007	0.006	0.002	0.006	0.006	0.002	0.006	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.001	0.011	0.016

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 14.09 SEC
HRFR = 0.147E-01

GROUP 97

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	0.145	0.147	0.149	0.150	0.150	0.149	0.146	0.143	0.144	0.142	0.139	0.127	0.086	0.031	0.002	0.002	0.002	0.002	0.002	0.002
65	0.140	0.141	0.145	0.145	0.145	0.147	0.147	0.146	0.146	0.145	0.146	0.142	0.131	0.096	0.041	0.003	0.003	0.003	0.003	0.003
66	0.136	0.137	0.139	0.141	0.140	0.140	0.141	0.143	0.146	0.146	0.147	0.147	0.146	0.135	0.105	0.049	0.004	0.004	0.004	0.004
67	0.134	0.135	0.136	0.137	0.137	0.137	0.139	0.140	0.141	0.142	0.143	0.146	0.148	0.147	0.141	0.115	0.062	0.012	0.012	0.012
68	0.132	0.134	0.135	0.134	0.133	0.133	0.135	0.138	0.141	0.142	0.143	0.143	0.146	0.147	0.147	0.144	0.127	0.080	0.024	0.024
69	0.127	0.127	0.127	0.128	0.129	0.131	0.131	0.131	0.133	0.136	0.139	0.139	0.140	0.144	0.146	0.144	0.141	0.131	0.093	0.037
70	0.118	0.119	0.121	0.122	0.122	0.124	0.124	0.126	0.129	0.131	0.133	0.136	0.135	0.135	0.137	0.137	0.136	0.134	0.127	0.100
71	0.112	0.113	0.113	0.114	0.116	0.116	0.119	0.121	0.122	0.123	0.125	0.125	0.127	0.127	0.129	0.129	0.129	0.128	0.128	0.124
72	0.106	0.106	0.107	0.107	0.107	0.108	0.111	0.111	0.111	0.111	0.113	0.115	0.116	0.116	0.118	0.122	0.124	0.125	0.125	0.124
73	0.101	0.102	0.102	0.101	0.102	0.102	0.101	0.102	0.103	0.104	0.105	0.105	0.105	0.106	0.111	0.114	0.116	0.117	0.118	0.118
74	0.097	0.098	0.098	0.098	0.098	0.098	0.096	0.098	0.100	0.100	0.100	0.101	0.102	0.103	0.106	0.107	0.107	0.109	0.107	0.109
75	0.096	0.097	0.097	0.098	0.096	0.096	0.094	0.095	0.096	0.098	0.097	0.099	0.100	0.101	0.102	0.103	0.104	0.103	0.102	0.103
76	0.095	0.096	0.095	0.096	0.096	0.096	0.096	0.095	0.094	0.095	0.096	0.097	0.098	0.099	0.100	0.100	0.100	0.100	0.100	0.101
77	0.095	0.096	0.095	0.096	0.095	0.095	0.094	0.096	0.095	0.096	0.096	0.096	0.096	0.098	0.098	0.098	0.099	0.100	0.100	0.100
78	0.095	0.097	0.096	0.096	0.096	0.096	0.095	0.094	0.094	0.094	0.095	0.096	0.096	0.096	0.097	0.098	0.099	0.100	0.100	0.102
79	0.096	0.097	0.098	0.098	0.098	0.098	0.097	0.096	0.096	0.096	0.096	0.094	0.095	0.095	0.096	0.098	0.099	0.100	0.102	0.103
80	0.098	0.099	0.098	0.099	0.098	0.099	0.098	0.098	0.098	0.098	0.097	0.098	0.096	0.098	0.096	0.098	0.098	0.101	0.102	0.103
81	0.098	0.100	0.100	0.102	0.101	0.101	0.101	0.100	0.100	0.102	0.100	0.100	0.100	0.100	0.100	0.102	0.101	0.102	0.102	0.102
82	0.098	0.099	0.100	0.101	0.100	0.101	0.100	0.101	0.100	0.100	0.100	0.100	0.099	0.102	0.102	0.104	0.104	0.104	0.104	0.105
83	0.097	0.098	0.098	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.101	0.102	0.102	0.104	0.104	0.105	0.104	0.105
84	0.102	0.101	0.102	0.102	0.102	0.101	0.100	0.100	0.098	0.099	0.097	0.098	0.098	0.100	0.100	0.102	0.102	0.104	0.104	0.106
85	0.074	0.078	0.081	0.086	0.089	0.091	0.091	0.091	0.091	0.092	0.092	0.094	0.094	0.094	0.094	0.095	0.094	0.098	0.098	0.098
86	0.003	0.003	0.003	0.003	0.001	0.002	0.003	0.003	0.004	0.008	0.011	0.009	0.012	0.013	0.013	0.013	0.015	0.019	0.021	0.024
87	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
88	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
89	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
90	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
91	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.009	0.030	0.030	0.011	0.001	0.001	0.001	0.001	0.001	0.001	0.001
92	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.001	0.015	0.020	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
93	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
94	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
95	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
96	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003
97	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.004
98	0.011	0.003	0.003	0.003	0.003	0.003	0.003	0.001	0.002	0.002	0.003	0.003	0.002	0.003	0.003	0.002	0.002	0.004	0.004	0.004

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HRFR
IR SCAN TIME 14.09 SEC
HRFR = 0.147E-01

GROUP 97

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
65	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
66	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
67	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
68	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024
69	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037
70	0.048	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
71	0.105	0.064	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
72	0.121	0.107	0.065	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016
73	0.118	0.118	0.108	0.073	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023
74	0.109	0.110	0.108	0.104	0.075	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033
75	0.104	0.106	0.104	0.104	0.099	0.079	0.035	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
76	0.100	0.101	0.102	0.102	0.100	0.098	0.082	0.045	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
77	0.102	0.104	0.104	0.102	0.101	0.100	0.097	0.089	0.058	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
78	0.103	0.105	0.104	0.104	0.104	0.103	0.101	0.100	0.094	0.074	0.035	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
79	0.104	0.103	0.103	0.104	0.106	0.104	0.103	0.103	0.102	0.099	0.084	0.049	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
80	0.103	0.104	0.105	0.106	0.106	0.107	0.106	0.106	0.104	0.104	0.101	0.090	0.058	0.018	0.018	0.018	0.018	0.018	0.018	0.018
81	0.103	0.107	0.106	0.107	0.107	0.109	0.107	0.107	0.106	0.106	0.104	0.106	0.096	0.064	0.021	0.021	0.021	0.021	0.021	0.021
82	0.105	0.106	0.106	0.106	0.106	0.107	0.108	0.110	0.111	0.110	0.110	0.111	0.109	0.098	0.070	0.032	0.002	0.002	0.002	0.002
83	0.106	0.106	0.106	0.106	0.106	0.107	0.108	0.110	0.112	0.114	0.114	0.113	0.112	0.109	0.098	0.075	0.037	0.006	0.006	0.006
84	0.106	0.107	0.107	0.108	0.109	0.110	0.110	0.112	0.112	0.114	0.117	0.118	0.118	0.115	0.110	0.103	0.082	0.049	0.012	0.012
85	0.100	0.102	0.104	0.106	0.107	0.109	0.111	0.113	0.114	0.116	0.116	0.119	0.119	0.119	0.116	0.113	0.105	0.091	0.059	0.025
86	0.027	0.029	0.037	0.040	0.042	0.046	0.050	0.053	0.058	0.061	0.064	0.068	0.070	0.072	0.072	0.072	0.070	0.066	0.058	0.038
87	0.001	0.003	0.003	0.006	0.004	0.003	0.003	0.001	0.006	0.011	0.009	0.007	0.004	0.006	0.003	0.004	0.004	0.004	0.002	0.002
88	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
89	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.002	0.002	0.002
90	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.004	0.004	0.004	0.003	0.009	0.008	0.006	0.001	0.002
91	0.001	0.001	0.001	0.001	0.001	0.001	0.012	0.018	0.008	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.002	0.003	0.001	0.002
92	0.008	0.008	0.008	0.008	0.008	0.001	0.015	0.027	0.016	0.007	0.007	0.001	0.001	0.002	0.002	0.003	0.002	0.003	0.002	0.002
93	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.002	0.002	0.006	0.006	0.006	0.006	0.007	0.006	0.006
94	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.003	0.003	0.003	0.006	0.007	0.009	0.011	0.013	0.013	0.013	0.012	0.013
95	0.001	0.001	0.001	0.001	0.002	0.001	0.004	0.003	0.006	0.006	0.007	0.009	0.012	0.013	0.015	0.016	0.019	0.016	0.016	0.015
96	0.002	0.003	0.002	0.004	0.003	0.006	0.006	0.007	0.006	0.008	0.008	0.011	0.012	0.016	0.019	0.022	0.021	0.020	0.020	0.019
97	0.002	0.004	0.004	0.006	0.006	0.008	0.008	0.011	0.011	0.009	0.009	0.013	0.016	0.022	0.025	0.027	0.027	0.027	0.023	0.023
98	0.007	0.007	0.003	0.008	0.008	0.009	0.009	0.013	0.008	0.009	0.013	0.022	0.023	0.029	0.031	0.033	0.032	0.031	0.027	0.026

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 14.09 SEC
HRFR = 0.147E-01

GROUP 97

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
65	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
66	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
67	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
68	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024
69	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037
70	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
71	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
72	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016
73	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023
74	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033
75	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
76	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
77	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
78	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
79	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
80	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
81	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021
82	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
83	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
84	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
85	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
86	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
87	0.001	0.004	0.003	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
88	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
89	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
90	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
91	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
92	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.003	0.003	0.004	0.002	0.002	0.001	0.003	0.003	0.003	0.003	0.003	0.001	0.002
93	0.004	0.006	0.004	0.006	0.007	0.008	0.006	0.008	0.007	0.008	0.008	0.008	0.009	0.008	0.009	0.008	0.008	0.008	0.007	0.007
94	0.011	0.012	0.013	0.013	0.012	0.013	0.013	0.014	0.013	0.014	0.013	0.015	0.013	0.015	0.014	0.015	0.013	0.016	0.012	0.013
95	0.018	0.016	0.016	0.019	0.020	0.020	0.020	0.021	0.020	0.021	0.021	0.022	0.022	0.024	0.023	0.024	0.024	0.025	0.026	0.026
96	0.019	0.021	0.022	0.022	0.022	0.026	0.024	0.029	0.027	0.033	0.033	0.037	0.039	0.041	0.041	0.043	0.042	0.044	0.043	0.044
97	0.022	0.024	0.025	0.027	0.029	0.032	0.035	0.038	0.039	0.041	0.043	0.047	0.048	0.052	0.051	0.053	0.052	0.054	0.053	0.055
98	0.024	0.026	0.029	0.030	0.033	0.035	0.039	0.041	0.043	0.045	0.048	0.049	0.051	0.052	0.053	0.052	0.053	0.053	0.053	0.054

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 14.09 SEC
HRFR = 0.147E-01

.GROUP 97

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
65	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
66	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
67	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
68	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024
69	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037
70	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
71	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
72	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016
73	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023
74	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033
75	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
76	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
77	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
78	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
79	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
80	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
81	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021
82	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
83	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
84	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
85	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
86	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
87	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
88	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001
89	0.002	0.002	0.002	0.002	0.001	0.001	0.002	0.002	0.001	0.001	0.001
90	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.002	0.002	0.002
91	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.003	0.003	0.004
92	0.001	0.002	0.001	0.003	0.002	0.004	0.003	0.006	0.006	0.008
93	0.006	0.007	0.006	0.007	0.006	0.008	0.008	0.011	0.011	0.013
94	0.012	0.013	0.013	0.015	0.014	0.015	0.016	0.018	0.019	0.020
95	0.026	0.026	0.027	0.027	0.030	0.027	0.030	0.027	0.030	0.030
96	0.041	0.041	0.041	0.042	0.041	0.044	0.044	0.045	0.045	0.046
97	0.051	0.052	0.050	0.051	0.051	0.053	0.052	0.056	0.058	0.062
98	0.054	0.054	0.056	0.055	0.055	0.059	0.061	0.074	0.102	0.137

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

GROUP	* * * * TITLE TYPE	MODEL DESCRIPTION * * * * GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
111	RS1 AFT	0.02	0.010	-10.04	40.04	0.053	4	42	38

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/F FT-1	HRFR BTU/FT2-SEC-R	INITIAL TEMP DEG R
7.96	320.27	1297.67	94.91	0.0339	3802.	0.300E-04	0.764E-07	0.149E+07	0.253E-01	554.7

IR CAMERA INFORMATION

MOUNTING LOCATION	260
F STOP	1.8
LENS-DEG	15
SENSITIVITY	1000.
BLACK LEVEL VOLTAGE	2.4542
LINE SCAN PHI	90
MODEL EMISSIVITY	0.96
REF EMISSIVITY	0.94
WINDOW FACTUR	0.860

TIME RECORDS

LIFT OFF	0.00
CENTER LINE	1.99
IR SCAN TIME	10.37
DELTA TIME,SEC	9.26
PHOTO 1 TIME	.442
PHOTO 2 TIME	0
PHOTO 3 TIME	0
PHOTO 4 TIME	0

REFERENCE TARGET INFORMATION

TCR5	502.15
TCR6	-228.49

DIGITAL DATA AREA PRINTOUT LOCATION

LINE 29 THROUGH 98
POINT 1 THROUGH 110

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 111

IR SCAN TIME 9.26 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	1.010	1.011	1.013	1.013	1.013	1.011	1.011	1.007	1.013	1.008	1.010	1.006	1.006	1.007	1.010	1.010	1.010	1.010	1.010	1.010
30	1.012	1.013	1.012	1.013	1.011	1.010	1.008	1.010	1.010	1.010	1.011	1.010	1.010	1.010	1.010	1.011	1.010	1.010	1.010	1.008
31	1.016	1.013	1.012	1.012	1.013	1.011	1.011	1.011	1.012	1.010	1.011	1.011	1.011	1.013	1.012	1.011	1.011	1.010	1.007	1.007
32	1.014	1.012	1.012	1.013	1.013	1.013	1.016	1.013	1.012	1.012	1.013	1.012	1.010	1.011	1.011	1.010	1.010	1.007	1.006	1.006
33	1.014	1.016	1.016	1.016	1.018	1.016	1.013	1.013	1.012	1.012	1.011	1.011	1.010	1.008	1.006	1.007	1.007	1.010	1.012	1.011
34	1.017	1.017	1.018	1.014	1.013	1.014	1.012	1.011	1.010	1.010	1.010	1.007	1.006	1.007	1.008	1.008	1.012	1.012	1.013	1.013
35	1.017	1.017	1.010	1.011	1.008	1.010	1.006	1.006	1.003	1.005	1.005	1.007	1.007	1.011	1.010	1.013	1.013	1.016	1.016	1.012
36	1.013	1.012	1.010	1.010	1.007	1.006	1.006	1.007	1.007	1.008	1.010	1.011	1.011	1.013	1.013	1.013	1.010	1.006	1.001	0.991
37	1.014	1.006	1.007	1.006	1.005	1.007	1.008	1.010	1.008	1.010	1.011	1.013	1.014	1.014	1.006	1.001	0.993	0.989	0.978	0.975
38	1.006	1.008	1.008	1.008	1.010	1.010	1.012	1.012	1.012	1.012	1.013	1.008	1.003	0.996	0.989	0.980	0.975	0.973	0.975	0.973
39	1.008	1.008	1.010	1.010	1.010	1.011	1.012	1.013	1.011	1.006	1.000	0.990	0.984	0.976	0.975	0.975	0.973	0.972	0.973	0.973
40	1.011	1.012	1.012	1.011	1.012	1.012	1.010	1.005	0.997	0.987	0.981	0.976	0.976	0.975	0.976	0.975	0.975	0.975	0.975	0.975
41	1.013	1.014	1.013	1.014	1.011	1.003	0.996	0.986	0.981	0.975	0.978	0.976	0.976	0.976	0.978	0.976	0.978	0.978	0.978	0.978
42	1.017	1.018	1.016	1.002	0.996	0.983	0.981	0.975	0.978	0.975	0.978	0.975	0.980	0.980	0.980	0.978	0.980	0.980	0.980	0.980
43	1.017	1.007	0.998	0.987	0.983	0.980	0.980	0.978	0.980	0.976	0.980	0.980	0.981	0.978	0.981	0.980	0.981	0.980	0.983	0.980
44	0.998	0.989	0.984	0.984	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.980	0.981	0.981	0.984	0.983	0.986	0.987	0.990
45	0.989	0.987	0.986	0.987	0.986	0.984	0.984	0.984	0.983	0.984	0.984	0.987	0.984	0.987	0.987	0.989	0.989	0.997	1.026	1.070
46	0.991	0.993	0.990	0.989	0.989	0.989	0.990	0.989	0.989	0.990	0.990	0.990	0.990	0.994	0.994	0.996	0.997	1.022	1.115	1.217
47	0.994	0.994	0.994	0.994	0.994	0.993	0.994	0.994	0.993	0.994	0.994	0.996	0.996	0.997	0.997	1.000	1.005	1.043	1.154	1.257
48	0.997	0.996	0.997	0.997	0.996	0.996	0.998	0.996	0.996	0.996	0.997	0.997	0.998	1.000	1.001	1.002	1.007	1.053	1.170	1.270
49	0.998	0.998	0.998	0.997	0.996	0.997	0.994	0.997	0.996	0.998	0.997	1.000	1.001	1.001	1.001	1.005	1.012	1.066	1.188	1.281
50	0.997	0.997	0.998	0.997	0.998	0.997	0.997	0.997	0.997	0.997	1.000	0.998	1.001	1.001	1.005	1.006	1.016	1.077	1.202	1.287
51	0.996	0.996	0.996	0.996	0.996	0.996	0.997	0.996	0.997	0.997	0.998	0.998	1.000	1.001	1.002	1.007	1.027	1.110	1.227	1.297
52	0.990	0.990	0.991	0.990	0.991	0.990	0.993	0.991	0.989	0.993	0.994	0.994	0.997	0.996	1.001	1.003	1.044	1.155	1.262	1.313
53	0.983	0.984	0.983	0.981	0.984	0.981	0.983	0.983	0.984	0.984	0.986	0.986	0.989	0.989	0.993	0.998	1.054	1.182	1.279	1.320
54	0.975	0.976	0.975	0.975	0.975	0.973	0.975	0.972	0.975	0.975	0.978	0.976	0.980	0.981	0.987	0.997	1.080	1.212	1.293	1.324
55	0.972	0.970	0.972	0.970	0.972	0.970	0.972	0.972	0.972	0.972	0.973	0.975	0.976	0.980	0.984	1.007	1.111	1.238	1.303	1.328
56	0.970	0.967	0.970	0.961	0.970	0.965	0.972	0.965	0.972	0.973	0.975	0.975	0.978	0.981	0.986	1.019	1.138	1.256	1.311	1.330
57	0.970	0.968	0.970	0.968	0.970	0.968	0.972	0.970	0.973	0.972	0.975	0.972	0.978	0.978	0.987	1.033	1.157	1.268	1.314	1.329
58	0.972	0.970	0.972	0.972	0.970	0.972	0.972	0.972	0.972	0.973	0.975	0.976	0.976	0.983	0.989	1.044	1.173	1.278	1.321	1.336
59	0.973	0.972	0.972	0.970	0.972	0.972	0.972	0.972	0.975	0.972	0.976	0.976	0.980	0.981	0.996	1.065	1.198	1.290	1.323	1.337
60	0.970	0.972	0.970	0.972	0.972	0.972	0.972	0.973	0.972	0.975	0.975	0.976	0.980	0.984	1.001	1.099	1.228	1.296	1.318	1.330
61	0.968	0.970	0.970	0.970	0.970	0.972	0.972	0.972	0.973	0.975	0.975	0.980	0.981	0.986	1.013	1.130	1.249	1.300	1.318	1.327
62	0.972	0.972	0.972	0.972	0.972	0.973	0.975	0.973	0.975	0.976	0.978	0.980	0.981	0.991	1.040	1.167	1.268	1.305	1.319	1.327
63	0.972	0.973	0.968	0.972	0.968	0.970	0.972	0.975	0.975	0.978	0.980	0.981	0.984	0.996	1.065	1.196	1.277	1.304	1.317	1.326

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VAF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 111

IR SCAN TIME 9.26 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	1.007	1.010	1.007	1.010	1.006	1.008	1.003	1.005	1.001	1.003	1.001	1.003	1.001	1.001	1.001	1.005	1.006	1.006	1.006	1.007
30	1.008	1.008	1.007	1.006	1.007	1.005	1.005	1.003	1.006	1.006	1.007	1.008	1.010	1.008	1.010	1.010	1.011	1.013	1.007	1.008
31	1.006	1.006	1.005	1.006	1.007	1.010	1.010	1.010	1.011	1.013	1.013	1.017	1.014	1.013	1.012	1.008	1.006	1.001	0.998	0.994
32	1.006	1.008	1.010	1.012	1.012	1.014	1.013	1.014	1.016	1.016	1.013	1.011	1.007	1.001	0.996	0.990	0.986	0.980	0.973	0.970
33	1.012	1.012	1.012	1.014	1.017	1.016	1.012	1.008	1.005	1.001	0.996	0.993	0.984	0.975	0.970	0.967	0.961	0.963	0.961	0.963
34	1.014	1.014	1.013	1.011	1.007	1.000	0.994	0.987	0.981	0.973	0.968	0.965	0.965	0.965	0.963	0.961	0.963	0.961	0.965	0.961
35	1.007	1.001	0.996	0.989	0.980	0.972	0.968	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.963	0.965	0.965	0.965
36	0.986	0.975	0.970	0.967	0.968	0.967	0.967	0.965	0.967	0.965	0.967	0.963	0.967	0.968	0.968	0.968	0.968	0.968	0.968	0.967
37	0.972	0.972	0.972	0.975	0.970	0.972	0.968	0.972	0.972	0.968	0.970	0.968	0.970	0.968	0.970	0.963	0.972	0.963	0.970	0.963
38	0.975	0.972	0.973	0.972	0.972	0.972	0.972	0.972	0.973	0.972	0.973	0.972	0.972	0.972	0.972	0.972	0.973	0.972	0.972	0.972
39	0.975	0.973	0.975	0.975	0.975	0.975	0.975	0.973	0.975	0.973	0.975	0.976	0.976	0.976	0.978	0.976	0.978	0.975	0.975	0.973
40	0.976	0.976	0.976	0.976	0.976	0.978	0.978	0.978	0.978	0.978	0.980	0.976	0.978	0.976	0.978	0.976	0.978	0.975	0.976	0.975
41	0.978	0.978	0.980	0.980	0.980	0.981	0.981	0.980	0.981	0.980	0.981	0.981	0.981	0.980	0.978	0.978	0.980	0.978	0.980	0.978
42	0.981	0.981	0.983	0.981	0.984	0.983	0.983	0.983	0.984	0.984	0.984	0.983	0.984	0.981	0.984	0.981	0.983	0.981	0.981	0.981
43	0.983	0.981	0.986	0.984	0.987	0.984	0.987	0.983	0.987	0.984	0.989	0.986	0.987	0.986	0.987	0.984	0.984	0.983	0.983	0.981
44	0.991	0.993	0.993	0.993	0.993	0.993	0.990	0.993	0.993	0.990	0.990	0.990	0.989	0.989	0.986	0.987	0.984	0.987	0.981	0.986
45	1.097	1.106	1.103	1.094	1.082	1.066	1.048	1.034	1.019	1.008	1.003	0.998	0.997	0.996	0.994	0.994	0.994	0.993	0.990	0.991
46	1.275	1.304	1.320	1.327	1.326	1.317	1.298	1.267	1.227	1.180	1.124	1.068	1.029	1.012	1.003	1.001	1.000	0.998	0.998	0.997
47	1.312	1.342	1.365	1.384	1.402	1.421	1.438	1.449	1.454	1.441	1.368	1.254	1.150	1.071	1.031	1.016	1.007	1.005	1.005	1.002
48	1.321	1.349	1.372	1.392	1.408	1.424	1.440	1.457	1.470	1.484	1.491	1.432	1.309	1.191	1.102	1.051	1.026	1.017	1.007	1.007
49	1.324	1.349	1.372	1.396	1.415	1.431	1.443	1.455	1.465	1.474	1.484	1.499	1.459	1.340	1.209	1.112	1.060	1.040	1.030	1.022
50	1.325	1.346	1.364	1.383	1.405	1.426	1.444	1.458	1.467	1.472	1.475	1.478	1.484	1.455	1.350	1.215	1.113	1.052	1.032	1.028
51	1.329	1.348	1.365	1.381	1.400	1.418	1.432	1.449	1.465	1.473	1.474	1.473	1.468	1.455	1.406	1.296	1.173	1.087	1.039	1.020
52	1.336	1.353	1.369	1.385	1.402	1.417	1.429	1.439	1.453	1.465	1.476	1.482	1.479	1.467	1.437	1.370	1.266	1.157	1.080	1.035
53	1.339	1.352	1.365	1.380	1.397	1.412	1.423	1.434	1.448	1.459	1.464	1.467	1.473	1.477	1.473	1.450	1.388	1.284	1.172	1.087
54	1.341	1.353	1.366	1.381	1.398	1.411	1.419	1.428	1.442	1.456	1.465	1.469	1.465	1.459	1.458	1.463	1.462	1.428	1.343	1.224
55	1.342	1.354	1.368	1.380	1.396	1.409	1.418	1.426	1.437	1.449	1.460	1.467	1.471	1.469	1.461	1.447	1.443	1.454	1.455	1.401
56	1.340	1.350	1.361	1.374	1.387	1.395	1.405	1.417	1.433	1.447	1.457	1.463	1.466	1.468	1.470	1.468	1.458	1.438	1.431	1.450
57	1.339	1.347	1.357	1.370	1.380	1.387	1.395	1.407	1.423	1.439	1.452	1.463	1.470	1.472	1.472	1.473	1.475	1.474	1.460	1.431
58	1.344	1.351	1.361	1.374	1.383	1.390	1.396	1.404	1.417	1.431	1.444	1.454	1.462	1.470	1.475	1.477	1.479	1.481	1.483	1.479
59	1.347	1.355	1.366	1.379	1.389	1.397	1.403	1.409	1.419	1.431	1.442	1.452	1.461	1.466	1.468	1.471	1.470	1.468	1.471	1.480	1.490
60	1.339	1.348	1.360	1.375	1.390	1.402	1.411	1.420	1.431	1.442	1.452	1.461	1.466	1.468	1.471	1.470	1.468	1.471	1.480	1.490
61	1.333	1.339	1.347	1.357	1.370	1.385	1.399	1.412	1.429	1.445	1.460	1.471	1.475	1.479	1.481	1.478	1.475	1.472	1.468	1.462
62	1.334	1.340	1.346	1.353	1.361	1.370	1.376	1.379	1.389	1.403	1.420	1.440	1.459	1.476	1.484	1.487	1.487	1.482	1.481	1.478
63	1.333	1.340	1.346	1.354	1.365	1.376	1.383	1.384	1.386	1.389	1.387	1.386	1.389	1.403	1.426	1.450	1.468	1.482	1.490	1.490

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 111

IR SCAN TIME 9.26 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	1.008	1.008	1.007	1.006	1.005	1.003	1.003	1.001	0.998	0.994	0.990	0.990	0.986	0.986	0.984	0.981	0.978	0.978	0.976	0.973
30	1.005	1.005	0.998	0.998	0.993	0.993	0.987	0.987	0.980	0.980	0.972	0.972	0.967	0.968	0.965	0.963	0.963	0.961	0.961	0.961
31	0.990	0.987	0.981	0.978	0.972	0.968	0.965	0.963	0.961	0.959	0.959	0.958	0.959	0.958	0.958	0.958	0.954	0.958	0.956	0.958
32	0.967	0.963	0.963	0.963	0.961	0.961	0.961	0.959	0.961	0.959	0.958	0.958	0.958	0.956	0.958	0.958	0.958	0.959	0.958	0.958
33	0.961	0.961	0.961	0.961	0.961	0.959	0.961	0.961	0.959	0.961	0.959	0.959	0.958	0.958	0.956	0.958	0.956	0.958	0.956	0.956
34	0.963	0.961	0.965	0.961	0.963	0.963	0.963	0.961	0.961	0.959	0.961	0.959	0.959	0.958	0.959	0.958	0.959	0.958	0.958	0.958
35	0.965	0.965	0.963	0.965	0.963	0.963	0.963	0.963	0.963	0.963	0.961	0.963	0.961	0.959	0.959	0.959	0.961	0.959	0.959	0.958
36	0.967	0.965	0.967	0.965	0.967	0.967	0.967	0.965	0.967	0.967	0.965	0.963	0.965	0.965	0.965	0.963	0.961	0.963	0.963	0.961
37	0.972	0.959	0.972	0.961	0.970	0.961	0.968	0.961	0.968	0.961	0.968	0.968	0.967	0.965	0.965	0.965	0.965	0.963	0.965	0.963
38	0.972	0.972	0.972	0.972	0.970	0.972	0.972	0.972	0.970	0.968	0.970	0.968	0.970	0.965	0.968	0.965	0.967	0.963	0.967	0.963
39	0.973	0.973	0.973	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.970	0.970	0.972	0.968	0.970	0.968	0.968	0.968	0.967	0.968
40	0.975	0.975	0.975	0.975	0.975	0.973	0.973	0.975	0.972	0.972	0.972	0.972	0.972	0.972	0.970	0.970	0.972	0.970	0.970	0.968
41	0.978	0.976	0.978	0.975	0.976	0.975	0.976	0.975	0.975	0.975	0.973	0.975	0.973	0.972	0.972	0.972	0.972	0.972	0.972	0.970
42	0.980	0.980	0.980	0.980	0.980	0.978	0.978	0.976	0.976	0.975	0.975	0.975	0.975	0.973	0.975	0.973	0.972	0.972	0.972	0.972
43	0.984	0.981	0.981	0.980	0.981	0.978	0.981	0.978	0.980	0.978	0.978	0.976	0.978	0.975	0.975	0.975	0.975	0.973	0.973	0.973
44	0.980	0.984	0.980	0.984	0.980	0.981	0.978	0.981	0.978	0.980	0.980	0.980	0.978	0.980	0.978	0.978	0.975	0.978	0.975	0.976
45	0.989	0.989	0.987	0.987	0.986	0.986	0.984	0.984	0.983	0.983	0.981	0.984	0.978	0.983	0.980	0.981	0.978	0.981	0.978	0.980
46	0.997	0.996	0.996	0.996	0.994	0.993	0.991	0.990	0.990	0.990	0.987	0.989	0.987	0.989	0.987	0.987	0.987	0.987	0.986	0.986
47	1.002	1.001	1.001	1.000	0.998	0.997	0.994	0.997	0.994	0.996	0.993	0.993	0.990	0.991	0.990	0.990	0.991	0.990	0.990	0.991
48	1.006	1.007	1.005	1.002	1.002	1.000	0.998	0.997	0.996	0.997	0.996	0.996	0.996	0.996	0.994	0.994	0.993	0.993	0.991	0.993
49	1.014	1.010	1.007	1.007	1.003	1.002	1.002	1.000	1.000	0.998	0.997	0.998	0.996	0.997	0.996	0.997	0.996	0.994	0.993	0.994
50	1.031	1.027	1.018	1.012	1.008	1.006	1.006	1.002	1.002	1.001	1.001	1.000	1.000	0.998	0.998	0.997	0.997	0.997	0.996	0.996
51	1.013	1.017	1.018	1.017	1.010	1.006	1.003	1.003	1.003	1.001	1.001	1.000	1.000	0.998	0.998	0.998	0.997	0.996	0.996	0.996
52	1.018	1.011	1.010	1.007	1.008	1.005	1.003	1.000	0.998	0.996	0.998	0.994	0.994	0.993	0.994	0.990	0.993	0.990	0.991	0.989
53	1.040	1.018	1.010	1.007	1.006	1.002	0.998	0.993	0.989	0.987	0.986	0.984	0.984	0.981	0.981	0.981	0.981	0.980	0.980	0.976
54	1.120	1.054	1.022	1.008	1.006	1.003	1.005	0.996	0.989	0.981	0.980	0.976	0.976	0.975	0.975	0.972	0.972	0.972	0.972	0.968
55	1.288	1.166	1.079	1.032	1.012	1.006	1.005	1.002	0.997	0.987	0.981	0.976	0.978	0.973	0.975	0.972	0.972	0.968	0.970	0.968
56	1.438	1.343	1.210	1.106	1.045	1.016	1.006	1.005	1.003	0.998	0.990	0.983	0.981	0.976	0.978	0.975	0.975	0.973	0.973	0.970
57	1.418	1.427	1.378	1.253	1.138	1.061	1.025	1.006	1.006	1.005	1.001	0.993	0.984	0.980	0.980	0.975	0.978	0.975	0.975	0.972
58	1.461	1.423	1.397	1.375	1.285	1.166	1.078	1.030	1.007	1.002	1.002	1.000	0.994	0.987	0.981	0.981	0.978	0.978	0.975	0.975
59	1.486	1.479	1.452	1.395	1.323	1.225	1.117	1.050	1.019	1.002	0.998	0.998	1.000	0.993	0.987	0.983	0.981	0.976	0.978	0.975
60	1.494	1.493	1.492	1.479	1.433	1.344	1.229	1.126	1.056	1.021	1.003	0.998	0.998	0.998	0.994	0.989	0.983	0.981	0.980	0.978
61	1.462	1.470	1.482	1.490	1.490	1.472	1.419	1.324	1.201	1.100	1.040	1.012	1.001	0.996	0.998	0.996	0.989	0.986	0.981	0.981
62	1.469	1.447	1.421	1.416	1.437	1.462	1.473	1.455	1.383	1.251	1.129	1.056	1.018	1.003	0.997	0.996	0.996	0.991	0.983	0.983
63	1.484	1.480	1.468	1.437	1.390	1.354	1.359	1.390	1.399	1.338	1.211	1.106	1.046	1.016	1.002	0.997	0.996	0.994	0.990	0.986

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 111

IR SCAN TIME 9.26 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.970	0.970	0.968	0.967	0.967	0.967	0.968	0.967	0.968	0.967	0.967	0.967	0.967	0.967	0.965	0.967	0.967	0.967	0.963	0.967
30	0.961	0.961	0.961	0.959	0.958	0.959	0.959	0.959	0.958	0.959	0.958	0.959	0.959	0.961	0.959	0.959	0.961	0.961	0.959	0.961
31	0.954	0.958	0.956	0.958	0.954	0.956	0.952	0.956	0.952	0.956	0.952	0.958	0.956	0.958	0.958	0.956	0.958	0.958	0.956	0.958
32	0.958	0.958	0.956	0.956	0.956	0.956	0.956	0.954	0.956	0.954	0.954	0.954	0.956	0.958	0.950	0.956	0.950	0.958	0.952	0.954
33	0.956	0.954	0.956	0.956	0.954	0.956	0.956	0.956	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.952	0.956	0.954
34	0.961	0.958	0.958	0.956	0.954	0.956	0.958	0.956	0.956	0.954	0.954	0.956	0.954	0.954	0.956	0.954	0.954	0.954	0.954	0.954
35	0.958	0.958	0.958	0.958	0.958	0.958	0.958	0.958	0.956	0.956	0.958	0.956	0.956	0.956	0.956	0.954	0.954	0.954	0.956	0.954
36	0.961	0.961	0.961	0.961	0.961	0.958	0.959	0.959	0.961	0.958	0.959	0.958	0.958	0.958	0.958	0.956	0.958	0.956	0.956	0.956
37	0.965	0.961	0.963	0.963	0.963	0.961	0.963	0.961	0.961	0.961	0.961	0.961	0.961	0.961	0.959	0.959	0.959	0.958	0.958	0.958
38	0.965	0.963	0.965	0.963	0.965	0.961	0.965	0.961	0.965	0.963	0.965	0.963	0.965	0.963	0.963	0.963	0.961	0.959	0.963	0.963
39	0.968	0.967	0.967	0.967	0.967	0.965	0.965	0.965	0.965	0.963	0.965	0.961	0.965	0.961	0.965	0.961	0.965	0.961	0.963	0.959
40	0.966	0.968	0.970	0.968	0.968	0.967	0.968	0.965	0.968	0.965	0.967	0.965	0.968	0.965	0.967	0.965	0.967	0.963	0.965	0.963
41	0.972	0.968	0.970	0.968	0.970	0.968	0.970	0.968	0.970	0.968	0.968	0.968	0.968	0.968	0.968	0.967	0.968	0.965	0.967	0.965
42	0.972	0.972	0.972	0.972	0.972	0.968	0.970	0.968	0.970	0.968	0.972	0.968	0.968	0.968	0.970	0.968	0.968	0.967	0.968	0.967
43	0.973	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.970	0.968	0.972	0.968	0.970	0.968	0.968	0.968	0.968	0.968
44	0.975	0.975	0.975	0.973	0.972	0.973	0.973	0.972	0.975	0.972	0.972	0.972	0.972	0.972	0.970	0.972	0.972	0.972	0.972	0.972
45	0.978	0.980	0.976	0.976	0.975	0.978	0.978	0.978	0.976	0.978	0.975	0.978	0.976	0.976	0.975	0.976	0.975	0.976	0.975	0.975
46	0.984	0.986	0.984	0.984	0.981	0.983	0.983	0.981	0.980	0.986	0.978	0.984	0.976	0.984	0.978	0.983	0.976	0.983	0.976	0.983
47	0.989	0.990	0.987	0.990	0.989	0.989	0.987	0.987	0.986	0.987	0.986	0.987	0.986	0.986	0.984	0.986	0.984	0.986	0.986	0.987
48	0.991	0.991	0.990	0.991	0.990	0.987	0.989	0.990	0.987	0.990	0.987	0.989	0.987	0.989	0.987	0.987	0.987	0.986	0.987	0.987
49	0.993	0.993	0.991	0.993	0.991	0.991	0.991	0.991	0.990	0.991	0.990	0.991	0.989	0.990	0.989	0.989	0.990	0.990	0.987	0.989
50	0.996	0.994	0.996	0.993	0.994	0.994	0.994	0.993	0.993	0.991	0.993	0.990	0.991	0.990	0.990	0.990	0.991	0.993	0.991	0.990
51	0.996	0.996	0.994	0.994	0.993	0.994	0.993	0.994	0.993	0.996	0.993	0.989	0.990	0.990	0.993	0.990	0.990	0.990	0.990	0.990
52	0.990	0.987	0.990	0.986	0.987	0.987	0.989	0.987	0.987	0.984	0.987	0.984	0.986	0.984	0.986	0.981	0.984	0.984	0.984	0.983
53	0.978	0.975	0.976	0.975	0.975	0.975	0.973	0.968	0.975	0.970	0.972	0.968	0.972	0.968	0.972	0.968	0.972	0.968	0.972	0.968
54	0.968	0.968	0.968	0.965	0.967	0.967	0.965	0.965	0.965	0.965	0.967	0.963	0.963	0.963	0.963	0.961	0.963	0.961	0.961	0.961
55	0.968	0.967	0.965	0.967	0.967	0.963	0.965	0.963	0.965	0.963	0.965	0.961	0.963	0.961	0.961	0.959	0.963	0.961	0.961	0.959
56	0.968	0.968	0.968	0.967	0.968	0.967	0.967	0.965	0.965	0.963	0.965	0.968	0.965	0.963	0.965	0.961	0.963	0.961	0.961	0.961
57	0.972	0.970	0.972	0.968	0.970	0.968	0.968	0.968	0.968	0.967	0.968	0.968	0.970	0.965	0.968	0.965	0.967	0.963	0.965	0.963
58	0.972	0.975	0.973	0.973	0.973	0.973	0.972	0.972	0.973	0.972	0.973	0.972	0.973	0.972	0.972	0.972	0.972	0.972	0.972	0.972
59	0.976	0.972	0.975	0.972	0.973	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.970	0.972	0.968	0.970	0.968	0.968	0.968
60	0.975	0.975	0.975	0.972	0.972	0.973	0.968	0.972	0.968	0.972	0.968	0.972	0.967	0.970	0.967	0.968	0.965	0.968	0.965	0.965
61	0.980	0.978	0.976	0.975	0.975	0.975	0.973	0.973	0.972	0.972	0.972	0.972	0.972	0.972	0.970	0.972	0.970	0.970	0.968	0.968
62	0.980	0.981	0.976	0.978	0.976	0.975	0.976	0.975	0.975	0.975	0.975	0.973	0.973	0.973	0.972	0.972	0.972	0.972	0.972	0.972
63	0.983	0.983	0.980	0.980	0.978	0.978	0.976	0.976	0.975	0.976	0.975	0.976	0.975	0.973	0.973	0.975	0.972	0.972	0.973	0.975

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
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MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 111

IR SCAN TIME 9.26 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.965	0.965	0.965	0.967	0.965	0.965	0.963	0.963	0.963	0.963	0.963	0.963	0.961	0.961	0.961	0.959	0.959	0.958	0.958	0.958
30	0.961	0.961	0.961	0.961	0.961	0.961	0.959	0.959	0.959	0.961	0.959	0.961	0.958	0.958	0.959	0.956	0.956	0.956	0.954	0.954
31	0.958	0.958	0.958	0.959	0.958	0.958	0.959	0.959	0.956	0.958	0.956	0.958	0.956	0.956	0.956	0.956	0.956	0.954	0.954	0.952
32	0.952	0.956	0.952	0.956	0.952	0.956	0.954	0.958	0.952	0.956	0.956	0.956	0.956	0.956	0.954	0.954	0.954	0.954	0.952	0.954
33	0.954	0.954	0.954	0.954	0.952	0.952	0.954	0.954	0.952	0.952	0.954	0.952	0.950	0.952	0.950	0.952	0.948	0.950	0.944	0.950
34	0.956	0.954	0.954	0.952	0.954	0.952	0.952	0.952	0.954	0.952	0.954	0.950	0.952	0.952	0.954	0.952	0.952	0.950	0.950	0.950
35	0.954	0.954	0.954	0.954	0.954	0.954	0.950	0.952	0.952	0.952	0.954	0.950	0.952	0.952	0.950	0.952	0.950	0.950	0.952	0.950
36	0.956	0.956	0.956	0.956	0.954	0.954	0.956	0.956	0.956	0.956	0.956	0.956	0.956	0.958	0.952	0.954	0.954	0.948	0.975	0.954
37	0.958	0.958	0.958	0.959	0.961	0.956	0.956	0.956	0.956	0.956	0.956	0.956	0.956	0.954	0.954	0.954	0.956	0.956	0.956	0.956
38	0.963	0.961	0.959	0.959	0.959	0.961	0.959	0.961	0.961	0.961	0.958	0.958	0.958	0.958	0.958	0.958	0.958	0.958	0.961	0.959
39	0.961	0.959	0.963	0.959	0.961	0.959	0.961	0.961	0.961	0.961	0.961	0.961	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959
40	0.965	0.963	0.965	0.961	0.963	0.961	0.963	0.961	0.961	0.958	0.963	0.959	0.961	0.958	0.961	0.958	0.961	0.958	0.961	0.958
41	0.965	0.963	0.965	0.963	0.965	0.963	0.965	0.963	0.965	0.963	0.963	0.961	0.963	0.963	0.963	0.961	0.961	0.961	0.961	0.961
42	0.967	0.965	0.967	0.965	0.967	0.965	0.967	0.965	0.965	0.963	0.963	0.963	0.965	0.963	0.965	0.961	0.963	0.963	0.963	0.961
43	0.970	0.968	0.968	0.967	0.968	0.967	0.967	0.967	0.968	0.965	0.967	0.965	0.965	0.965	0.965	0.965	0.967	0.963	0.965	0.965
44	0.972	0.972	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.968	0.968	0.968	0.968	0.968	0.968	0.968	0.970	0.970	0.968
45	0.975	0.975	0.975	0.976	0.975	0.975	0.975	0.975	0.975	0.975	0.975	0.975	0.975	0.975	0.975	0.973	0.972	0.972	0.972	0.973
46	0.978	0.984	0.978	0.984	0.978	0.984	0.981	0.983	0.981	0.981	0.981	0.981	0.980	0.981	0.980	0.981	0.978	0.981	0.980	0.981
47	0.986	0.986	0.987	0.987	0.987	0.984	0.986	0.984	0.983	0.984	0.981	0.984	0.981	0.986	0.981	0.986	0.980	0.984	0.981	0.981
48	0.989	0.990	0.989	0.989	0.989	0.989	0.987	0.987	0.987	0.987	0.986	0.986	0.987	0.986	0.984	0.987	0.984	0.986	0.986	0.984
49	0.989	0.990	0.989	0.990	0.989	0.990	0.989	0.987	0.987	0.987	0.987	0.989	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.986
50	0.991	0.990	0.991	0.990	0.991	0.990	0.991	0.989	0.990	0.989	0.990	0.987	0.990	0.987	0.989	0.987	0.989	0.987	0.989	0.986
51	0.989	0.990	0.990	0.989	0.987	0.990	0.987	0.989	0.987	0.987	0.987	0.987	0.987	0.987	0.986	0.986	0.987	0.986	0.984	0.984
52	0.984	0.984	0.984	0.981	0.984	0.983	0.983	0.981	0.983	0.981	0.983	0.981	0.981	0.980	0.980	0.980	0.980	0.980	0.980	0.980
53	0.972	0.968	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.968	0.970	0.970	0.968	0.968	0.970	0.968	0.970	0.970
54	0.961	0.959	0.961	0.961	0.961	0.959	0.959	0.958	0.961	0.958	0.961	0.959	0.959	0.958	0.959	0.954	0.958	0.958	0.959	0.958
55	0.959	0.959	0.958	0.958	0.958	0.958	0.958	0.958	0.958	0.958	0.956	0.958	0.958	0.958	0.956	0.956	0.958	0.958	0.956	0.954
56	0.961	0.961	0.963	0.958	0.959	0.958	0.961	0.958	0.959	0.958	0.959	0.958	0.958	0.956	0.958	0.956	0.958	0.954	0.956	0.956
57	0.965	0.963	0.965	0.961	0.963	0.961	0.961	0.961	0.963	0.961	0.963	0.961	0.961	0.959	0.961	0.959	0.959	0.959	0.959	0.958
58	0.972	0.972	0.970	0.972	0.972	0.970	0.972	0.972	0.972	0.972	0.972	0.970	0.968	0.970	0.970	0.968	0.970	0.970	0.972	0.968
59	0.968	0.968	0.967	0.967	0.967	0.965	0.965	0.965	0.968	0.967	0.965	0.963	0.965	0.963	0.963	0.959	0.963	0.961	0.963	0.961
60	0.965	0.968	0.965	0.967	0.965	0.965	0.965	0.965	0.965	0.967	0.963	0.965	0.963	0.961	0.961	0.961	0.961	0.963	0.961	0.961
61	0.968	0.967	0.968	0.967	0.961	0.967	0.965	0.967	0.963	0.965	0.961	0.965	0.963	0.965	0.961	0.965	0.961	0.961	0.961	0.963
62	0.968	0.968	0.972	0.968	0.972	0.970	0.968	0.968	0.968	0.968	0.968	0.967	0.968	0.965	0.967	0.965	0.965	0.963	0.963	0.961
63	0.970	0.972	0.972	0.973	0.972	0.970	0.970	0.975	0.956	0.968	0.968	0.968	0.967	0.970	0.967	0.970	0.965	0.968	0.967	0.963

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 111

IR SCAN TIME 9.26 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.958	0.956	0.956	0.956	0.956	0.954	0.954	0.954	0.954	0.956
30	0.956	0.954	0.952	0.954	0.952	0.952	0.952	0.952	0.952	0.954
31	0.952	0.954	0.948	0.952	0.952	0.952	0.952	0.950	0.950	0.950
32	0.952	0.952	0.950	0.950	0.950	0.950	0.950	0.950	0.948	0.950
33	0.944	0.948	0.944	0.948	0.944	0.948	0.944	0.948	0.948	0.948
34	0.950	0.950	0.950	0.948	0.944	0.948	0.950	0.950	0.948	0.944
35	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.948
36	0.954	0.948	0.954	0.954	0.952	0.952	0.954	0.958	0.952	0.950
37	0.956	0.956	0.956	0.956	0.956	0.954	0.954	0.952	0.958	0.954
38	0.959	0.958	0.958	0.956	0.958	0.958	0.958	0.958	0.958	0.958
39	0.959	0.961	0.958	0.959	0.959	0.959	0.956	0.959	0.959	0.959
40	0.961	0.958	0.961	0.958	0.963	0.961	0.961	0.959	0.963	0.961
41	0.961	0.961	0.963	0.961	0.961	0.959	0.961	0.958	0.965	0.958
42	0.963	0.961	0.965	0.961	0.963	0.961	0.963	0.961	0.965	0.963
43	0.967	0.965	0.965	0.965	0.967	0.965	0.967	0.965	0.966	0.965
44	0.968	0.968	0.968	0.968	0.968	0.968	0.968	0.968	0.968	0.968
45	0.973	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972
46	0.978	0.981	0.978	0.981	0.978	0.980	0.978	0.980	0.978	0.978
47	0.981	0.983	0.981	0.983	0.983	0.983	0.983	0.981	0.981	0.983
48	0.984	0.984	0.984	0.984	0.986	0.987	0.981	0.984	0.981	0.984
49	0.986	0.987	0.986	0.987	0.984	0.986	0.984	0.984	0.984	0.986
50	0.987	0.986	0.987	0.986	0.984	0.984	0.987	0.986	0.987	0.984
51	0.984	0.983	0.984	0.984	0.984	0.984	0.983	0.983	0.983	0.981
52	0.980	0.978	0.980	0.978	0.980	0.976	0.978	0.976	0.976	0.975
53	0.970	0.970	0.970	0.970	0.970	0.968	0.970	0.970	0.968	0.967
54	0.959	0.958	0.961	0.959	0.961	0.959	0.959	0.959	0.961	0.958
55	0.956	0.954	0.956	0.948	0.956	0.946	0.956	0.946	0.956	0.946
56	0.958	0.956	0.956	0.956	0.956	0.954	0.956	0.954	0.954	0.954
57	0.959	0.956	0.958	0.958	0.958	0.958	0.959	0.958	0.958	0.956
58	0.968	0.968	0.968	0.967	0.967	0.965	0.965	0.965	0.965	0.965
59	0.963	0.961	0.959	0.961	0.963	0.961	0.959	0.958	0.959	0.958
60	0.961	0.961	0.959	0.961	0.959	0.959	0.961	0.956	0.959	0.956
61	0.961	0.961	0.961	0.959	0.961	0.959	0.958	0.959	0.958	0.958
62	0.961	0.963	0.959	0.961	0.958	0.959	0.956	0.958	0.958	0.959
63	0.965	0.965	0.961	0.968	0.961	0.959	0.959	0.961	0.959	0.961

NASA/R1 OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VAF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 111

IR SCAN TIME 9.26 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.972	0.972	0.972	0.972	0.973	0.973	0.978	0.975	0.983	0.976	0.983	0.983	0.986	0.996	1.079	1.207	1.278	1.301	1.313	1.322
65	0.973	0.973	0.973	0.972	0.975	0.973	0.975	0.976	0.976	0.978	0.980	0.981	0.984	1.000	1.093	1.219	1.278	1.296	1.308	1.318
66	0.973	0.972	0.973	0.973	0.975	0.973	0.975	0.975	0.976	0.978	0.981	0.983	0.986	1.011	1.112	1.228	1.279	1.296	1.306	1.313
67	0.973	0.973	0.973	0.973	0.975	0.975	0.975	0.976	0.978	0.980	0.983	0.983	0.987	1.027	1.144	1.245	1.284	1.301	1.310	1.317
68	0.973	0.972	0.975	0.973	0.973	0.973	0.975	0.976	0.976	0.978	0.980	0.984	0.990	1.048	1.178	1.258	1.285	1.298	1.307	1.315
69	0.973	0.973	0.973	0.973	0.975	0.975	0.975	0.975	0.978	0.980	0.981	0.984	0.991	1.068	1.201	1.266	1.288	1.299	1.307	1.314
70	0.973	0.975	0.976	0.975	0.968	0.973	0.976	0.978	0.978	0.980	0.981	0.984	0.998	1.099	1.220	1.270	1.287	1.299	1.306	1.313
71	0.975	0.975	0.973	0.975	0.975	0.975	0.975	0.976	0.975	0.981	0.980	0.986	1.012	1.132	1.229	1.265	1.280	1.291	1.297	1.304
72	0.975	0.975	0.975	0.975	0.975	0.975	0.976	0.978	0.978	0.981	0.981	0.987	1.023	1.141	1.223	1.251	1.264	1.273	1.281	1.289
73	0.975	0.975	0.975	0.975	0.975	0.975	0.975	0.976	0.978	0.980	0.981	0.987	1.037	1.148	1.214	1.236	1.246	1.254	1.262	1.268
74	0.975	0.973	0.976	0.973	0.975	0.976	0.976	0.978	0.978	0.978	0.983	0.987	1.039	1.149	1.210	1.228	1.235	1.241	1.247	1.252
75	0.973	0.975	0.975	0.973	0.975	0.975	0.975	0.976	0.975	0.980	0.981	0.993	1.057	1.166	1.216	1.232	1.240	1.244	1.249	1.253
76	0.972	0.978	0.981	0.976	0.975	0.976	0.975	0.975	0.976	0.978	0.990	1.036	1.109	1.192	1.228	1.241	1.249	1.253	1.257	1.261
77	0.983	1.036	1.062	1.040	1.013	1.000	0.990	0.978	0.975	0.975	0.981	1.028	1.130	1.209	1.236	1.248	1.256	1.261	1.265	1.268
78	1.031	1.123	1.104	1.072	1.058	1.025	1.014	0.996	0.976	0.970	0.981	1.042	1.155	1.222	1.243	1.251	1.258	1.264	1.271	1.274
79	1.059	1.141	1.091	1.071	1.068	1.044	1.027	1.018	0.996	0.975	0.990	1.070	1.178	1.231	1.246	1.253	1.258	1.264	1.269	1.273
80	1.043	1.111	1.096	1.103	1.083	1.045	1.042	1.028	1.019	0.993	0.998	1.082	1.184	1.231	1.244	1.252	1.256	1.260	1.264	1.268
81	1.029	1.087	1.112	1.116	1.126	1.082	1.046	1.031	1.028	1.018	1.008	1.084	1.186	1.226	1.240	1.247	1.252	1.255	1.257	1.260
82	1.032	1.074	1.124	1.120	1.143	1.122	1.065	1.022	1.003	1.010	1.027	1.089	1.177	1.215	1.228	1.234	1.239	1.243	1.246	1.248
83	1.060	1.073	1.090	1.094	1.128	1.134	1.094	1.043	1.002	0.996	1.016	1.090	1.172	1.204	1.214	1.220	1.225	1.229	1.237	1.249
84	1.054	1.049	1.047	1.057	1.089	1.101	1.073	1.029	1.003	1.013	1.034	1.082	1.151	1.165	1.177	1.191	1.203	1.214	1.223	1.234
85	1.016	1.014	1.018	1.037	1.062	1.085	1.081	1.048	1.021	1.028	1.036	1.031	1.031	1.035	1.037	1.046	1.055	1.069	1.084	1.104
86	0.996	0.996	1.000	1.013	1.034	1.049	1.045	1.025	1.018	1.021	1.027	1.018	1.012	1.013	1.013	1.017	1.017	1.018	1.018	1.019
87	0.986	0.987	0.987	0.990	0.996	0.997	0.996	0.998	1.003	1.014	1.022	1.018	1.012	1.011	1.010	1.011	1.011	1.010	1.011	1.010
88	0.978	0.981	0.980	0.980	0.983	0.986	0.987	0.990	1.003	1.019	1.021	1.014	1.010	1.008	1.007	1.006	1.003	1.006	1.006	1.003
89	0.973	0.976	0.978	0.983	0.983	0.986	0.986	0.990	0.998	1.013	1.020	1.014	1.010	1.008	1.010	1.008	1.006	1.003	1.003	1.005
90	0.972	0.972	0.978	0.981	0.981	0.983	0.984	0.983	0.986	1.002	1.016	1.011	1.007	1.007	1.007	1.005	1.006	1.003	1.003	1.005
91	0.972	0.973	0.978	0.980	0.984	0.980	0.984	0.978	0.983	0.993	1.007	1.007	1.007	1.007	1.007	1.005	1.008	1.003	1.003	1.003
92	0.976	0.975	0.980	0.976	0.981	0.976	0.983	0.976	0.978	0.986	1.002	1.007	1.007	1.005	1.007	1.005	1.006	1.003	1.002	1.001
93	0.984	0.984	0.984	0.983	0.983	0.983	0.987	0.987	0.987	0.991	1.002	1.007	1.006	1.005	1.005	1.003	1.002	0.998	1.001	0.998
94	0.994	0.993	0.993	0.991	0.991	0.990	0.993	0.993	0.997	1.002	1.011	1.010	1.006	1.006	1.007	1.005	1.005	1.002	1.001	1.001
95	0.998	0.998	0.997	0.997	0.998	0.998	0.998	0.998	1.000	1.007	1.014	1.012	1.010	1.007	1.010	1.010	1.008	1.006	1.005	1.003
96	1.002	0.997	0.998	1.000	1.001	1.000	1.000	0.998	1.000	1.010	1.018	1.018	1.014	1.013	1.013	1.012	1.012	1.011	1.011	1.006
97	1.002	1.002	1.001	1.001	1.002	1.001	1.001	0.998	1.001	1.007	1.018	1.014	1.016	1.014	1.018	1.019	1.021	1.018	1.016	1.010
98	1.002	1.001	1.001	1.001	1.001	1.002	1.001	0.998	0.998	1.006	1.013	1.013	1.007	1.010	1.016	1.020	1.020	1.021	1.018	1.012

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 111

IR SCAN TIME 9.26 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	1.329	1.335	1.341	1.351	1.364	1.376	1.383	1.388	1.397	1.406	1.412	1.413	1.405	1.388	1.366	1.351	1.355	1.383	1.421	1.456
65	1.325	1.331	1.339	1.349	1.363	1.374	1.382	1.389	1.396	1.409	1.420	1.427	1.433	1.435	1.426	1.409	1.382	1.351	1.321	1.311
66	1.321	1.327	1.336	1.346	1.359	1.370	1.379	1.389	1.398	1.408	1.420	1.428	1.436	1.442	1.444	1.445	1.445	1.438	1.417	1.384
67	1.323	1.330	1.338	1.349	1.359	1.368	1.376	1.386	1.397	1.406	1.416	1.429	1.441	1.449	1.452	1.454	1.457	1.458	1.455	1.450
68	1.321	1.332	1.347	1.364	1.383	1.388	1.386	1.382	1.391	1.403	1.409	1.419	1.431	1.438	1.442	1.449	1.456	1.461	1.461	1.462
69	1.318	1.327	1.338	1.347	1.357	1.367	1.376	1.378	1.388	1.401	1.412	1.417	1.422	1.429	1.435	1.439	1.443	1.446	1.451	1.458
70	1.317	1.325	1.337	1.345	1.353	1.362	1.372	1.380	1.388	1.398	1.408	1.419	1.426	1.430	1.430	1.431	1.433	1.433	1.433	1.434
71	1.310	1.319	1.332	1.341	1.348	1.357	1.368	1.377	1.385	1.395	1.405	1.416	1.424	1.428	1.430	1.433	1.434	1.435	1.436	1.436
72	1.294	1.301	1.313	1.323	1.329	1.338	1.348	1.359	1.369	1.380	1.390	1.401	1.411	1.419	1.421	1.425	1.431	1.435	1.437	1.438
73	1.272	1.278	1.286	1.294	1.299	1.307	1.317	1.327	1.337	1.347	1.354	1.363	1.370	1.377	1.381	1.386	1.394	1.404	1.414	1.421
74	1.254	1.255	1.261	1.266	1.271	1.275	1.280	1.289	1.297	1.303	1.308	1.311	1.317	1.322	1.326	1.330	1.332	1.336	1.342	1.350
75	1.254	1.254	1.255	1.257	1.260	1.265	1.265	1.268	1.272	1.273	1.271	1.271	1.271	1.273	1.274	1.273	1.271	1.271	1.273	1.276
76	1.264	1.264	1.265	1.266	1.271	1.275	1.275	1.274	1.275	1.274	1.273	1.270	1.267	1.262	1.259	1.253	1.248	1.245	1.243	1.240
77	1.272	1.274	1.277	1.281	1.287	1.292	1.296	1.297	1.299	1.299	1.298	1.294	1.289	1.281	1.275	1.267	1.257	1.249	1.243	1.238
78	1.279	1.284	1.286	1.289	1.295	1.303	1.309	1.315	1.321	1.325	1.326	1.325	1.321	1.314	1.310	1.302	1.287	1.276	1.267	1.257
79	1.278	1.284	1.289	1.292	1.299	1.305	1.312	1.318	1.327	1.332	1.338	1.340	1.341	1.337	1.336	1.333	1.324	1.314	1.307	1.297
80	1.274	1.278	1.285	1.291	1.296	1.301	1.308	1.315	1.324	1.331	1.336	1.340	1.342	1.345	1.347	1.348	1.347	1.344	1.339	1.336
81	1.264	1.268	1.273	1.279	1.285	1.292	1.299	1.306	1.313	1.320	1.326	1.331	1.334	1.336	1.339	1.341	1.342	1.345	1.347	1.348
82	1.251	1.254	1.258	1.261	1.267	1.273	1.282	1.289	1.297	1.303	1.309	1.314	1.317	1.318	1.320	1.322	1.325	1.326	1.327	1.329
83	1.256	1.249	1.247	1.249	1.253	1.257	1.263	1.268	1.275	1.281	1.287	1.291	1.293	1.294	1.294	1.294	1.295	1.295	1.297	1.298
84	1.235	1.225	1.225	1.227	1.229	1.231	1.231	1.234	1.247	1.259	1.266	1.270	1.272	1.273	1.273	1.273	1.271	1.269	1.268	1.268
85	1.119	1.132	1.147	1.159	1.170	1.181	1.186	1.191	1.200	1.212	1.227	1.237	1.243	1.248	1.253	1.256	1.258	1.260	1.260	1.260
86	1.018	1.018	1.016	1.020	1.021	1.029	1.031	1.033	1.034	1.039	1.043	1.050	1.056	1.062	1.066	1.072	1.076	1.084	1.090	1.096
87	1.010	1.010	1.010	1.010	1.010	1.007	1.011	1.010	1.010	1.011	1.010	1.010	1.010	1.010	1.011	1.012	1.013	1.012	1.012	1.012
88	1.003	1.002	1.002	1.002	1.003	1.006	1.005	1.003	1.006	1.003	1.003	1.002	1.002	1.002	1.003	1.003	1.003	1.003	1.005	1.003
89	1.003	1.003	1.000	1.002	1.000	1.000	1.001	1.001	1.000	1.000	1.000	1.000	1.000	0.998	0.998	0.998	0.998	0.998	0.998	0.998
90	1.005	1.003	1.003	1.003	1.003	1.002	1.002	1.000	1.001	1.002	1.002	1.002	1.002	1.000	1.000	0.998	0.998	0.998	0.998	0.997
91	1.002	1.003	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.002	1.006	1.020	1.071	1.098	1.065	1.025	1.003	1.000	0.998	0.998
92	1.002	1.000	1.001	1.000	0.998	0.998	0.997	0.996	0.998	0.998	1.002	1.022	1.093	1.128	1.092	1.035	1.007	0.998	0.996	0.996
93	1.002	0.998	1.001	0.994	0.998	0.991	0.996	0.991	0.997	0.991	0.996	0.993	1.001	1.002	1.002	1.000	0.997	0.996	0.994	0.996
94	1.002	1.002	1.002	0.998	0.997	0.993	0.997	0.996	0.996	0.996	0.997	0.996	0.996	0.996	0.996	0.996	0.996	0.994	0.994	0.993
95	1.003	1.001	1.001	0.998	0.998	0.997	0.997	0.996	0.996	0.996	0.994	0.996	0.996	0.996	0.997	0.996	0.996	0.996	0.996	0.994
96	1.005	1.002	1.002	0.998	0.998	0.996	0.996	0.994	0.996	0.993	0.994	0.993	0.994	0.993	0.991	0.990	0.994	0.993	0.996	0.993
97	1.006	1.003	1.002	1.001	0.998	0.997	0.997	0.996	0.997	0.996	0.996	0.996	0.996	0.994	0.993	0.990	0.990	0.990	0.993	0.993
98	1.010	1.008	1.007	1.006	1.005	1.005	1.005	1.006	1.006	1.005	1.003	1.001	0.998	0.996	0.996	0.996	0.993	0.994	0.996	0.997

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 111

IR SCAN TIME 9.26 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	1.474	1.486	1.490	1.487	1.478	1.451	1.400	1.336	1.293	1.285	1.263	1.197	1.110	1.048	1.018	1.003	0.998	0.994	0.993	0.990
65	1.327	1.368	1.414	1.456	1.480	1.484	1.477	1.459	1.420	1.352	1.280	1.225	1.162	1.085	1.035	1.012	1.000	0.996	0.993	0.993
66	1.336	1.298	1.275	1.278	1.307	1.357	1.409	1.446	1.466	1.468	1.444	1.388	1.310	1.225	1.135	1.058	1.020	1.001	0.996	0.990
67	1.439	1.415	1.377	1.330	1.283	1.253	1.246	1.266	1.311	1.368	1.420	1.451	1.449	1.402	1.317	1.207	1.105	1.039	1.008	0.996
68	1.464	1.464	1.457	1.442	1.411	1.364	1.310	1.265	1.241	1.232	1.243	1.279	1.337	1.391	1.405	1.353	1.249	1.135	1.055	1.014
69	1.464	1.470	1.473	1.470	1.462	1.452	1.435	1.401	1.352	1.299	1.258	1.236	1.228	1.234	1.260	1.298	1.299	1.241	1.149	1.073
70	1.438	1.440	1.443	1.451	1.459	1.462	1.460	1.454	1.446	1.425	1.389	1.336	1.282	1.247	1.228	1.218	1.214	1.221	1.200	1.123
71	1.434	1.431	1.424	1.415	1.407	1.407	1.413	1.427	1.444	1.453	1.456	1.445	1.416	1.370	1.312	1.258	1.223	1.203	1.187	1.156
72	1.439	1.440	1.437	1.434	1.424	1.406	1.387	1.367	1.354	1.356	1.372	1.393	1.414	1.429	1.429	1.405	1.357	1.295	1.242	1.207
73	1.428	1.432	1.436	1.441	1.439	1.439	1.435	1.422	1.397	1.368	1.333	1.300	1.278	1.279	1.303	1.340	1.373	1.389	1.376	1.335
74	1.360	1.372	1.382	1.392	1.402	1.411	1.416	1.422	1.428	1.428	1.419	1.399	1.365	1.323	1.281	1.246	1.226	1.226	1.243	1.266
75	1.279	1.284	1.290	1.296	1.303	1.311	1.319	1.332	1.348	1.361	1.373	1.384	1.393	1.394	1.384	1.362	1.327	1.280	1.233	1.202
76	1.238	1.236	1.235	1.234	1.234	1.232	1.231	1.233	1.238	1.246	1.255	1.266	1.279	1.294	1.311	1.327	1.341	1.342	1.329	1.297
77	1.234	1.229	1.226	1.223	1.220	1.217	1.213	1.208	1.204	1.201	1.202	1.201	1.200	1.201	1.205	1.210	1.217	1.226	1.240	1.254
78	1.248	1.240	1.232	1.227	1.221	1.216	1.212	1.209	1.206	1.204	1.202	1.198	1.193	1.190	1.186	1.182	1.181	1.179	1.180	1.180
79	1.289	1.279	1.267	1.254	1.241	1.229	1.221	1.213	1.207	1.203	1.200	1.195	1.188	1.186	1.187	1.186	1.185	1.182	1.180	1.178
80	1.332	1.325	1.317	1.306	1.292	1.277	1.260	1.244	1.230	1.219	1.211	1.202	1.197	1.193	1.191	1.189	1.188	1.186	1.186	1.184
81	1.349	1.350	1.349	1.346	1.341	1.333	1.321	1.306	1.289	1.269	1.250	1.233	1.220	1.210	1.204	1.199	1.195	1.192	1.191	1.188
82	1.332	1.335	1.339	1.342	1.344	1.346	1.347	1.345	1.340	1.332	1.320	1.303	1.284	1.264	1.245	1.228	1.217	1.207	1.200	1.196
83	1.300	1.303	1.305	1.307	1.309	1.311	1.314	1.315	1.317	1.318	1.319	1.318	1.316	1.312	1.306	1.294	1.279	1.260	1.243	1.226
84	1.268	1.268	1.268	1.269	1.268	1.268	1.268	1.268	1.267	1.267	1.266	1.267	1.268	1.271	1.274	1.277	1.280	1.282	1.278	1.272
85	1.260	1.260	1.260	1.259	1.257	1.253	1.248	1.243	1.238	1.233	1.229	1.225	1.221	1.219	1.218	1.218	1.219	1.222	1.225	1.229
86	1.105	1.114	1.123	1.133	1.144	1.151	1.153	1.156	1.158	1.160	1.159	1.160	1.161	1.162	1.163	1.164	1.166	1.167	1.168	1.168
87	1.013	1.014	1.013	1.017	1.014	1.018	1.017	1.019	1.017	1.018	1.018	1.019	1.017	1.019	1.018	1.020	1.021	1.022	1.022	1.026
88	1.003	1.005	1.006	1.007	1.007	1.005	1.005	1.005	1.005	1.005	1.005	1.003	1.003	1.002	1.002	1.001	1.002	1.003	1.001	1.002
89	0.998	0.998	0.998	1.000	1.000	1.000	0.998	0.998	1.000	0.998	1.000	1.000	0.998	0.997	0.996	0.998	0.996	0.997	0.996	0.997
90	0.998	0.998	0.997	0.997	0.997	0.998	0.998	0.998	0.998	0.998	1.000	1.000	0.998	0.998	0.997	0.997	0.997	0.997	0.997	0.996
91	0.998	0.997	0.997	0.996	0.998	0.997	0.998	1.000	1.001	1.005	1.014	1.018	1.007	1.002	0.998	0.997	0.996	0.996	0.994	0.994
92	0.996	0.994	0.994	0.994	0.996	0.996	0.997	0.998	1.002	1.034	1.086	1.088	1.051	1.016	1.002	0.998	0.997	0.996	0.996	0.993
93	0.996	0.996	0.997	0.996	0.997	0.996	0.998	0.996	1.001	1.002	1.020	1.025	1.016	1.003	1.000	0.998	0.996	0.997	0.997	0.996
94	0.994	0.993	0.996	0.993	0.996	0.996	0.998	0.996	0.998	0.996	0.998	0.996	0.998	0.997	0.998	0.996	0.997	0.996	0.998	0.997
95	0.996	0.994	0.996	0.996	0.998	0.998	1.000	0.998	1.000	0.998	0.998	0.998	0.998	0.998	0.998	0.996	0.997	0.996	0.998	0.998
96	0.996	0.996	0.996	0.994	0.996	0.997	0.998	0.998	0.998	0.998	0.998	0.998	1.001	1.000	1.001	0.998	1.000	0.998	1.001	1.001
97	0.994	0.993	0.996	0.996	0.998	0.997	1.000	1.000	1.001	1.001	1.002	1.001	1.001	1.000	1.001	1.000	1.002	1.001	1.003	1.003
98	0.997	0.997	0.996	0.997	0.996	0.998	0.997	0.998	0.998	1.000	1.001	1.000	1.001	1.001	1.002	1.001	1.002	1.002	1.003	1.005

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 111

IR SCAN TIME 9.26 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.986	0.984	0.980	0.980	0.978	0.978	0.978	0.978	0.975	0.976	0.976	0.975	0.975	0.976	0.975	0.973	0.973	0.973	0.975	0.973
65	0.990	0.987	0.981	0.983	0.981	0.980	0.981	0.980	0.980	0.978	0.980	0.978	0.978	0.978	0.978	0.978	0.976	0.978	0.975	0.978
66	0.993	0.991	0.989	0.984	0.984	0.984	0.983	0.983	0.983	0.981	0.981	0.980	0.980	0.980	0.980	0.978	0.980	0.980	0.980	0.978
67	0.993	0.990	0.991	0.984	0.987	0.983	0.984	0.981	0.984	0.981	0.984	0.981	0.984	0.981	0.983	0.981	0.984	0.981	0.984	0.981
68	0.997	0.990	0.989	0.990	0.990	0.987	0.986	0.987	0.987	0.990	0.990	0.991	0.990	0.991	0.990	0.990	0.989	0.989	0.987	0.986
69	1.023	0.998	0.993	0.990	0.989	0.990	0.991	0.994	0.996	0.997	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.997	0.996	0.994
70	1.049	1.014	0.998	0.991	0.990	0.990	0.991	0.998	1.001	1.003	1.005	1.005	1.002	1.003	1.003	1.003	1.003	1.002	1.001	1.001
71	1.096	1.039	1.010	0.996	0.989	0.989	0.989	0.994	1.000	1.005	1.006	1.007	1.007	1.006	1.007	1.007	1.006	1.006	1.003	1.003
72	1.175	1.117	1.051	1.013	0.998	0.990	0.989	0.989	0.993	0.998	1.006	1.008	1.008	1.008	1.007	1.008	1.007	1.005	1.006	1.005
73	1.278	1.220	1.153	1.078	1.026	1.002	0.993	0.989	0.986	0.990	0.997	1.003	1.007	1.007	1.008	1.008	1.008	1.007	1.007	1.006
74	1.280	1.271	1.240	1.182	1.106	1.038	1.008	0.989	0.987	0.981	0.987	0.990	1.001	1.003	1.010	1.006	1.011	1.008	1.008	1.006
75	1.166	1.180	1.182	1.178	1.152	1.103	1.046	1.010	0.993	0.986	0.983	0.984	0.990	0.998	1.005	1.007	1.007	1.005	1.006	1.006
76	1.255	1.215	1.186	1.166	1.152	1.130	1.087	1.036	1.003	0.990	0.984	0.981	0.984	0.987	0.996	0.998	0.998	0.998	0.998	0.997
77	1.262	1.261	1.245	1.217	1.187	1.164	1.142	1.102	1.047	1.011	0.993	0.984	0.983	0.981	0.986	0.987	0.989	0.983	0.983	0.980
78	1.184	1.191	1.196	1.200	1.202	1.196	1.183	1.161	1.121	1.064	1.021	0.996	0.986	0.983	0.981	0.980	0.983	0.980	0.972	0.963
79	1.177	1.174	1.171	1.170	1.171	1.170	1.172	1.174	1.170	1.143	1.089	1.033	1.001	0.987	0.983	0.980	0.981	0.978	0.980	0.970
80	1.181	1.178	1.176	1.175	1.173	1.169	1.166	1.163	1.160	1.157	1.140	1.098	1.045	1.008	0.990	0.980	0.978	0.978	0.978	0.978
81	1.187	1.186	1.186	1.184	1.183	1.180	1.178	1.173	1.171	1.167	1.162	1.146	1.108	1.052	1.012	0.990	0.984	0.981	0.984	0.980
82	1.194	1.193	1.191	1.188	1.187	1.186	1.185	1.182	1.180	1.177	1.174	1.173	1.165	1.134	1.079	1.027	1.000	0.991	0.994	0.996
83	1.212	1.202	1.196	1.191	1.188	1.186	1.186	1.186	1.186	1.184	1.182	1.180	1.179	1.170	1.145	1.093	1.039	1.006	0.996	0.996
84	1.261	1.248	1.233	1.219	1.207	1.199	1.193	1.191	1.190	1.191	1.189	1.190	1.189	1.186	1.176	1.152	1.103	1.047	1.012	0.998
85	1.234	1.240	1.242	1.242	1.239	1.233	1.227	1.220	1.213	1.209	1.206	1.205	1.202	1.198	1.193	1.183	1.159	1.113	1.056	1.018
86	1.169	1.172	1.177	1.183	1.189	1.197	1.206	1.214	1.219	1.223	1.226	1.227	1.222	1.217	1.211	1.203	1.188	1.162	1.114	1.056
87	1.025	1.029	1.032	1.037	1.042	1.045	1.049	1.060	1.068	1.075	1.085	1.092	1.095	1.098	1.102	1.103	1.100	1.092	1.070	1.040
88	1.000	1.001	1.000	1.002	1.001	1.001	0.998	1.003	1.005	1.011	1.010	1.010	1.010	1.012	1.012	1.011	1.010	1.006	1.003	1.001
89	0.996	0.997	0.998	0.996	0.994	0.993	0.994	0.996	0.996	0.996	0.998	1.001	1.003	1.005	1.003	1.003	1.000	1.000	0.996	0.996
90	0.996	0.996	0.996	0.994	0.996	0.993	0.994	0.993	0.991	0.993	0.997	0.998	1.003	1.003	1.010	1.006	1.003	1.002	1.000	0.987
91	0.993	0.993	0.994	0.994	0.994	0.996	0.996	0.996	0.993	0.993	0.998	1.002	1.003	1.005	1.005	1.007	1.011	1.003	0.998	0.997
92	0.996	0.994	0.996	0.996	0.997	1.008	1.034	1.046	1.029	1.010	1.002	1.001	1.002	1.003	1.006	1.007	1.005	1.003	1.002	1.001
93	0.998	0.997	0.997	0.996	0.998	1.002	1.018	1.026	1.019	1.007	1.003	1.003	1.005	1.007	1.008	1.010	1.008	1.007	1.006	1.005
94	0.998	0.998	1.000	0.998	1.000	1.000	1.002	1.001	1.002	1.003	1.006	1.007	1.011	1.012	1.016	1.016	1.018	1.016	1.014	1.012
95	1.001	1.000	1.001	1.002	1.003	1.002	1.005	1.005	1.006	1.005	1.008	1.012	1.016	1.019	1.022	1.023	1.026	1.022	1.022	1.021
96	1.002	1.002	1.003	1.003	1.006	1.006	1.006	1.007	1.007	1.007	1.011	1.014	1.021	1.023	1.029	1.030	1.032	1.028	1.029	1.027
97	1.005	1.005	1.006	1.005	1.007	1.010	1.012	1.012	1.012	1.011	1.014	1.018	1.027	1.031	1.035	1.037	1.038	1.034	1.033	1.030
98	1.007	1.008	1.008	1.010	1.010	1.012	1.012	1.013	1.012	1.013	1.018	1.023	1.030	1.036	1.040	1.044	1.042	1.040	1.036	1.036

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 111

IR SCAN TIME 9.26 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.975	0.972	0.975	0.973	0.975	0.972	0.972	0.972	0.972	0.972	0.972	0.968	0.968	0.968	0.968	0.968	0.968	0.965	0.967	0.965
65	0.975	0.976	0.975	0.975	0.975	0.973	0.973	0.973	0.973	0.972	0.972	0.973	0.973	0.972	0.970	0.972	0.970	0.968	0.968	0.968
66	0.980	0.978	0.978	0.976	0.980	0.976	0.976	0.975	0.975	0.975	0.976	0.973	0.972	0.973	0.972	0.972	0.972	0.972	0.972	0.970
67	0.983	0.980	0.981	0.980	0.981	0.978	0.980	0.978	0.978	0.978	0.978	0.975	0.975	0.975	0.973	0.973	0.973	0.972	0.972	0.972
68	0.984	0.983	0.980	0.983	0.978	0.980	0.976	0.978	0.975	0.978	0.975	0.976	0.975	0.976	0.972	0.973	0.972	0.973	0.973	0.972
69	0.991	0.990	0.987	0.984	0.981	0.983	0.980	0.981	0.980	0.980	0.978	0.978	0.978	0.976	0.976	0.975	0.975	0.972	0.973	0.973
70	0.998	0.996	0.991	0.990	0.987	0.987	0.983	0.983	0.981	0.981	0.980	0.981	0.980	0.980	0.978	0.978	0.975	0.976	0.975	0.973
71	1.002	1.000	0.998	0.996	0.991	0.989	0.987	0.986	0.984	0.983	0.980	0.981	0.980	0.980	0.978	0.980	0.976	0.976	0.975	0.975
72	1.003	1.002	1.001	0.998	0.996	0.993	0.989	0.986	0.983	0.983	0.981	0.983	0.981	0.980	0.978	0.980	0.978	0.978	0.975	0.975
73	1.006	1.003	1.003	1.001	0.998	0.996	0.990	0.990	0.986	0.984	0.983	0.983	0.981	0.981	0.980	0.980	0.978	0.976	0.975	0.975
74	1.006	1.005	1.003	1.002	1.001	1.000	0.996	0.991	0.989	0.984	0.984	0.981	0.981	0.981	0.981	0.980	0.980	0.978	0.976	0.975
75	1.001	1.002	1.000	1.000	0.996	0.997	0.993	0.991	0.984	0.983	0.980	0.978	0.976	0.978	0.973	0.976	0.975	0.973	0.972	0.972
76	0.996	0.996	0.996	0.991	0.991	0.989	0.989	0.983	0.981	0.978	0.975	0.972	0.972	0.972	0.968	0.968	0.968	0.963	0.967	0.961
77	0.978	0.975	0.975	0.973	0.973	0.972	0.972	0.968	0.965	0.963	0.961	0.959	0.959	0.958	0.954	0.956	0.956	0.954	0.954	0.952
78	0.959	0.958	0.956	0.952	0.954	0.952	0.952	0.950	0.950	0.948	0.948	0.946	0.948	0.946	0.944	0.944	0.944	0.942	0.944	0.942
79	0.961	0.954	0.948	0.944	0.944	0.942	0.944	0.942	0.944	0.942	0.942	0.940	0.942	0.940	0.940	0.937	0.940	0.937	0.940	0.937
80	0.976	0.972	0.965	0.954	0.948	0.944	0.944	0.942	0.940	0.940	0.940	0.942	0.940	0.937	0.942	0.940	0.942	0.940	0.940	0.940
81	0.981	0.980	0.978	0.975	0.972	0.965	0.956	0.950	0.946	0.942	0.942	0.940	0.937	0.937	0.935	0.937	0.937	0.935	0.937	0.933
82	0.996	0.993	0.991	0.983	0.981	0.976	0.978	0.972	0.972	0.967	0.961	0.952	0.952	0.948	0.944	0.942	0.940	0.940	0.937	0.935
83	1.001	1.003	1.002	0.998	0.994	0.986	0.984	0.983	0.981	0.980	0.980	0.976	0.975	0.972	0.968	0.958	0.963	0.946	0.950	0.937
84	0.998	0.998	0.998	0.998	0.996	0.994	0.991	0.990	0.987	0.986	0.983	0.983	0.981	0.983	0.981	0.981	0.978	0.976	0.972	0.970
85	1.001	0.996	0.996	0.996	0.994	0.994	0.994	0.994	0.991	0.990	0.987	0.987	0.983	0.983	0.981	0.983	0.981	0.980	0.978	0.980
86	1.013	0.996	0.991	0.990	0.990	0.994	0.993	0.994	0.993	0.993	0.990	0.989	0.987	0.986	0.983	0.984	0.981	0.981	0.981	0.981
87	1.011	0.997	0.993	0.991	0.990	0.990	0.990	0.991	0.990	0.991	0.990	0.989	0.987	0.989	0.987	0.989	0.986	0.984	0.981	0.980
88	0.998	0.997	0.998	0.996	0.993	0.989	0.984	0.987	0.986	0.987	0.987	0.986	0.986	0.986	0.984	0.986	0.986	0.984	0.984	0.984
89	0.993	0.993	0.991	0.991	0.990	0.987	0.984	0.986	0.984	0.984	0.983	0.986	0.986	0.986	0.983	0.984	0.984	0.986	0.984	0.986
90	0.994	0.993	0.993	0.990	0.989	0.990	0.990	0.991	0.989	0.989	0.990	0.987	0.986	0.986	0.986	0.984	0.989	0.987	0.987	0.989
91	0.996	0.994	0.993	0.994	0.994	0.994	0.994	0.994	0.994	0.993	0.991	0.991	0.990	0.990	0.990	0.990	0.993	0.990	0.990	0.991
92	1.000	0.998	0.998	0.997	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.997	0.998	0.996	0.997	0.996	0.996	0.996	0.996	0.996
93	1.005	1.002	1.003	1.003	1.005	1.003	1.005	1.006	1.007	1.007	1.007	1.007	1.007	1.005	1.003	1.003	1.002	1.001	1.002	1.000
94	1.011	1.012	1.012	1.013	1.013	1.014	1.016	1.014	1.016	1.014	1.017	1.014	1.014	1.012	1.013	1.011	1.011	1.010	1.007	1.011
95	1.022	1.021	1.022	1.022	1.026	1.026	1.027	1.027	1.027	1.026	1.027	1.026	1.027	1.025	1.026	1.023	1.023	1.021	1.022	1.020
96	1.029	1.028	1.031	1.030	1.033	1.032	1.036	1.034	1.039	1.039	1.042	1.042	1.044	1.044	1.045	1.044	1.045	1.044	1.046	1.045
97	1.032	1.031	1.034	1.036	1.041	1.043	1.048	1.050	1.054	1.056	1.058	1.060	1.064	1.063	1.067	1.065	1.067	1.065	1.066	1.065
98	1.035	1.038	1.040	1.043	1.046	1.050	1.055	1.059	1.063	1.066	1.068	1.070	1.073	1.074	1.074	1.076	1.076	1.077	1.076	1.077

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 111

IR SCAN TIME 9.26 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.965	0.963	0.963	0.961	0.961	0.961	0.961	0.961	0.961	0.959
65	0.967	0.965	0.967	0.965	0.965	0.965	0.961	0.963	0.961	0.961
66	0.968	0.968	0.968	0.965	0.965	0.965	0.965	0.963	0.963	0.961
67	0.972	0.972	0.968	0.968	0.967	0.967	0.965	0.965	0.965	0.963
68	0.972	0.970	0.970	0.968	0.968	0.967	0.967	0.965	0.965	0.965
69	0.967	0.970	0.967	0.972	0.965	0.968	0.963	0.967	0.961	0.965
70	0.972	0.972	0.972	0.970	0.968	0.970	0.968	0.968	0.965	0.965
71	0.973	0.972	0.972	0.972	0.970	0.970	0.968	0.968	0.967	0.965
72	0.975	0.973	0.972	0.972	0.972	0.970	0.970	0.970	0.968	0.968
73	0.975	0.973	0.972	0.973	0.972	0.970	0.970	0.968	0.968	0.967
74	0.975	0.973	0.973	0.972	0.972	0.970	0.970	0.967	0.967	0.967
75	0.970	0.970	0.968	0.968	0.967	0.965	0.963	0.963	0.961	0.959
76	0.963	0.959	0.961	0.958	0.959	0.954	0.956	0.954	0.952	0.950
77	0.952	0.950	0.950	0.948	0.948	0.948	0.946	0.944	0.944	0.942
78	0.944	0.942	0.940	0.940	0.942	0.940	0.940	0.940	0.935	0.937
79	0.937	0.935	0.937	0.937	0.937	0.937	0.937	0.933	0.933	0.933
80	0.944	0.940	0.942	0.940	0.940	0.942	0.942	0.940	0.942	0.940
81	0.933	0.933	0.933	0.933	0.933	0.933	0.933	0.928	0.930	0.928
82	0.933	0.933	0.935	0.933	0.933	0.930	0.930	0.928	0.933	0.933
83	0.944	0.933	0.940	0.926	0.937	0.926	0.933	0.926	0.933	0.923
84	0.965	0.959	0.954	0.952	0.948	0.944	0.940	0.940	0.935	0.935
85	0.980	0.978	0.975	0.973	0.972	0.968	0.961	0.956	0.954	0.950
86	0.980	0.981	0.981	0.981	0.980	0.980	0.976	0.975	0.972	0.970
87	0.980	0.980	0.980	0.983	0.981	0.983	0.983	0.984	0.981	0.981
88	0.981	0.983	0.983	0.984	0.984	0.984	0.984	0.984	0.983	0.984
89	0.987	0.986	0.986	0.987	0.986	0.984	0.984	0.984	0.984	0.984
90	0.986	0.989	0.990	0.990	0.993	0.990	0.991	0.990	0.990	0.986
91	0.990	0.993	0.990	0.993	0.993	0.993	0.993	0.994	0.996	0.994
92	0.996	0.996	0.996	0.996	0.997	0.997	0.998	0.998	1.000	1.000
93	1.001	1.000	1.001	1.001	1.001	1.002	1.002	1.005	1.007	1.007
94	1.007	1.010	1.010	1.010	1.010	1.011	1.013	1.013	1.016	1.017
95	1.021	1.021	1.023	1.022	1.025	1.025	1.028	1.028	1.031	1.029
96	1.046	1.045	1.046	1.046	1.048	1.048	1.048	1.048	1.049	1.049
97	1.066	1.064	1.066	1.064	1.066	1.066	1.068	1.069	1.070	1.070
98	1.077	1.076	1.077	1.078	1.079	1.080	1.083	1.089	1.096	1.106

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 9.26 SEC
HREF = 0.253E-01

GROUP 111

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	0.005	0.006	0.007	0.007	0.007	0.006	0.006	0.004	0.007	0.005	0.005	0.003	0.003	0.004	0.005	0.005	0.005	0.005	0.005	0.005
30	0.007	0.007	0.007	0.007	0.006	0.005	0.005	0.005	0.005	0.005	0.006	0.005	0.005	0.005	0.005	0.006	0.005	0.005	0.005	0.005
31	0.009	0.007	0.007	0.007	0.007	0.006	0.006	0.006	0.007	0.005	0.006	0.006	0.006	0.006	0.007	0.007	0.006	0.006	0.005	0.004	0.004
32	0.008	0.007	0.007	0.007	0.007	0.007	0.009	0.007	0.007	0.007	0.007	0.007	0.005	0.006	0.006	0.005	0.005	0.004	0.003	0.003
33	0.008	0.009	0.009	0.009	0.010	0.009	0.007	0.007	0.007	0.007	0.006	0.006	0.005	0.005	0.003	0.004	0.004	0.005	0.007	0.006
34	0.009	0.009	0.010	0.008	0.007	0.008	0.007	0.006	0.005	0.005	0.005	0.004	0.003	0.004	0.005	0.005	0.007	0.007	0.007	0.007
35	0.009	0.009	0.005	0.006	0.005	0.005	0.003	0.003	0.002	0.003	0.003	0.004	0.004	0.006	0.005	0.007	0.007	0.009	0.009	0.007
36	0.007	0.007	0.005	0.005	0.004	0.003	0.003	0.004	0.004	0.005	0.005	0.006	0.006	0.007	0.007	0.007	0.005	0.003	0.000	0.000
37	0.008	0.003	0.004	0.003	0.003	0.004	0.005	0.005	0.005	0.005	0.006	0.007	0.008	0.008	0.003	0.000	0.000	0.000	0.000	0.000
38	0.003	0.005	0.005	0.005	0.005	0.005	0.007	0.007	0.007	0.007	0.007	0.005	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
39	0.005	0.005	0.005	0.005	0.005	0.006	0.007	0.007	0.006	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
40	0.006	0.007	0.007	0.006	0.007	0.007	0.005	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
41	0.007	0.008	0.007	0.008	0.006	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
42	0.009	0.010	0.009	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
43	0.009	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
44	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
45	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.014	0.041
46	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.013	0.069	0.143
47	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.024	0.096	0.175
48	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.004	0.030	0.107	0.187
49	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.003	0.007	0.038	0.120	0.196
50	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.003	0.003	0.009	0.045	0.131	0.201
51	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.004	0.015	0.066	0.151	0.211
52	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.025	0.097	0.179	0.225
53	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.031	0.116	0.195	0.232
54	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.047	0.139	0.207	0.236
55	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.067	0.160	0.216	0.239
56	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.011	0.085	0.174	0.223	0.241
57	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.019	0.098	0.184	0.226	0.241
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.025	0.109	0.193	0.233	0.248
59	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.038	0.128	0.204	0.235	0.249
60	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.059	0.152	0.209	0.230	0.242
61	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.007	0.080	0.169	0.213	0.230	0.239
62	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.023	0.105	0.185	0.218	0.231	0.239
63	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.038	0.126	0.192	0.217	0.229	0.238

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 9.26 SEC
HREF = 0.253E-01

GROUP 111

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	0.004	0.005	0.004	0.005	0.003	0.005	0.002	0.003	0.000	0.002	0.000	0.002	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.004
30	0.005	0.005	0.004	0.003	0.004	0.003	0.003	0.002	0.003	0.003	0.004	0.005	0.005	0.005	0.005	0.005	0.006	0.007	0.004	0.005
31	0.003	0.003	0.003	0.003	0.004	0.005	0.005	0.005	0.006	0.007	0.007	0.009	0.008	0.007	0.007	0.005	0.003	0.000	0.000	0.000
32	0.003	0.005	0.005	0.007	0.007	0.008	0.007	0.008	0.009	0.009	0.007	0.006	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.007	0.007	0.007	0.008	0.009	0.009	0.007	0.005	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.008	0.008	0.007	0.006	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
35	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
39	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
40	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
41	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
42	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
43	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
44	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
45	0.058	0.064	0.061	0.056	0.048	0.038	0.028	0.019	0.011	0.005	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
46	0.191	0.217	0.232	0.238	0.238	0.229	0.212	0.184	0.151	0.115	0.076	0.040	0.016	0.007	0.002	0.000	0.000	0.000	0.000	0.000
47	0.224	0.254	0.277	0.298	0.318	0.341	0.362	0.375	0.382	0.365	0.281	0.173	0.093	0.042	0.018	0.009	0.004	0.003	0.003	0.001
48	0.233	0.261	0.285	0.306	0.325	0.344	0.365	0.386	0.404	0.423	0.433	0.354	0.222	0.122	0.061	0.029	0.014	0.009	0.004	0.004
49	0.236	0.261	0.285	0.311	0.334	0.352	0.368	0.383	0.397	0.409	0.423	0.444	0.389	0.251	0.137	0.067	0.035	0.023	0.017	0.013
50	0.237	0.257	0.276	0.297	0.322	0.347	0.370	0.387	0.399	0.406	0.410	0.415	0.423	0.384	0.262	0.141	0.068	0.030	0.018	0.016
51	0.240	0.259	0.277	0.295	0.315	0.336	0.355	0.375	0.397	0.408	0.409	0.407	0.401	0.384	0.323	0.209	0.109	0.052	0.022	0.011
52	0.248	0.265	0.282	0.299	0.318	0.336	0.350	0.363	0.380	0.397	0.411	0.420	0.416	0.399	0.360	0.283	0.183	0.098	0.047	0.020
53	0.251	0.263	0.277	0.293	0.312	0.330	0.343	0.356	0.374	0.389	0.396	0.400	0.408	0.413	0.407	0.376	0.302	0.198	0.109	0.052
54	0.253	0.265	0.279	0.295	0.313	0.329	0.338	0.349	0.367	0.385	0.397	0.402	0.397	0.389	0.388	0.395	0.393	0.349	0.254	0.148
55	0.253	0.266	0.281	0.294	0.311	0.326	0.336	0.347	0.360	0.376	0.390	0.400	0.404	0.402	0.391	0.373	0.368	0.383	0.384	0.317
56	0.252	0.261	0.273	0.287	0.301	0.310	0.321	0.336	0.355	0.373	0.386	0.394	0.398	0.401	0.403	0.400	0.387	0.362	0.353	0.376
57	0.251	0.258	0.269	0.283	0.294	0.301	0.311	0.324	0.343	0.362	0.380	0.394	0.404	0.406	0.406	0.408	0.411	0.409	0.390	0.353
58	0.256	0.263	0.273	0.287	0.297	0.304	0.311	0.321	0.336	0.353	0.369	0.382	0.393	0.404	0.411	0.414	0.416	0.419	0.421	0.416
59	0.259	0.267	0.279	0.292	0.303	0.312	0.319	0.327	0.338	0.353	0.367	0.379	0.389	0.395	0.402	0.410	0.419	0.428	0.434	0.431
60	0.250	0.259	0.272	0.288	0.304	0.318	0.329	0.340	0.353	0.366	0.379	0.392	0.398	0.401	0.405	0.404	0.401	0.405	0.417	0.431
61	0.245	0.251	0.258	0.269	0.283	0.299	0.314	0.330	0.350	0.370	0.390	0.404	0.410	0.417	0.419	0.415	0.411	0.407	0.401	0.393
62	0.246	0.252	0.258	0.264	0.273	0.283	0.289	0.293	0.303	0.319	0.340	0.364	0.389	0.412	0.423	0.428	0.427	0.420	0.419	0.415
63	0.244	0.252	0.258	0.266	0.277	0.289	0.296	0.298	0.302	0.304	0.301	0.300	0.304	0.319	0.347	0.376	0.401	0.420	0.432	0.431

IR HEAT TRANSFER COEFFICIENT - H(,9TO)/HREF
IR SCAN TIME 9.26 SEC
GROUP 111 HREF = 0.253E-01

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50.	51	52	53	54	55	56	57	58	59	60
29	0.005	0.005	0.004	0.003	0.003	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
39	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
40	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
41	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
42	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
43	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
44	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
45	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
46	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
47	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48	0.003	0.004	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
49	0.008	0.005	0.004	0.004	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
50	0.018	0.015	0.010	0.007	0.005	0.003	0.003	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
51	0.007	0.009	0.010	0.009	0.005	0.003	0.002	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52	0.010	0.006	0.005	0.004	0.005	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
53	0.023	0.010	0.005	0.004	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
54	0.073	0.031	0.013	0.005	0.003	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
55	0.202	0.105	0.046	0.018	0.007	0.003	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
56	0.362	0.255	0.137	0.064	0.026	0.009	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
57	0.337	0.348	0.291	0.172	0.085	0.035	0.014	0.003	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	0.392	0.343	0.312	0.288	0.200	0.105	0.046	0.017	0.004	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
59	0.426	0.416	0.380	0.310	0.235	0.149	0.071	0.029	0.011	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
60	0.437	0.437	0.434	0.416	0.355	0.256	0.153	0.077	0.033	0.012	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
61	0.392	0.404	0.421	0.432	0.432	0.406	0.338	0.236	0.130	0.060	0.023	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
62	0.402	0.373	0.341	0.335	0.360	0.393	0.407	0.364	0.297	0.171	0.078	0.032	0.010	0.002	0.002	0.002	0.002	0.002	0.002	0.002
63	0.423	0.417	0.400	0.360	0.305	0.266	0.271	0.305	0.315	0.250	0.138	0.064	0.026	0.009	0.001	0.001	0.001	0.001	0.001	0.001

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 9.26 SEC
GROUP 111 HREF = 0.253E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
39	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
40	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
41	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
42	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
43	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
44	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
45	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
46	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
47	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
49	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
51	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
53	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
54	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
55	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
56	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
59	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
60	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
61	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
62	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
63	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 9.26 SEC
HREF = 0.253E-01

GROUP 111

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
39	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
40	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
41	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
42	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
43	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
44	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
45	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
46	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
47	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
49	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
51	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
53	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
54	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
55	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
56	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
59	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
60	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
61	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
62	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
63	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001

IR HEAT TRANSFER COEFFICIENT - H(.9TU)/HREF
IR SCAN TIME 9.26 SEC
HREF = 0.253E-01

GROUP 111

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
39	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
40	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
41	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
42	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
43	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
44	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
45	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
46	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
47	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
49	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
51	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
53	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
54	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
55	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
56	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
59	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
60	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
61	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
62	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
63	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 9.26 SEC
GROUP 111 HREF = 0.253E-01

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.046	0.135	0.193	0.214	0.225	0.234
65	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.055	0.144	0.193	0.210	0.221	0.230
66	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.006	0.068	0.151	0.194	0.210	0.219	0.226
67	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.015	0.089	0.165	0.199	0.214	0.222	0.229
68	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.027	0.113	0.176	0.199	0.211	0.220	0.227
69	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.040	0.130	0.183	0.202	0.213	0.219	0.226
70	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.059	0.145	0.187	0.202	0.212	0.219	0.225
71	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.081	0.152	0.182	0.195	0.205	0.211	0.217
72	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.013	0.087	0.147	0.171	0.181	0.189	0.196	0.203
73	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.021	0.092	0.141	0.158	0.166	0.173	0.179	0.185
74	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.022	0.093	0.137	0.151	0.157	0.162	0.167	0.171
75	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.033	0.105	0.142	0.154	0.161	0.165	0.168	0.172
76	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.020	0.066	0.124	0.152	0.162	0.168	0.172	0.175	0.179
77	0.002	0.020	0.036	0.023	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.016	0.079	0.136	0.158	0.168	0.175	0.179	0.182	0.185
78	0.018	0.075	0.062	0.042	0.034	0.014	0.008	0.008	0.008	0.008	0.008	0.024	0.096	0.146	0.163	0.171	0.176	0.182	0.187	0.190
79	0.034	0.067	0.054	0.042	0.040	0.025	0.015	0.010	0.010	0.010	0.010	0.041	0.113	0.154	0.166	0.172	0.176	0.181	0.185	0.189
80	0.024	0.067	0.057	0.061	0.049	0.026	0.024	0.016	0.011	0.011	0.011	0.048	0.118	0.154	0.165	0.171	0.175	0.178	0.181	0.185
81	0.016	0.052	0.067	0.070	0.077	0.048	0.026	0.018	0.016	0.010	0.005	0.049	0.119	0.150	0.161	0.167	0.171	0.173	0.175	0.177
82	0.018	0.043	0.076	0.073	0.088	0.074	0.038	0.013	0.002	0.005	0.015	0.053	0.113	0.141	0.151	0.156	0.160	0.163	0.166	0.168
83	0.035	0.042	0.053	0.056	0.078	0.082	0.056	0.024	0.001	0.001	0.009	0.053	0.109	0.133	0.141	0.145	0.149	0.153	0.159	0.168
84	0.031	0.028	0.027	0.033	0.053	0.060	0.042	0.016	0.002	0.007	0.019	0.049	0.094	0.104	0.113	0.123	0.132	0.140	0.147	0.156
85	0.009	0.008	0.010	0.021	0.036	0.050	0.048	0.027	0.012	0.016	0.020	0.018	0.018	0.020	0.021	0.026	0.032	0.040	0.049	0.062
86	0.000	0.000	0.000	0.007	0.019	0.028	0.026	0.014	0.010	0.012	0.015	0.010	0.007	0.007	0.007	0.009	0.009	0.010	0.010	0.011
87	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.002	0.008	0.013	0.010	0.007	0.006	0.005	0.006	0.006	0.005	0.006	0.005
88	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.002	0.011	0.012	0.008	0.005	0.005	0.004	0.003	0.002	0.003	0.003	0.002
89	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.011	0.008	0.005	0.005	0.005	0.005	0.003	0.002	0.002	0.003
90	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.009	0.006	0.004	0.004	0.004	0.003	0.003	0.002	0.002	0.003
91	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.004	0.004	0.004	0.004	0.004	0.003	0.005	0.002	0.002	0.002
92	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.004	0.004	0.003	0.004	0.003	0.003	0.002	0.001	0.000
93	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.004	0.003	0.003	0.003	0.002	0.001	0.001	0.000	0.000
94	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.001	0.006	0.005	0.003	0.003	0.004	0.003	0.003	0.001	0.000	0.000
95	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.004	0.008	0.007	0.005	0.004	0.005	0.005	0.005	0.003	0.003	0.002
96	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.005	0.010	0.010	0.008	0.007	0.007	0.007	0.007	0.006	0.006	0.003
97	0.001	0.001	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.004	0.010	0.008	0.009	0.008	0.010	0.011	0.012	0.010	0.009	0.005
98	0.001	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.003	0.007	0.007	0.004	0.005	0.009	0.011	0.011	0.012	0.010	0.007

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 9.26 SEC
HREF = 0.253E-01

GROUP 111

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	0.240	0.246	0.253	0.263	0.276	0.289	0.297	0.303	0.312	0.323	0.329	0.331	0.322	0.302	0.279	0.263	0.267	0.297	0.341	0.384
65	0.237	0.243	0.250	0.261	0.275	0.287	0.296	0.304	0.311	0.326	0.339	0.348	0.355	0.357	0.346	0.326	0.296	0.263	0.233	0.223
66	0.233	0.238	0.247	0.258	0.271	0.283	0.293	0.303	0.313	0.326	0.339	0.349	0.359	0.367	0.369	0.371	0.370	0.361	0.336	0.297
67	0.235	0.241	0.250	0.261	0.271	0.280	0.290	0.300	0.312	0.323	0.335	0.350	0.366	0.376	0.379	0.382	0.387	0.388	0.383	0.377
68	0.233	0.243	0.259	0.277	0.297	0.303	0.300	0.295	0.306	0.319	0.327	0.338	0.353	0.361	0.367	0.376	0.385	0.392	0.392	0.393
69	0.230	0.238	0.249	0.259	0.269	0.279	0.289	0.291	0.302	0.317	0.330	0.336	0.341	0.350	0.358	0.363	0.368	0.372	0.379	0.388
70	0.229	0.237	0.249	0.257	0.265	0.275	0.285	0.294	0.302	0.313	0.325	0.338	0.347	0.351	0.351	0.353	0.355	0.356	0.355	0.357
71	0.222	0.231	0.243	0.253	0.259	0.269	0.280	0.290	0.299	0.311	0.322	0.334	0.344	0.349	0.352	0.355	0.357	0.358	0.358	0.359
72	0.208	0.214	0.225	0.235	0.241	0.250	0.260	0.271	0.282	0.293	0.305	0.317	0.329	0.338	0.340	0.346	0.353	0.358	0.360	0.362
73	0.188	0.193	0.201	0.208	0.212	0.219	0.229	0.239	0.249	0.258	0.266	0.275	0.283	0.290	0.294	0.300	0.309	0.321	0.332	0.341
74	0.173	0.174	0.179	0.183	0.187	0.191	0.195	0.203	0.211	0.216	0.221	0.224	0.229	0.234	0.238	0.241	0.243	0.248	0.254	0.261
75	0.173	0.173	0.173	0.175	0.178	0.182	0.182	0.185	0.188	0.189	0.188	0.187	0.188	0.189	0.189	0.189	0.188	0.188	0.189	0.191
76	0.181	0.181	0.182	0.183	0.187	0.191	0.191	0.190	0.191	0.190	0.189	0.186	0.183	0.180	0.177	0.172	0.168	0.166	0.164	0.161
77	0.188	0.190	0.193	0.196	0.201	0.206	0.209	0.210	0.212	0.213	0.211	0.208	0.203	0.196	0.191	0.183	0.175	0.169	0.163	0.160
78	0.194	0.199	0.201	0.203	0.209	0.216	0.222	0.227	0.233	0.237	0.238	0.237	0.233	0.226	0.222	0.215	0.202	0.192	0.184	0.176
79	0.193	0.199	0.203	0.206	0.212	0.217	0.225	0.231	0.238	0.244	0.250	0.252	0.252	0.249	0.248	0.244	0.236	0.227	0.219	0.211
80	0.189	0.194	0.199	0.205	0.210	0.214	0.221	0.228	0.236	0.242	0.248	0.252	0.254	0.257	0.259	0.260	0.259	0.255	0.251	0.247
81	0.181	0.184	0.189	0.194	0.200	0.206	0.212	0.219	0.226	0.232	0.238	0.242	0.245	0.248	0.250	0.252	0.254	0.257	0.259	0.259
82	0.170	0.173	0.176	0.179	0.184	0.189	0.197	0.203	0.210	0.216	0.222	0.226	0.229	0.230	0.232	0.234	0.237	0.237	0.239	0.241
83	0.174	0.168	0.167	0.169	0.172	0.175	0.180	0.185	0.191	0.196	0.201	0.205	0.206	0.208	0.208	0.208	0.208	0.209	0.210	0.211
84	0.157	0.149	0.149	0.151	0.152	0.154	0.154	0.156	0.167	0.177	0.183	0.187	0.188	0.189	0.189	0.189	0.187	0.186	0.185	0.185
85	0.072	0.081	0.091	0.099	0.107	0.115	0.119	0.122	0.129	0.139	0.150	0.158	0.164	0.168	0.172	0.175	0.176	0.177	0.178	0.178
86	0.010	0.010	0.009	0.011	0.012	0.016	0.018	0.019	0.019	0.022	0.024	0.029	0.032	0.036	0.039	0.042	0.044	0.049	0.053	0.057
87	0.005	0.005	0.005	0.005	0.005	0.004	0.006	0.005	0.005	0.006	0.005	0.005	0.005	0.005	0.006	0.007	0.007	0.007	0.007	0.007
88	0.002	0.001	0.001	0.001	0.002	0.003	0.003	0.002	0.003	0.002	0.002	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.003	0.002
89	0.002	0.002	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.003	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
91	0.001	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.003	0.011	0.042	0.058	0.038	0.014	0.002	0.002	0.002	0.002
92	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.013	0.055	0.078	0.054	0.020	0.004	0.004	0.004	0.004
93	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001
94	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
95	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
96	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
97	0.003	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
98	0.005	0.005	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 9.26 SEC
HREF = 0.253E-01

GROUP 111

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	0.410	0.426	0.432	0.428	0.415	0.378	0.316	0.248	0.206	0.199	0.180	0.128	0.066	0.027	0.010	0.002	0.002	0.002	0.002	0.002
65	0.238	0.281	0.332	0.385	0.418	0.424	0.413	0.389	0.339	0.264	0.195	0.149	0.101	0.050	0.020	0.007	0.007	0.007	0.007	0.007
66	0.250	0.211	0.191	0.194	0.220	0.269	0.326	0.372	0.398	0.400	0.369	0.302	0.222	0.149	0.083	0.034	0.011	0.000	0.000	0.000
67	0.363	0.333	0.290	0.242	0.198	0.172	0.166	0.183	0.223	0.281	0.339	0.378	0.376	0.319	0.229	0.135	0.063	0.022	0.005	0.005
68	0.396	0.396	0.386	0.366	0.329	0.276	0.223	0.182	0.162	0.155	0.163	0.194	0.248	0.306	0.321	0.265	0.168	0.082	0.032	0.008
69	0.395	0.404	0.408	0.403	0.393	0.380	0.358	0.317	0.264	0.212	0.176	0.158	0.152	0.156	0.178	0.211	0.212	0.162	0.093	0.042
70	0.362	0.364	0.368	0.378	0.389	0.393	0.390	0.383	0.371	0.346	0.304	0.248	0.197	0.167	0.152	0.144	0.140	0.146	0.130	0.074
71	0.357	0.353	0.344	0.333	0.324	0.324	0.331	0.348	0.370	0.381	0.385	0.371	0.335	0.283	0.224	0.176	0.148	0.132	0.120	0.097
72	0.363	0.364	0.360	0.356	0.344	0.323	0.301	0.279	0.266	0.268	0.284	0.308	0.332	0.351	0.350	0.321	0.269	0.209	0.162	0.135
73	0.349	0.354	0.360	0.365	0.363	0.363	0.358	0.342	0.313	0.280	0.244	0.213	0.194	0.195	0.216	0.251	0.286	0.303	0.289	0.247
74	0.272	0.284	0.296	0.307	0.318	0.328	0.335	0.342	0.349	0.349	0.338	0.315	0.277	0.235	0.196	0.166	0.149	0.149	0.163	0.183
75	0.194	0.199	0.204	0.209	0.216	0.223	0.231	0.243	0.259	0.274	0.286	0.298	0.308	0.309	0.298	0.275	0.239	0.195	0.155	0.131
76	0.159	0.158	0.157	0.156	0.156	0.155	0.154	0.156	0.160	0.166	0.174	0.183	0.195	0.208	0.223	0.239	0.253	0.254	0.240	0.211
77	0.156	0.152	0.150	0.147	0.145	0.142	0.140	0.136	0.133	0.130	0.131	0.130	0.130	0.130	0.133	0.137	0.142	0.149	0.161	0.173
78	0.168	0.161	0.155	0.151	0.146	0.142	0.139	0.136	0.134	0.132	0.131	0.128	0.124	0.122	0.119	0.116	0.115	0.114	0.114	0.115
79	0.203	0.194	0.183	0.173	0.162	0.153	0.146	0.140	0.135	0.131	0.129	0.126	0.120	0.119	0.120	0.119	0.118	0.116	0.115	0.113
80	0.243	0.237	0.229	0.219	0.206	0.192	0.178	0.164	0.153	0.144	0.138	0.131	0.127	0.124	0.123	0.121	0.120	0.119	0.119	0.118
81	0.261	0.261	0.261	0.258	0.253	0.244	0.233	0.219	0.203	0.186	0.170	0.156	0.145	0.137	0.133	0.129	0.126	0.124	0.123	0.120
82	0.243	0.247	0.250	0.253	0.256	0.257	0.258	0.256	0.252	0.244	0.232	0.216	0.199	0.182	0.166	0.152	0.142	0.135	0.129	0.126
83	0.213	0.216	0.218	0.220	0.221	0.223	0.226	0.227	0.229	0.230	0.231	0.230	0.228	0.225	0.218	0.208	0.194	0.178	0.163	0.149
84	0.184	0.185	0.185	0.185	0.185	0.185	0.184	0.184	0.184	0.184	0.183	0.184	0.185	0.187	0.189	0.193	0.195	0.197	0.194	0.188
85	0.176	0.178	0.178	0.177	0.175	0.172	0.168	0.164	0.159	0.155	0.152	0.149	0.146	0.145	0.144	0.144	0.145	0.147	0.149	0.153
86	0.063	0.069	0.075	0.081	0.089	0.094	0.096	0.097	0.099	0.100	0.100	0.100	0.101	0.102	0.102	0.103	0.104	0.105	0.106	0.106
87	0.007	0.008	0.007	0.009	0.008	0.010	0.009	0.011	0.009	0.010	0.010	0.011	0.009	0.011	0.010	0.011	0.012	0.013	0.013	0.014
88	0.002	0.003	0.003	0.004	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.001	0.001	0.000	0.001	0.002	0.000	0.001
89	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
91	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.000	0.003	0.008	0.010	0.004	0.001	0.001	0.001	0.001	0.001	0.001	0.001
92	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.001	0.019	0.051	0.052	0.029	0.009	0.001	0.001	0.001	0.001	0.001	0.001
93	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.001	0.011	0.014	0.009	0.002	0.002	0.002	0.002	0.002	0.002	0.002
94	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
95	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
96	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.002	0.002
98	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.001	0.002	0.003

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 9.26 SEC
GROUP 111 HREF = 0.253E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
65	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
66	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
67	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
68	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
69	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
70	0.028	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.000	0.002	0.003	0.003	0.001	0.002	0.002	0.002	0.002	0.001	0.000	0.000
71	0.057	0.022	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.003	0.003	0.004	0.004	0.003	0.004	0.004	0.003	0.003	0.002	0.002
72	0.111	0.071	0.029	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.003	0.005	0.005	0.005	0.004	0.005	0.004	0.003	0.003	0.003
73	0.194	0.145	0.095	0.046	0.014	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.004	0.004	0.005	0.005	0.005	0.004	0.004	0.003
74	0.195	0.188	0.161	0.116	0.064	0.022	0.005	0.005	0.005	0.005	0.005	0.005	0.000	0.002	0.005	0.003	0.006	0.005	0.005	0.003
75	0.119	0.115	0.116	0.113	0.095	0.061	0.026	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.003	0.004	0.004	0.003	0.003
76	0.174	0.141	0.119	0.104	0.095	0.079	0.051	0.020	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
77	0.179	0.179	0.165	0.143	0.120	0.103	0.088	0.061	0.027	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
78	0.118	0.122	0.127	0.130	0.131	0.126	0.117	0.101	0.073	0.037	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
79	0.113	0.110	0.108	0.108	0.108	0.107	0.109	0.110	0.107	0.088	0.053	0.019	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80	0.115	0.113	0.112	0.111	0.109	0.107	0.104	0.102	0.100	0.098	0.086	0.058	0.026	0.005	0.005	0.005	0.005	0.005	0.005	0.005
81	0.120	0.119	0.119	0.117	0.117	0.115	0.113	0.110	0.108	0.105	0.102	0.090	0.065	0.030	0.007	0.007	0.007	0.007	0.007	0.007
82	0.125	0.124	0.122	0.120	0.120	0.119	0.118	0.116	0.115	0.113	0.110	0.109	0.104	0.082	0.046	0.015	0.015	0.015	0.015	0.015
83	0.139	0.131	0.126	0.122	0.120	0.119	0.119	0.119	0.119	0.117	0.116	0.115	0.114	0.108	0.089	0.055	0.022	0.003	0.003	0.003
84	0.179	0.168	0.156	0.144	0.135	0.129	0.124	0.123	0.122	0.122	0.122	0.122	0.121	0.119	0.112	0.095	0.061	0.027	0.007	0.007
85	0.157	0.161	0.163	0.162	0.160	0.156	0.151	0.145	0.140	0.136	0.134	0.133	0.131	0.128	0.124	0.117	0.100	0.068	0.033	0.010
86	0.107	0.109	0.112	0.117	0.121	0.128	0.134	0.140	0.144	0.148	0.150	0.151	0.147	0.143	0.138	0.132	0.121	0.102	0.069	0.032
87	0.014	0.016	0.018	0.021	0.024	0.026	0.028	0.035	0.040	0.044	0.050	0.054	0.056	0.059	0.061	0.062	0.060	0.055	0.041	0.023
88	0.001	0.000	0.000	0.001	0.000	0.000	0.000	0.002	0.003	0.006	0.005	0.005	0.005	0.007	0.007	0.006	0.005	0.003	0.002	0.000
89	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.002
90	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.005	0.003	0.002	0.001	0.001	0.001
91	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.003	0.003	0.004	0.006	0.002	0.002	0.002
92	0.001	0.001	0.001	0.001	0.001	0.005	0.019	0.026	0.016	0.005	0.001	0.000	0.001	0.002	0.003	0.004	0.003	0.002	0.001	0.000
93	0.002	0.002	0.002	0.002	0.002	0.001	0.010	0.014	0.011	0.004	0.002	0.002	0.003	0.004	0.005	0.005	0.005	0.004	0.003	0.003
94	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.001	0.002	0.003	0.004	0.006	0.007	0.009	0.009	0.010	0.009	0.008	0.007
95	0.000	0.000	0.000	0.001	0.002	0.001	0.003	0.003	0.003	0.003	0.005	0.007	0.009	0.011	0.013	0.013	0.014	0.013	0.013	0.012
96	0.001	0.001	0.002	0.002	0.003	0.003	0.003	0.004	0.004	0.004	0.006	0.008	0.012	0.013	0.016	0.017	0.018	0.016	0.016	0.015
97	0.003	0.003	0.003	0.003	0.004	0.005	0.007	0.007	0.007	0.006	0.008	0.010	0.015	0.018	0.020	0.021	0.022	0.019	0.019	0.017
98	0.004	0.005	0.005	0.005	0.005	0.007	0.007	0.007	0.007	0.007	0.010	0.013	0.017	0.020	0.023	0.025	0.024	0.023	0.020	0.020

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 9.26 SEC
GROUP 111 HREF = 0.253E-01

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
65	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
66	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
67	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
68	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
69	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
70	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
71	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
72	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73	0.003	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74	0.003	0.003	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
75	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
76	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
77	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
78	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
79	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
81	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
82	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
83	0.000	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
84	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
85	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
86	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
87	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
88	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
89	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
90	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
91	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
92	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
93	0.003	0.001	0.002	0.002	0.003	0.002	0.003	0.003	0.004	0.004	0.004	0.004	0.004	0.003	0.002	0.002	0.001	0.000	0.001	0.001
94	0.006	0.007	0.007	0.007	0.007	0.008	0.009	0.008	0.009	0.008	0.009	0.008	0.008	0.007	0.007	0.006	0.006	0.005	0.004	0.006
95	0.013	0.012	0.013	0.013	0.014	0.014	0.015	0.015	0.015	0.014	0.015	0.014	0.015	0.014	0.014	0.013	0.013	0.012	0.013	0.011
96	0.016	0.016	0.018	0.017	0.019	0.018	0.020	0.019	0.022	0.022	0.024	0.024	0.025	0.025	0.026	0.025	0.026	0.025	0.026	0.026
97	0.018	0.018	0.019	0.020	0.023	0.024	0.027	0.029	0.031	0.032	0.034	0.035	0.037	0.037	0.039	0.038	0.039	0.038	0.039	0.038
98	0.020	0.022	0.023	0.024	0.026	0.029	0.032	0.034	0.037	0.039	0.040	0.041	0.042	0.043	0.043	0.044	0.044	0.045	0.044	0.045

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 9.26 SEC
HREF = 0.253E-01

GROUP 111

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
65	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
66	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
67	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
68	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
69	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
70	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
71	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
72	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
75	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
76	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
77	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
78	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
79	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
81	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
82	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
83	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
84	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
85	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
86	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
87	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
88	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
89	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
90	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
91	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
92	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
93	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.003	0.004	0.004
94	0.004	0.005	0.005	0.005	0.005	0.006	0.007	0.007	0.009	0.009
95	0.012	0.012	0.013	0.013	0.014	0.014	0.016	0.016	0.018	0.016
96	0.026	0.026	0.026	0.026	0.027	0.027	0.026	0.028	0.028	0.028
97	0.039	0.037	0.038	0.037	0.039	0.038	0.040	0.040	0.041	0.041
98	0.045	0.044	0.045	0.046	0.046	0.047	0.049	0.053	0.057	0.064

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

GROUP	* * * * MODEL DESCRIPTION * * * * TITLE TYPE	GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
112	RSI AFT	0.02	0.010	0.02	29.98	0.053	4	51	47

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/F FT-1	HRFR BTU/FT2-SEC-R	INITIAL TEMP DEG R
7.96	319.47	1293.67	94.62	0.0338	3796.	0.300E-04	0.762E-07	0.149E+07	0.253E-01	554.7

IR CAMERA INFORMATION

MOUNTING LOCATION	260
F STOP	1.8
LENS-DEG	15
SENSITIVITY	1000.
BLACK LEVEL VOLTAGE	2.4542
LINE SCAN PHI	90
MODEL EMISSIVITY	0.96
REF EMISSIVITY	0.94
WINDOW FACTOR	0.860

TIME RECORDS

LIFT OFF	0.00
CENTER LINE	1.99
IR SCAN TIME	16.34
DELTA TIME,SEC	15.23
PHOTO 1 TIME	.452
PHOTO 2 TIME	0
PHOTO 3 TIME	0
PHOTO 4 TIME	0

REFERENCE TARGET INFORMATION

TCR5	502.02
TCR6	-228.49

DIGITAL DATA AREA PRINTOUT LOCATION

LINE 29 THROUGH 98
POINT 1 THROUGH 110

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 112

IR SCAN TIME 15.23 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	1.006	1.006	1.006	1.007	1.006	1.003	1.003	1.001	1.006	1.001	1.003	1.002	0.999	1.001	1.001	1.003	1.002	1.003	1.002	1.001
30	1.006	1.006	1.006	1.005	1.003	1.003	1.002	1.003	1.003	1.002	1.003	1.001	1.002	1.002	1.002	1.002	1.001	1.001	0.999	0.999
31	1.006	1.006	1.003	1.005	1.006	1.005	1.005	1.003	1.003	1.003	1.003	1.003	1.002	1.003	1.001	1.003	1.001	0.998	0.998	0.999
32	1.006	1.005	1.005	1.003	1.006	1.003	1.003	1.002	1.001	1.002	1.002	1.001	1.001	0.999	0.999	0.999	0.999	1.001	1.001	1.002
33	1.006	1.007	1.007	1.005	1.002	1.003	1.003	1.001	1.001	0.999	1.001	0.998	0.998	0.998	0.999	1.002	1.003	1.003	1.002	1.006
34	1.007	1.005	1.003	1.003	1.001	1.001	0.999	0.999	0.997	0.998	0.998	1.001	1.001	1.002	1.002	1.003	1.005	1.005	1.006	1.006
35	1.005	1.006	1.001	0.998	0.999	0.995	0.996	0.997	1.001	0.998	1.002	0.999	1.003	1.002	1.005	1.006	1.005	1.002	0.997	0.993
36	1.001	1.002	1.001	1.001	0.999	1.002	1.002	1.002	1.003	1.002	1.003	1.003	1.005	1.006	1.006	1.002	0.998	0.993	0.987	0.978	0.975
37	1.001	1.001	1.001	1.002	1.002	1.003	1.003	1.003	1.003	1.003	1.003	1.005	1.005	0.999	0.995	0.988	0.983	0.975	0.971	0.971	0.971
38	1.002	1.003	1.003	1.005	1.003	1.003	1.003	1.006	1.003	1.003	0.998	0.993	0.984	0.979	0.973	0.971	0.970	0.971	0.970	0.971
39	1.005	1.006	1.005	1.005	1.005	1.005	1.003	1.001	0.995	0.988	0.981	0.975	0.971	0.973	0.971	0.971	0.971	0.971	0.971	0.971
40	1.007	1.007	1.006	1.007	1.005	0.999	0.993	0.987	0.979	0.975	0.971	0.971	0.971	0.973	0.973	0.975	0.973	0.975	0.973	0.973
41	1.007	1.008	1.006	0.999	0.993	0.984	0.978	0.975	0.973	0.975	0.975	0.976	0.975	0.975	0.973	0.975	0.975	0.975	0.975	0.976
42	1.007	1.002	0.986	0.987	0.975	0.978	0.970	0.978	0.971	0.976	0.970	0.976	0.971	0.976	0.978	0.976	0.978	0.978	0.978	0.979
43	0.994	0.988	0.981	0.981	0.979	0.979	0.976	0.978	0.978	0.978	0.976	0.979	0.978	0.979	0.979	0.981	0.976	0.981	0.978	0.983
44	0.987	0.986	0.986	0.983	0.983	0.981	0.983	0.981	0.981	0.983	0.981	0.981	0.983	0.981	0.984	0.984	0.986	0.988	0.997	1.005
45	0.990	0.990	0.988	0.987	0.987	0.987	0.987	0.984	0.987	0.987	0.987	0.987	0.988	0.987	0.988	0.990	0.993	1.010	1.065	1.125
46	0.990	0.993	0.991	0.993	0.990	0.991	0.990	0.990	0.990	0.991	0.990	0.993	0.991	0.994	0.991	0.995	0.997	1.032	1.116	1.196
47	0.995	0.993	0.995	0.995	0.998	0.994	0.995	0.993	0.998	0.993	0.994	0.995	0.997	0.995	0.998	0.998	1.003	1.050	1.149	1.225
48	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.994	0.994	0.995	0.995	0.995	0.997	0.998	0.999	1.001	1.013	1.087	1.192	1.256
49	0.995	0.995	0.997	0.993	0.995	0.993	0.995	0.994	0.995	0.994	0.995	0.995	0.998	0.998	0.999	1.003	1.029	1.123	1.224	1.277
50	0.995	0.994	0.994	0.995	0.994	0.995	0.995	0.995	0.994	0.995	0.995	0.995	0.997	0.997	1.001	1.006	1.053	1.160	1.245	1.285
51	0.990	0.991	0.990	0.993	0.990	0.991	0.990	0.993	0.993	0.994	0.993	0.995	0.995	0.997	0.998	1.013	1.084	1.190	1.254	1.286
52	0.984	0.986	0.984	0.984	0.983	0.986	0.984	0.984	0.984	0.986	0.986	0.987	0.987	0.991	0.993	1.012	1.100	1.205	1.261	1.288
53	0.976	0.978	0.975	0.976	0.975	0.975	0.975	0.976	0.975	0.978	0.978	0.978	0.979	0.983	0.986	1.013	1.119	1.221	1.270	1.294
54	0.970	0.970	0.971	0.970	0.970	0.970	0.970	0.968	0.971	0.970	0.971	0.971	0.975	0.976	0.983	1.021	1.136	1.229	1.271	1.293
55	0.970	0.970	0.968	0.968	0.966	0.970	0.968	0.970	0.970	0.971	0.971	0.975	0.975	0.978	0.987	1.049	1.161	1.236	1.268	1.285
56	0.970	0.966	0.970	0.963	0.970	0.963	0.970	0.963	0.971	0.968	0.970	0.971	0.973	0.976	1.001	1.089	1.190	1.244	1.267	1.281
57	0.968	0.968	0.968	0.968	0.966	0.968	0.966	0.966	0.970	0.968	0.971	0.971	0.975	0.979	1.021	1.125	1.214	1.254	1.272	1.284
58	0.970	0.970	0.968	0.968	0.970	0.968	0.970	0.970	0.970	0.971	0.973	0.975	0.978	0.986	1.043	1.156	1.233	1.263	1.279	1.290
59	0.971	0.971	0.971	0.971	0.971	0.971	0.971	0.971	0.973	0.975	0.975	0.975	0.979	0.993	1.070	1.183	1.245	1.268	1.283	1.296
60	0.975	0.975	0.973	0.973	0.973	0.975	0.973	0.975	0.976	0.976	0.976	0.978	0.981	0.994	1.065	1.162	1.213	1.238	1.256	1.272
61	0.978	0.978	0.978	0.976	0.976	0.975	0.976	0.978	0.978	0.978	0.979	0.979	0.983	0.998	1.060	1.126	1.158	1.176	1.192	1.206
62	0.978	0.978	0.975	0.976	0.978	0.978	0.976	0.978	0.979	0.979	0.979	0.981	0.983	1.005	1.065	1.118	1.139	1.147	1.154	1.161
63	0.976	0.976	0.971	0.975	0.971	0.978	0.971	0.976	0.976	0.978	0.976	0.981	0.984	1.020	1.103	1.159	1.174	1.177	1.177	1.177

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 112

IR SCAN TIME 15.23 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	0.998	1.001	0.997	1.001	0.995	0.999	0.997	0.998	0.995	0.999	0.995	1.001	0.999	1.003	1.001	1.005	1.003	1.005	1.003	1.003
30	0.998	0.999	0.998	0.998	0.999	0.999	1.001	1.001	1.003	1.005	1.006	1.005	1.005	1.006	1.003	1.005	1.003	0.998	0.999	0.993
31	0.997	0.999	1.001	1.005	1.005	1.006	1.006	1.006	1.007	1.007	1.007	1.007	1.003	0.999	0.995	0.993	0.987	0.986	0.979	0.976
32	1.003	1.003	1.005	1.006	1.007	1.008	1.006	1.005	0.999	0.998	0.994	0.990	0.984	0.978	0.971	0.968	0.963	0.961	0.959	0.957
33	1.006	1.006	1.006	1.005	1.001	0.995	0.993	0.987	0.983	0.975	0.968	0.965	0.961	0.961	0.961	0.959	0.963	0.959	0.961	0.961
34	1.002	1.001	0.993	0.987	0.979	0.975	0.968	0.965	0.961	0.961	0.963	0.961	0.961	0.961	0.961	0.961	0.961	0.961	0.961	0.965
35	0.986	0.979	0.971	0.968	0.966	0.965	0.965	0.965	0.963	0.963	0.965	0.963	0.963	0.965	0.965	0.963	0.965	0.965	0.965	0.965
36	0.965	0.968	0.965	0.966	0.965	0.968	0.963	0.966	0.961	0.966	0.963	0.965	0.965	0.968	0.966	0.966	0.966	0.968	0.966	0.968
37	0.968	0.968	0.968	0.970	0.968	0.970	0.968	0.970	0.968	0.970	0.968	0.970	0.968	0.968	0.968	0.971	0.966	0.971	0.963	0.971
38	0.970	0.971	0.970	0.971	0.971	0.971	0.971	0.971	0.970	0.971	0.970	0.971	0.971	0.971	0.971	0.971	0.970	0.971	0.971	0.971
39	0.971	0.971	0.971	0.973	0.973	0.973	0.973	0.973	0.973	0.971	0.973	0.973	0.971	0.973	0.973	0.973	0.971	0.971	0.973	0.971
40	0.973	0.975	0.975	0.975	0.975	0.976	0.975	0.976	0.975	0.975	0.976	0.976	0.975	0.976	0.975	0.976	0.975	0.975	0.975	0.973
41	0.976	0.976	0.978	0.978	0.976	0.978	0.978	0.979	0.976	0.979	0.978	0.978	0.978	0.979	0.978	0.978	0.976	0.978	0.975	0.978
42	0.978	0.981	0.979	0.983	0.979	0.983	0.979	0.983	0.979	0.983	0.983	0.983	0.981	0.981	0.981	0.981	0.981	0.979	0.978	0.981
43	0.981	0.984	0.981	0.987	0.983	0.986	0.984	0.986	0.983	0.987	0.984	0.987	0.984	0.986	0.984	0.984	0.981	0.984	0.981	0.984
44	1.013	1.013	1.014	1.012	1.008	1.006	1.002	0.998	0.997	0.995	0.993	0.993	0.991	0.988	0.990	0.987	0.990	0.986	0.986	0.984
45	1.158	1.175	1.184	1.187	1.186	1.177	1.160	1.141	1.124	1.108	1.083	1.048	1.019	1.005	0.999	0.997	0.997	0.995	0.994	0.993
46	1.239	1.266	1.287	1.306	1.323	1.339	1.350	1.351	1.358	1.376	1.351	1.263	1.166	1.082	1.035	1.013	1.003	1.001	0.998	0.999
47	1.262	1.286	1.305	1.321	1.335	1.349	1.364	1.378	1.386	1.401	1.429	1.413	1.320	1.207	1.114	1.056	1.029	1.017	1.010	1.008
48	1.286	1.308	1.328	1.346	1.361	1.372	1.380	1.386	1.391	1.394	1.398	1.413	1.407	1.328	1.211	1.113	1.050	1.027	1.021	1.019
49	1.303	1.324	1.344	1.363	1.381	1.396	1.407	1.415	1.417	1.414	1.408	1.402	1.402	1.389	1.319	1.208	1.112	1.049	1.020	1.013
50	1.310	1.330	1.352	1.376	1.399	1.418	1.431	1.440	1.445	1.443	1.437	1.427	1.416	1.406	1.386	1.319	1.211	1.112	1.049	1.020
51	1.309	1.328	1.347	1.368	1.390	1.411	1.428	1.446	1.461	1.468	1.467	1.463	1.453	1.440	1.423	1.398	1.336	1.236	1.137	1.066
52	1.306	1.324	1.342	1.362	1.381	1.395	1.403	1.413	1.431	1.453	1.471	1.483	1.486	1.482	1.472	1.459	1.441	1.401	1.313	1.198
53	1.309	1.324	1.340	1.359	1.378	1.394	1.404	1.411	1.416	1.416	1.415	1.422	1.442	1.464	1.478	1.483	1.481	1.475	1.454	1.391
54	1.310	1.328	1.345	1.363	1.383	1.397	1.407	1.416	1.428	1.439	1.440	1.426	1.399	1.379	1.382	1.409	1.441	1.468	1.482	1.480
55	1.299	1.314	1.331	1.349	1.368	1.384	1.400	1.416	1.433	1.448	1.460	1.466	1.464	1.445	1.407	1.360	1.329	1.335	1.373	1.422
56	1.294	1.307	1.322	1.336	1.345	1.350	1.359	1.375	1.399	1.425	1.448	1.466	1.475	1.477	1.472	1.458	1.426	1.374	1.320	1.289
57	1.296	1.311	1.329	1.345	1.357	1.365	1.371	1.375	1.376	1.375	1.378	1.393	1.418	1.446	1.468	1.479	1.483	1.478	1.453	1.402
58	1.300	1.315	1.332	1.347	1.360	1.371	1.382	1.395	1.408	1.415	1.412	1.394	1.368	1.346	1.347	1.373	1.413	1.450	1.477	1.485
59	1.307	1.321	1.338	1.353	1.366	1.378	1.388	1.400	1.414	1.428	1.440	1.450	1.449	1.431	1.398	1.354	1.315	1.303	1.329	1.378
60	1.289	1.307	1.327	1.348	1.369	1.386	1.398	1.412	1.426	1.438	1.451	1.460	1.464	1.468	1.472	1.464	1.438	1.394	1.340	1.292
61	1.223	1.240	1.261	1.284	1.310	1.337	1.360	1.383	1.408	1.429	1.448	1.462	1.470	1.478	1.480	1.477	1.477	1.472	1.460	1.436
62	1.170	1.179	1.190	1.204	1.220	1.240	1.258	1.278	1.305	1.337	1.368	1.401	1.432	1.456	1.476	1.487	1.491	1.490	1.490	1.491
63	1.176	1.176	1.177	1.183	1.189	1.196	1.201	1.208	1.218	1.231	1.246	1.265	1.287	1.313	1.343	1.374	1.403	1.435	1.467	1.488

IR TEMPERATURE RECORD.-- TWALL/INITIAL TEMP

GROUP 112

IR SCAN TIME 15.23 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	1.003	1.003	1.001	0.998	0.995	0.995	0.993	0.990	0.987	0.984	0.979	0.979	0.975	0.970	0.970	0.970	0.966	0.966	0.965	0.966
30	0.994	0.987	0.987	0.979	0.979	0.971	0.971	0.966	0.965	0.959	0.961	0.957	0.957	0.957	0.957	0.957	0.959	0.959	0.959	0.957
31	0.970	0.968	0.963	0.963	0.961	0.961	0.961	0.961	0.961	0.959	0.957	0.957	0.957	0.956	0.957	0.957	0.954	0.957	0.954	0.957
32	0.961	0.961	0.961	0.959	0.959	0.959	0.957	0.959	0.959	0.957	0.957	0.957	0.956	0.957	0.956	0.957	0.954	0.956	0.956	0.956
33	0.961	0.961	0.961	0.961	0.957	0.961	0.957	0.959	0.959	0.959	0.957	0.957	0.957	0.957	0.957	0.957	0.956	0.957	0.952	0.956
34	0.963	0.963	0.961	0.961	0.963	0.961	0.961	0.961	0.961	0.961	0.961	0.959	0.957	0.959	0.959	0.957	0.957	0.956	0.957	0.957
35	0.966	0.965	0.965	0.965	0.963	0.965	0.965	0.965	0.963	0.961	0.963	0.963	0.961	0.961	0.961	0.959	0.959	0.957	0.959	0.961
36	0.965	0.968	0.968	0.968	0.966	0.966	0.965	0.966	0.965	0.966	0.965	0.965	0.965	0.965	0.963	0.963	0.963	0.965	0.963	0.963
37	0.963	0.971	0.963	0.971	0.963	0.968	0.961	0.968	0.963	0.968	0.961	0.968	0.965	0.966	0.965	0.966	0.965	0.965	0.963	0.965
38	0.970	0.971	0.970	0.971	0.970	0.970	0.968	0.970	0.970	0.968	0.968	0.968	0.966	0.968	0.961	0.966	0.961	0.966	0.961	0.965
39	0.973	0.971	0.971	0.971	0.971	0.971	0.971	0.971	0.970	0.971	0.970	0.970	0.968	0.968	0.968	0.968	0.968	0.968	0.966	0.968
40	0.973	0.975	0.971	0.973	0.973	0.973	0.971	0.975	0.971	0.973	0.971	0.971	0.970	0.971	0.968	0.970	0.968	0.970	0.968	0.968
41	0.976	0.976	0.975	0.976	0.975	0.975	0.973	0.975	0.971	0.973	0.971	0.975	0.971	0.971	0.971	0.971	0.971	0.971	0.968	0.970
42	0.978	0.979	0.978	0.978	0.976	0.978	0.976	0.975	0.975	0.975	0.975	0.975	0.973	0.973	0.971	0.971	0.971	0.971	0.971	0.971
43	0.981	0.983	0.979	0.981	0.981	0.979	0.979	0.981	0.978	0.978	0.976	0.978	0.975	0.976	0.975	0.976	0.975	0.975	0.975	0.975
44	0.984	0.983	0.984	0.983	0.984	0.981	0.983	0.981	0.983	0.981	0.981	0.981	0.981	0.981	0.979	0.979	0.978	0.978	0.978	0.978
45	0.993	0.990	0.990	0.990	0.990	0.987	0.987	0.987	0.987	0.987	0.986	0.984	0.986	0.983	0.984	0.981	0.984	0.979	0.983	0.981
46	0.997	1.003	0.997	0.993	0.995	0.995	0.994	0.994	0.993	0.991	0.991	0.990	0.994	0.995	0.987	0.988	0.988	0.991	0.991	0.988
47	1.005	1.003	1.001	0.999	0.998	0.998	0.997	0.997	0.994	0.994	0.993	0.994	0.993	0.993	0.990	0.991	0.990	0.991	0.988	0.991
48	1.018	1.012	1.007	1.005	1.002	0.999	0.998	0.997	0.995	0.995	0.994	0.994	0.993	0.993	0.993	0.993	0.993	0.990	0.991	0.990
49	1.012	1.018	1.019	1.015	1.008	1.005	1.001	0.998	0.997	0.995	0.995	0.995	0.995	0.995	0.995	0.994	0.994	0.993	0.993	0.993
50	1.008	1.007	1.007	1.011	1.017	1.017	1.010	1.006	1.001	0.999	0.998	0.997	0.997	0.995	0.995	0.995	0.995	0.995	0.994	0.994
51	1.026	1.010	1.002	1.003	1.002	1.007	1.012	1.010	1.003	0.999	0.995	0.997	0.994	0.995	0.993	0.994	0.993	0.993	0.991	0.994
52	1.102	1.044	1.014	1.005	1.001	1.002	1.003	1.007	1.007	0.999	0.990	0.988	0.983	0.987	0.981	0.984	0.981	0.984	0.981	0.987
53	1.276	1.158	1.073	1.029	1.006	1.002	1.001	1.003	1.005	1.006	0.997	0.987	0.978	0.976	0.975	0.975	0.973	0.975	0.975	0.981
54	1.445	1.349	1.218	1.110	1.045	1.013	1.002	0.999	0.999	1.001	1.005	0.999	0.987	0.978	0.973	0.971	0.971	0.971	0.975	0.979
55	1.460	1.461	1.396	1.272	1.150	1.067	1.023	1.006	1.001	0.998	0.999	1.003	1.003	0.993	0.979	0.976	0.973	0.975	0.976	0.984
56	1.302	1.351	1.399	1.390	1.298	1.176	1.087	1.033	1.008	1.001	0.998	0.998	1.001	1.005	0.995	0.981	0.976	0.975	0.978	0.981
57	1.337	1.282	1.258	1.282	1.328	1.305	1.209	1.110	1.047	1.013	0.999	0.998	0.997	0.998	1.003	0.998	0.986	0.979	0.978	0.979
58	1.468	1.422	1.353	1.286	1.242	1.224	1.200	1.129	1.058	1.021	1.005	0.995	0.994	0.993	0.995	0.998	0.998	0.990	0.981	0.978
59	1.427	1.459	1.465	1.438	1.380	1.308	1.247	1.196	1.132	1.063	1.024	1.003	0.995	0.988	0.990	0.988	0.993	0.995	0.988	0.978
60	1.269	1.283	1.326	1.381	1.425	1.438	1.406	1.341	1.270	1.197	1.114	1.047	1.013	0.997	0.991	0.988	0.988	0.990	0.994	0.990
61	1.391	1.334	1.281	1.249	1.248	1.280	1.334	1.374	1.372	1.330	1.271	1.189	1.096	1.035	1.007	0.994	0.988	0.986	0.988	0.990
62	1.487	1.470	1.438	1.387	1.323	1.266	1.233	1.225	1.245	1.283	1.303	1.286	1.215	1.117	1.050	1.013	0.997	0.988	0.987	0.984
63	1.501	1.500	1.495	1.492	1.472	1.431	1.367	1.296	1.240	1.209	1.198	1.207	1.218	1.200	1.143	1.070	1.021	0.998	0.990	0.987

NASA/RI OH90 TRANSITION TEST
V416-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 112

IR SCAN TIME 15.23. SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.963	0.963	0.963	0.963	0.959	0.961	0.959	0.961	0.959	0.959	0.961	0.961	0.959	0.959	0.961	0.963	0.961	0.961	0.961	0.965
30	0.959	0.961	0.959	0.957	0.961	0.961	0.957	0.957	0.957	0.956	0.957	0.957	0.957	0.956	0.957	0.957	0.959	0.957	0.959	0.957
31	0.950	0.957	0.952	0.957	0.952	0.956	0.952	0.954	0.952	0.956	0.952	0.956	0.957	0.956	0.956	0.956	0.956	0.956	0.956	0.957
32	0.956	0.956	0.956	0.956	0.956	0.954	0.954	0.952	0.954	0.954	0.952	0.952	0.954	0.946	0.954	0.948	0.954	0.946	0.954	0.948
33	0.956	0.956	0.956	0.956	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.952	0.954	0.952	0.952	0.954	0.952	0.952	0.952	0.952
34	0.956	0.957	0.956	0.956	0.957	0.956	0.956	0.956	0.957	0.954	0.954	0.954	0.956	0.954	0.954	0.954	0.954	0.954	0.954	0.954
35	0.959	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.956	0.956	0.954	0.954	0.956	0.954	0.954	0.956
36	0.961	0.961	0.959	0.961	0.959	0.961	0.959	0.961	0.961	0.959	0.959	0.959	0.957	0.959	0.957	0.957	0.957	0.957	0.957	0.957
37	0.963	0.965	0.963	0.963	0.961	0.963	0.961	0.963	0.961	0.961	0.963	0.961	0.961	0.961	0.959	0.961	0.961	0.959	0.959	0.959
38	0.961	0.965	0.963	0.965	0.961	0.965	0.961	0.965	0.957	0.963	0.963	0.966	0.963	0.963	0.959	0.961	0.961	0.963	0.961	0.961
39	0.966	0.965	0.965	0.965	0.966	0.965	0.963	0.965	0.965	0.963	0.963	0.961	0.965	0.961	0.965	0.959	0.963	0.959	0.961	0.959
40	0.968	0.968	0.968	0.968	0.966	0.968	0.966	0.966	0.965	0.966	0.966	0.966	0.965	0.965	0.963	0.965	0.963	0.966	0.963	0.965
41	0.968	0.970	0.968	0.970	0.966	0.968	0.968	0.970	0.966	0.965	0.965	0.968	0.965	0.968	0.965	0.966	0.966	0.966	0.965	0.966
42	0.971	0.973	0.970	0.970	0.970	0.971	0.970	0.971	0.970	0.970	0.970	0.970	0.968	0.970	0.968	0.970	0.968	0.968	0.968	0.968
43	0.971	0.971	0.971	0.971	0.971	0.971	0.971	0.973	0.971	0.971	0.971	0.971	0.971	0.971	0.968	0.971	0.971	0.971	0.970	0.971
44	0.978	0.978	0.978	0.976	0.976	0.976	0.976	0.975	0.975	0.975	0.976	0.975	0.975	0.975	0.975	0.973	0.973	0.973	0.973	0.975
45	0.984	0.979	0.983	0.979	0.981	0.979	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.979	0.979	0.978	0.979	0.981	0.979	0.979
46	0.988	0.986	0.987	0.987	0.986	0.986	0.986	0.987	0.987	0.990	0.986	0.988	0.986	0.981	0.979	0.984	0.984	0.991	0.979	0.986
47	0.990	0.990	0.988	0.987	0.988	0.988	0.988	0.988	0.987	0.987	0.987	0.987	0.986	0.987	0.986	0.987	0.984	0.987	0.986	0.987
48	0.991	0.988	0.990	0.990	0.990	0.988	0.988	0.988	0.988	0.987	0.987	0.986	0.987	0.987	0.988	0.987	0.988	0.987	0.987	0.987
49	0.991	0.993	0.991	0.991	0.991	0.990	0.990	0.990	0.990	0.988	0.990	0.988	0.988	0.988	0.990	0.988	0.987	0.987	0.987	0.987
50	0.994	0.993	0.993	0.993	0.993	0.991	0.993	0.990	0.991	0.990	0.991	0.990	0.990	0.990	0.988	0.990	0.990	0.990	0.990	0.990
51	0.993	0.994	0.993	0.994	0.994	0.994	0.991	0.994	0.993	0.994	0.993	0.993	0.991	0.993	0.991	0.993	0.991	0.991	0.991	0.991
52	0.986	0.991	0.990	0.993	0.990	0.994	0.994	0.994	0.993	0.995	0.993	0.994	0.993	0.994	0.993	0.994	0.990	0.993	0.991	0.994
53	0.981	0.987	0.988	0.991	0.990	0.993	0.993	0.994	0.990	0.995	0.991	0.995	0.991	0.995	0.990	0.994	0.990	0.993	0.988	0.991
54	0.984	0.987	0.990	0.991	0.993	0.994	0.994	0.993	0.995	0.995	0.995	0.995	0.995	0.994	0.995	0.994	0.994	0.993	0.993	0.990
55	0.984	0.990	0.990	0.994	0.991	0.995	0.993	0.995	0.995	0.995	0.994	0.995	0.995	0.995	0.993	0.994	0.993	0.993	0.990	0.991
56	0.984	0.987	0.988	0.988	0.990	0.990	0.990	0.988	0.991	0.987	0.990	0.987	0.988	0.988	0.988	0.987	0.987	0.986	0.987	0.984
57	0.981	0.981	0.983	0.981	0.986	0.981	0.983	0.981	0.983	0.981	0.981	0.981	0.981	0.981	0.979	0.979	0.978	0.978	0.979	0.979
58	0.978	0.978	0.978	0.978	0.976	0.976	0.976	0.976	0.976	0.976	0.975	0.975	0.975	0.973	0.973	0.973	0.971	0.971	0.971	0.971
59	0.976	0.975	0.975	0.975	0.975	0.973	0.973	0.973	0.973	0.971	0.971	0.971	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970
60	0.983	0.978	0.975	0.975	0.973	0.970	0.973	0.968	0.971	0.968	0.970	0.968	0.970	0.968	0.968	0.966	0.966	0.966	0.968	0.966
61	0.991	0.984	0.979	0.976	0.975	0.975	0.973	0.971	0.971	0.971	0.971	0.970	0.970	0.968	0.968	0.968	0.968	0.968	0.968	0.968
62	0.987	0.988	0.983	0.978	0.976	0.973	0.971	0.971	0.971	0.971	0.968	0.968	0.968	0.968	0.966	0.968	0.968	0.968	0.968	0.968
63	0.984	0.987	0.987	0.987	0.979	0.975	0.971	0.973	0.971	0.970	0.968	0.970	0.965	0.968	0.965	0.968	0.965	0.968	0.966	0.970

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 112

IR SCAN TIME 15.23 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.965	0.965	0.961	0.965	0.963	0.963	0.961	0.961	0.961	0.961	0.961	0.963	0.959	0.961	0.957	0.959	0.957	0.957	0.954	0.959
30	0.959	0.959	0.959	0.959	0.961	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.957	0.956	0.956	0.956	0.954	0.956	0.954	0.954
31	0.956	0.957	0.956	0.957	0.952	0.957	0.956	0.956	0.956	0.957	0.956	0.956	0.954	0.954	0.954	0.956	0.954	0.954	0.952	0.952
32	0.956	0.948	0.956	0.950	0.954	0.948	0.954	0.952	0.956	0.956	0.952	0.954	0.954	0.952	0.952	0.952	0.952	0.952	0.950	0.950
33	0.952	0.952	0.952	0.952	0.952	0.952	0.952	0.952	0.948	0.952	0.952	0.948	0.950	0.948	0.950	0.946	0.950	0.946	0.948	0.948
34	0.954	0.954	0.952	0.954	0.952	0.952	0.950	0.952	0.954	0.950	0.952	0.952	0.952	0.952	0.952	0.950	0.950	0.950	0.950	0.948
35	0.956	0.956	0.954	0.954	0.954	0.954	0.954	0.952	0.954	0.954	0.952	0.952	0.952	0.954	0.952	0.952	0.950	0.950	0.952	0.952
36	0.957	0.957	0.956	0.956	0.956	0.956	0.954	0.956	0.954	0.956	0.954	0.956	0.954	0.956	0.954	0.954	0.954	0.956	0.954	0.954
37	0.957	0.957	0.957	0.959	0.957	0.957	0.957	0.957	0.956	0.957	0.957	0.957	0.954	0.956	0.956	0.956	0.956	0.957	0.956	0.956
38	0.959	0.961	0.959	0.961	0.959	0.961	0.959	0.959	0.957	0.957	0.957	0.957	0.957	0.959	0.957	0.957	0.957	0.957	0.957	0.957
39	0.963	0.959	0.961	0.957	0.961	0.959	0.961	0.961	0.961	0.961	0.961	0.961	0.961	0.956	0.961	0.959	0.961	0.959	0.959	0.959
40	0.961	0.965	0.961	0.963	0.961	0.963	0.961	0.961	0.961	0.961	0.959	0.961	0.957	0.961	0.957	0.961	0.957	0.961	0.959	0.963
41	0.965	0.965	0.961	0.965	0.963	0.965	0.963	0.963	0.963	0.963	0.961	0.965	0.961	0.963	0.961	0.965	0.961	0.961	0.961	0.963
42	0.968	0.968	0.966	0.966	0.966	0.966	0.965	0.966	0.965	0.966	0.968	0.965	0.965	0.968	0.965	0.965	0.963	0.965	0.963	0.963
43	0.970	0.971	0.970	0.970	0.970	0.970	0.970	0.970	0.968	0.970	0.966	0.968	0.968	0.968	0.968	0.968	0.968	0.966	0.968	0.968
44	0.973	0.973	0.971	0.975	0.973	0.975	0.975	0.973	0.973	0.973	0.971	0.971	0.971	0.971	0.971	0.971	0.971	0.975	0.973	0.971
45	0.979	0.979	0.981	0.981	0.981	0.981	0.979	0.979	0.981	0.979	0.981	0.979	0.978	0.978	0.978	0.978	0.978	0.978	0.978	0.978
46	0.983	0.987	0.987	0.983	0.984	0.988	0.986	0.984	0.984	0.986	0.979	0.984	0.983	0.986	0.976	0.978	0.984	0.983	0.984	0.983
47	0.987	0.990	0.987	0.988	0.987	0.987	0.986	0.987	0.983	0.986	0.984	0.987	0.983	0.986	0.983	0.987	0.983	0.984	0.983	0.986
48	0.988	0.987	0.988	0.990	0.988	0.987	0.987	0.987	0.987	0.986	0.987	0.987	0.987	0.986	0.987	0.984	0.986	0.984	0.984	0.986
49	0.988	0.988	0.988	0.988	0.988	0.987	0.988	0.987	0.988	0.987	0.987	0.987	0.987	0.986	0.987	0.986	0.987	0.987	0.986	0.986
50	0.990	0.990	0.990	0.988	0.988	0.988	0.988	0.987	0.988	0.987	0.987	0.987	0.987	0.986	0.987	0.986	0.986	0.984	0.986	0.986
51	0.990	0.991	0.990	0.990	0.987	0.988	0.986	0.987	0.984	0.986	0.984	0.984	0.983	0.986	0.981	0.986	0.983	0.984	0.983	0.984
52	0.990	0.990	0.988	0.988	0.984	0.986	0.981	0.981	0.978	0.979	0.976	0.978	0.975	0.976	0.975	0.975	0.975	0.975	0.971	0.975
53	0.988	0.990	0.986	0.987	0.981	0.981	0.976	0.975	0.970	0.971	0.970	0.970	0.968	0.968	0.966	0.968	0.965	0.965	0.965	0.966
54	0.986	0.988	0.987	0.986	0.981	0.978	0.975	0.968	0.968	0.963	0.963	0.961	0.961	0.961	0.961	0.957	0.959	0.957	0.957	0.956
55	0.988	0.988	0.986	0.987	0.981	0.979	0.975	0.971	0.970	0.968	0.963	0.963	0.959	0.959	0.961	0.959	0.957	0.957	0.957	0.957
56	0.984	0.981	0.984	0.979	0.979	0.975	0.971	0.968	0.966	0.965	0.963	0.959	0.959	0.959	0.959	0.957	0.957	0.957	0.956	0.956
57	0.976	0.978	0.976	0.975	0.975	0.973	0.971	0.968	0.965	0.965	0.965	0.963	0.963	0.961	0.961	0.961	0.961	0.961	0.961	0.961
58	0.971	0.971	0.970	0.971	0.968	0.968	0.966	0.966	0.965	0.965	0.963	0.961	0.961	0.963	0.963	0.963	0.961	0.961	0.961	0.961
59	0.968	0.968	0.968	0.968	0.966	0.968	0.965	0.966	0.963	0.965	0.963	0.963	0.963	0.961	0.963	0.961	0.963	0.961	0.961	0.961
60	0.968	0.970	0.970	0.968	0.968	0.968	0.968	0.966	0.966	0.965	0.965	0.965	0.965	0.965	0.965	0.963	0.965	0.965	0.963	0.965
61	0.968	0.963	0.968	0.968	0.966	0.966	0.968	0.965	0.966	0.963	0.965	0.963	0.965	0.963	0.965	0.963	0.965	0.963	0.965	0.965
62	0.968	0.968	0.968	0.968	0.968	0.965	0.966	0.965	0.965	0.965	0.963	0.963	0.963	0.965	0.963	0.963	0.963	0.963	0.961	0.963
63	0.966	0.968	0.966	0.968	0.965	0.966	0.963	0.966	0.965	0.965	0.963	0.965	0.961	0.963	0.961	0.963	0.961	0.963	0.961	0.961

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 112

IR SCAN TIME 15.23 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.956	0.956	0.954	0.956	0.954	0.954	0.954	0.959	0.954	0.954
30	0.954	0.952	0.952	0.952	0.954	0.954	0.952	0.952	0.952	0.952
31	0.950	0.950	0.950	0.952	0.950	0.950	0.948	0.950	0.948	0.950
32	0.952	0.950	0.948	0.948	0.948	0.948	0.948	0.950	0.948	0.948
33	0.948	0.946	0.946	0.944	0.948	0.944	0.948	0.948	0.948	0.950
34	0.948	0.948	0.948	0.948	0.946	0.950	0.950	0.948	0.946	0.944
35	0.952	0.952	0.952	0.952	0.950	0.950	0.950	0.950	0.950	0.950
36	0.956	0.956	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.956
37	0.954	0.956	0.956	0.956	0.956	0.957	0.954	0.956	0.954	0.956
38	0.957	0.959	0.957	0.957	0.956	0.957	0.956	0.956	0.956	0.959
39	0.959	0.961	0.959	0.961	0.959	0.959	0.959	0.961	0.957	0.959
40	0.957	0.957	0.957	0.961	0.957	0.963	0.961	0.961	0.961	0.963
41	0.961	0.963	0.961	0.963	0.961	0.963	0.961	0.963	0.957	0.963
42	0.963	0.965	0.965	0.965	0.965	0.965	0.965	0.966	0.965	0.968
43	0.970	0.968	0.966	0.968	0.966	0.968	0.968	0.968	0.968	0.968
44	0.971	0.971	0.971	0.971	0.973	0.971	0.973	0.971	0.971	0.971
45	0.978	0.976	0.978	0.976	0.978	0.976	0.976	0.976	0.978	0.976
46	0.983	0.983	0.979	0.981	0.981	0.981	0.981	0.981	0.979	0.987
47	0.981	0.986	0.981	0.986	0.984	0.984	0.984	0.986	0.984	0.986
48	0.986	0.984	0.984	0.983	0.984	0.981	0.986	0.981	0.984	0.981
49	0.987	0.987	0.987	0.986	0.986	0.984	0.984	0.986	0.983	0.986
50	0.986	0.986	0.986	0.984	0.986	0.984	0.983	0.981	0.983	0.983
51	0.979	0.981	0.981	0.983	0.979	0.983	0.979	0.981	0.978	0.979
52	0.971	0.973	0.973	0.971	0.971	0.971	0.971	0.971	0.971	0.971
53	0.965	0.965	0.965	0.965	0.963	0.963	0.963	0.963	0.961	0.961
54	0.956	0.956	0.956	0.956	0.956	0.954	0.954	0.954	0.954	0.952
55	0.957	0.957	0.954	0.956	0.948	0.954	0.946	0.954	0.946	0.954
56	0.956	0.956	0.956	0.956	0.954	0.954	0.954	0.954	0.954	0.954
57	0.961	0.959	0.959	0.959	0.961	0.961	0.957	0.959	0.957	0.959	0.959
58	0.961	0.961	0.961	0.961	0.961	0.961	0.959	0.961	0.961	0.961
59	0.961	0.963	0.961	0.961	0.961	0.961	0.959	0.959	0.961	0.959
60	0.961	0.963	0.965	0.963	0.963	0.961	0.963	0.963	0.963	0.963
61	0.965	0.963	0.963	0.965	0.965	0.965	0.963	0.963	0.961	0.963
62	0.963	0.961	0.961	0.959	0.961	0.957	0.961	0.957	0.961	0.959
63	0.961	0.961	0.961	0.963	0.957	0.961	0.959	0.961	0.959	0.959

NASA/RI OH90 TRANSITION TEST
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MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 15.23 SEC
GROUP 112 INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.971	0.968	0.970	0.971	0.970	0.971	0.970	0.971	0.975	0.970	0.973	0.975	0.987	1.054	1.156	1.202	1.217	1.224	1.228	1.229
65	0.966	0.963	0.963	0.965	0.963	0.965	0.963	0.965	0.965	0.968	0.968	0.973	0.995	1.092	1.189	1.227	1.242	1.252	1.261	1.267
66	0.959	0.956	0.956	0.956	0.956	0.956	0.954	0.956	0.957	0.959	0.963	0.970	1.020	1.126	1.202	1.232	1.248	1.259	1.270	1.280
67	0.954	0.952	0.952	0.950	0.950	0.948	0.950	0.950	0.952	0.954	0.957	0.965	1.028	1.126	1.182	1.207	1.222	1.235	1.249	1.262
68	0.950	0.948	0.950	0.946	0.946	0.946	0.946	0.948	0.948	0.950	0.952	0.961	1.018	1.105	1.146	1.164	1.177	1.188	1.200	1.211
69	0.948	0.948	0.946	0.944	0.944	0.944	0.946	0.946	0.944	0.948	0.952	0.961	1.022	1.102	1.134	1.148	1.158	1.167	1.175	1.182
70	0.948	0.948	0.939	0.944	0.937	0.946	0.944	0.944	0.946	0.948	0.950	0.965	1.038	1.116	1.142	1.152	1.159	1.164	1.168	1.173
71	0.950	0.950	0.946	0.944	0.946	0.944	0.944	0.942	0.946	0.944	0.948	0.970	1.061	1.129	1.151	1.161	1.168	1.172	1.177	1.180
72	0.948	0.944	0.944	0.944	0.944	0.946	0.944	0.944	0.944	0.948	0.950	0.993	1.082	1.130	1.145	1.154	1.161	1.168	1.174	1.178
73	0.946	0.948	0.944	0.944	0.944	0.944	0.942	0.944	0.944	0.944	0.954	1.008	1.084	1.115	1.125	1.132	1.140	1.148	1.155	1.158
74	0.948	0.944	0.942	0.939	0.946	0.944	0.946	0.942	0.952	0.944	0.961	1.022	1.079	1.097	1.105	1.112	1.118	1.124	1.129	1.134
75	0.948	0.946	0.944	0.944	0.942	0.942	0.942	0.942	0.939	0.952	0.963	1.042	1.076	1.088	1.094	1.101	1.105	1.111	1.115	1.119
76	0.954	0.963	0.966	0.959	0.963	0.963	0.954	0.946	0.944	0.956	1.010	1.055	1.078	1.087	1.094	1.098	1.103	1.107	1.111	1.114
77	0.990	1.031	1.036	1.041	1.048	1.050	1.048	1.011	0.968	0.963	1.013	1.063	1.084	1.092	1.098	1.103	1.107	1.111	1.114	1.119
78	1.021	1.055	1.030	1.060	1.096	1.078	1.084	1.097	1.043	0.993	1.033	1.070	1.089	1.095	1.102	1.105	1.112	1.115	1.120	1.123
79	1.034	1.061	1.027	1.045	1.088	1.105	1.092	1.096	1.094	1.051	1.060	1.085	1.096	1.102	1.107	1.111	1.116	1.120	1.125	1.129
80	1.039	1.066	1.061	1.056	1.061	1.080	1.103	1.088	1.082	1.085	1.087	1.102	1.107	1.111	1.114	1.118	1.123	1.126	1.130	1.136
81	1.049	1.067	1.079	1.080	1.056	1.053	1.051	1.058	1.065	1.081	1.098	1.113	1.117	1.122	1.124	1.127	1.130	1.134	1.138	1.143
82	1.060	1.068	1.082	1.087	1.064	1.049	1.024	1.008	1.024	1.066	1.103	1.121	1.125	1.128	1.132	1.134	1.138	1.143	1.147	1.150
83	1.066	1.060	1.069	1.077	1.066	1.052	1.020	0.994	1.005	1.061	1.117	1.138	1.144	1.146	1.146	1.147	1.149	1.155	1.158	1.152
84	1.055	1.046	1.055	1.063	1.051	1.028	1.007	1.005	1.012	1.023	1.053	1.067	1.079	1.091	1.103	1.116	1.124	1.130	1.136	1.137
85	1.024	1.029	1.047	1.060	1.049	1.026	1.007	1.013	1.010	1.003	0.998	1.002	1.002	1.005	1.003	1.010	1.011	1.014	1.018	1.024
86	0.991	0.998	1.007	1.017	1.011	1.001	0.998	1.005	1.011	1.003	0.999	0.998	0.998	0.998	0.998	0.999	0.998	0.998	0.997	0.998
87	0.979	0.979	0.978	0.981	0.981	0.986	0.988	1.001	1.007	1.003	0.998	0.998	0.995	0.995	0.995	0.995	0.993	0.994	0.993	0.995
88	0.968	0.965	0.963	0.968	0.976	0.981	0.987	1.001	1.006	1.002	0.998	0.998	0.997	0.997	0.993	0.994	0.991	0.991	0.990	0.993
89	0.956	0.954	0.956	0.963	0.971	0.976	0.981	0.993	1.001	1.001	0.998	1.001	0.998	0.997	0.995	0.995	0.991	0.993	0.993	0.994
90	0.952	0.948	0.950	0.961	0.970	0.975	0.976	0.988	0.998	1.001	1.001	1.001	1.001	0.999	0.995	0.997	0.995	0.995	0.993	0.994
91	0.948	0.948	0.952	0.959	0.966	0.971	0.973	0.984	0.997	0.998	0.999	0.999	0.999	0.998	0.998	0.995	0.995	0.995	0.994	0.993
92	0.952	0.944	0.954	0.954	0.970	0.966	0.975	0.978	0.999	0.998	1.001	0.998	1.002	0.998	0.999	0.995	0.998	0.995	0.993	0.990
93	0.978	0.971	0.971	0.971	0.976	0.978	0.983	0.988	0.999	1.002	1.002	1.003	1.005	1.002	1.002	1.001	0.997	0.998	0.995	0.987
94	0.994	0.994	0.991	0.993	0.990	0.993	0.991	0.997	1.005	1.007	1.003	1.006	1.007	1.010	1.007	1.010	1.007	1.003	0.998	0.995
95	1.006	1.003	1.003	1.002	1.002	1.001	0.999	1.002	1.010	1.012	1.010	1.012	1.012	1.012	1.013	1.013	1.012	1.007	1.002	0.995
96	1.010	1.008	1.007	1.008	1.007	1.006	1.002	1.005	1.012	1.017	1.015	1.019	1.019	1.021	1.021	1.021	1.018	1.013	1.003	0.998
97	1.013	1.012	1.012	1.010	1.010	1.007	1.003	1.007	1.013	1.011	1.012	1.015	1.019	1.023	1.022	1.023	1.018	1.012	1.007	1.005
98	1.014	1.015	1.015	1.013	1.011	1.010	1.006	1.008	1.012	1.011	1.011	1.013	1.015	1.020	1.020	1.020	1.018	1.013	1.011	1.010

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 112

IR SCAN TIME 15.23 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	1.227	1.224	1.221	1.220	1.217	1.212	1.207	1.203	1.204	1.207	1.210	1.213	1.218	1.222	1.227	1.234	1.247	1.268	1.296	1.330
65	1.272	1.278	1.283	1.289	1.290	1.285	1.277	1.264	1.254	1.240	1.229	1.216	1.212	1.209	1.209	1.206	1.210	1.211	1.214	1.215
66	1.290	1.301	1.314	1.327	1.337	1.343	1.346	1.347	1.344	1.334	1.322	1.307	1.288	1.266	1.246	1.231	1.222	1.218	1.215	1.214
67	1.277	1.295	1.313	1.331	1.345	1.356	1.367	1.379	1.390	1.395	1.396	1.397	1.393	1.378	1.355	1.331	1.305	1.282	1.263	1.249
68	1.227	1.245	1.264	1.286	1.300	1.310	1.321	1.339	1.370	1.393	1.407	1.419	1.431	1.439	1.440	1.436	1.425	1.408	1.382	1.353
69	1.192	1.205	1.215	1.226	1.238	1.250	1.262	1.274	1.290	1.309	1.328	1.345	1.361	1.378	1.394	1.409	1.421	1.429	1.432	1.430
70	1.178	1.187	1.193	1.198	1.203	1.210	1.216	1.222	1.227	1.234	1.240	1.249	1.256	1.262	1.268	1.275	1.285	1.297	1.311	1.326
71	1.185	1.191	1.197	1.198	1.200	1.202	1.205	1.206	1.208	1.210	1.211	1.213	1.215	1.217	1.218	1.221	1.225	1.227	1.229	1.231
72	1.184	1.192	1.198	1.201	1.204	1.209	1.211	1.214	1.215	1.215	1.213	1.213	1.209	1.206	1.200	1.196	1.194	1.195	1.196	1.197
73	1.162	1.170	1.175	1.178	1.182	1.189	1.193	1.198	1.202	1.202	1.203	1.202	1.204	1.200	1.197	1.193	1.188	1.184	1.182	1.180
74	1.136	1.142	1.146	1.151	1.156	1.159	1.164	1.171	1.175	1.177	1.177	1.178	1.180	1.182	1.180	1.177	1.174	1.172	1.170	1.169
75	1.121	1.126	1.129	1.135	1.139	1.143	1.145	1.150	1.152	1.155	1.156	1.157	1.158	1.159	1.159	1.159	1.158	1.159	1.159	1.159
76	1.117	1.121	1.124	1.129	1.134	1.137	1.138	1.141	1.143	1.145	1.146	1.148	1.148	1.148	1.148	1.148	1.146	1.146	1.145	1.146
77	1.123	1.124	1.127	1.131	1.135	1.139	1.141	1.145	1.146	1.147	1.147	1.147	1.146	1.145	1.146	1.146	1.143	1.142	1.142	1.143
78	1.127	1.131	1.131	1.136	1.139	1.143	1.145	1.148	1.150	1.151	1.152	1.151	1.150	1.149	1.148	1.149	1.146	1.144	1.143	1.143
79	1.133	1.136	1.140	1.144	1.144	1.149	1.150	1.154	1.155	1.156	1.156	1.158	1.156	1.156	1.154	1.155	1.152	1.151	1.149	1.149
80	1.140	1.144	1.148	1.151	1.154	1.158	1.160	1.163	1.164	1.166	1.165	1.165	1.164	1.163	1.161	1.161	1.161	1.160	1.159	1.158
81	1.148	1.152	1.157	1.162	1.166	1.170	1.172	1.176	1.178	1.182	1.182	1.182	1.181	1.180	1.179	1.178	1.177	1.175	1.174	1.173
82	1.152	1.157	1.161	1.167	1.172	1.178	1.182	1.186	1.189	1.192	1.194	1.196	1.196	1.196	1.194	1.194	1.194	1.194	1.194	1.194
83	1.146	1.149	1.153	1.157	1.161	1.166	1.171	1.180	1.187	1.191	1.193	1.194	1.194	1.195	1.195	1.194	1.194	1.193	1.193	1.194
84	1.138	1.140	1.142	1.145	1.149	1.152	1.158	1.167	1.176	1.185	1.190	1.193	1.194	1.196	1.196	1.196	1.196	1.195	1.194	1.195
85	1.027	1.036	1.043	1.049	1.059	1.063	1.064	1.068	1.075	1.085	1.092	1.100	1.105	1.109	1.113	1.119	1.123	1.127	1.131	1.135
86	0.998	0.998	0.999	0.997	0.998	0.997	0.999	0.998	0.999	0.997	0.999	0.998	0.999	0.999	1.001	0.999	1.001	1.002	1.002	1.003
87	0.996	0.997	0.998	1.001	0.999	0.999	0.998	0.998	0.997	0.995	0.994	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.997
88	0.990	0.993	0.993	0.995	0.995	0.997	0.995	0.997	0.997	0.994	0.993	0.991	0.991	0.993	0.991	0.991	0.990	0.993	0.990	0.991
89	0.993	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.993	0.994	0.991	0.993	0.990	0.993	0.990	0.991	0.988	0.990	0.988	0.991
90	0.993	0.995	0.994	0.997	0.995	0.998	0.995	0.998	0.995	0.998	0.998	1.010	1.020	1.010	0.998	0.994	0.990	0.991	0.990	0.991
91	0.991	0.993	0.993	0.994	0.993	0.994	0.995	0.995	0.997	0.998	1.014	1.070	1.110	1.089	1.038	1.003	0.993	0.988	0.990	0.990
92	0.990	0.988	0.988	0.990	0.991	0.991	0.993	0.994	0.995	0.995	0.998	1.019	1.049	1.043	1.013	0.998	0.991	0.990	0.988	0.988
93	0.990	0.983	0.988	0.987	0.993	0.988	0.995	0.993	0.997	0.995	0.998	0.993	0.995	0.988	0.993	0.991	0.991	0.988	0.988	0.988
94	0.990	0.991	0.991	0.995	0.995	0.998	0.998	1.001	1.002	1.003	1.002	1.002	0.998	0.995	0.993	0.993	0.990	0.991	0.986	0.987
95	0.991	0.990	0.995	0.997	0.998	0.999	1.001	1.003	1.005	1.005	1.005	1.005	1.002	0.998	0.995	0.994	0.993	0.990	0.991	0.990
96	0.995	0.996	0.996	0.999	1.001	1.006	1.006	1.007	1.008	1.010	1.008	1.010	1.007	1.005	0.999	0.995	0.994	0.993	0.990	0.990
97	1.001	1.003	1.003	1.006	1.005	1.006	1.010	1.008	1.008	1.007	1.010	1.008	1.007	1.007	1.002	1.001	0.997	0.995	0.995	0.994
98	1.010	1.010	1.010	1.010	1.010	1.011	1.011	1.011	1.012	1.011	1.010	1.008	1.006	1.007	1.005	1.002	0.999	1.006	1.021	1.032

IR TEMPERATURE RECORD.-- TWALL/INITIAL TEMP

IR SCAN TIME 15.23 SEC
GROUP 112 INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	1.365	1.400	1.436	1.466	1.487	1.499	1.490	1.457	1.395	1.319	1.252	1.207	1.180	1.162	1.140	1.090	1.036	1.005	0.993	0.986
65	1.219	1.227	1.244	1.268	1.301	1.339	1.380	1.420	1.447	1.452	1.424	1.365	1.293	1.231	1.189	1.156	1.110	1.051	1.011	0.994
66	1.216	1.216	1.218	1.222	1.225	1.225	1.228	1.234	1.253	1.286	1.332	1.374	1.392	1.371	1.317	1.257	1.209	1.158	1.092	1.031
67	1.241	1.238	1.236	1.236	1.238	1.240	1.240	1.239	1.238	1.236	1.236	1.236	1.247	1.273	1.302	1.310	1.292	1.255	1.206	1.137
68	1.321	1.290	1.268	1.252	1.242	1.235	1.232	1.231	1.233	1.234	1.237	1.237	1.235	1.230	1.229	1.232	1.241	1.259	1.269	1.252
69	1.426	1.414	1.391	1.359	1.326	1.295	1.268	1.247	1.233	1.227	1.226	1.226	1.228	1.228	1.226	1.228	1.229	1.227	1.225	1.221
70	1.342	1.357	1.370	1.378	1.378	1.369	1.353	1.334	1.309	1.289	1.272	1.256	1.242	1.235	1.229	1.227	1.229	1.231	1.231	1.231
71	1.235	1.239	1.245	1.251	1.262	1.273	1.280	1.286	1.291	1.290	1.284	1.274	1.263	1.254	1.246	1.240	1.233	1.227	1.222	1.218
72	1.198	1.200	1.202	1.206	1.209	1.212	1.215	1.222	1.225	1.227	1.230	1.234	1.239	1.241	1.236	1.225	1.215	1.210	1.204	1.200
73	1.177	1.176	1.176	1.177	1.177	1.177	1.178	1.181	1.183	1.185	1.186	1.188	1.189	1.189	1.189	1.192	1.196	1.200	1.203	1.202
74	1.167	1.165	1.163	1.162	1.159	1.157	1.155	1.153	1.153	1.158	1.158	1.157	1.155	1.155	1.155	1.156	1.156	1.158	1.159	1.162
75	1.160	1.160	1.159	1.159	1.158	1.156	1.151	1.148	1.145	1.143	1.142	1.142	1.139	1.138	1.137	1.138	1.138	1.139	1.139	1.140
76	1.146	1.147	1.145	1.146	1.146	1.147	1.147	1.146	1.145	1.144	1.142	1.142	1.143	1.142	1.139	1.138	1.136	1.137	1.135	1.134
77	1.143	1.142	1.140	1.140	1.139	1.138	1.136	1.136	1.133	1.134	1.134	1.136	1.136	1.137	1.137	1.139	1.139	1.140	1.141	1.143
78	1.144	1.144	1.144	1.142	1.141	1.140	1.139	1.136	1.134	1.132	1.132	1.132	1.132	1.133	1.129	1.129	1.133	1.134	1.136	1.137
79	1.148	1.147	1.147	1.147	1.146	1.145	1.144	1.143	1.141	1.141	1.139	1.139	1.137	1.137	1.136	1.137	1.137	1.139	1.140	1.142
80	1.157	1.156	1.154	1.153	1.151	1.151	1.148	1.148	1.146	1.147	1.145	1.145	1.144	1.144	1.142	1.144	1.144	1.145	1.145	1.146
81	1.171	1.170	1.168	1.168	1.165	1.163	1.160	1.158	1.156	1.154	1.152	1.151	1.150	1.148	1.148	1.149	1.150	1.150	1.150	1.151
82	1.194	1.194	1.194	1.193	1.191	1.189	1.186	1.183	1.178	1.174	1.170	1.166	1.162	1.158	1.156	1.156	1.155	1.154	1.153	1.152
83	1.195	1.198	1.198	1.200	1.201	1.201	1.201	1.201	1.200	1.198	1.196	1.194	1.191	1.189	1.186	1.184	1.179	1.176	1.172	1.169
84	1.194	1.195	1.195	1.196	1.195	1.194	1.193	1.191	1.189	1.186	1.186	1.187	1.186	1.186	1.186	1.187	1.189	1.191	1.192	1.193
85	1.140	1.145	1.148	1.152	1.157	1.159	1.159	1.158	1.155	1.155	1.153	1.152	1.151	1.151	1.152	1.153	1.153	1.155	1.158	1.161
86	1.002	1.003	1.002	1.005	1.005	1.005	1.006	1.006	1.006	1.005	1.006	1.007	1.007	1.008	1.008	1.008	1.007	1.008	1.010	1.011
87	0.994	0.995	0.994	0.997	0.993	0.995	0.993	0.995	0.990	0.993	0.990	0.995	0.990	0.991	0.988	0.990	0.988	0.988	0.988	0.990
88	0.991	0.993	0.990	0.993	0.990	0.993	0.990	0.991	0.988	0.990	0.987	0.987	0.986	0.987	0.987	0.984	0.981	0.984	0.975	0.981
89	0.990	0.991	0.990	0.991	0.990	0.990	0.988	0.990	0.987	0.988	0.986	0.987	0.984	0.984	0.981	0.981	0.979	0.979	0.979	0.981
90	0.990	0.993	0.990	0.991	0.990	0.993	0.988	0.990	0.987	0.988	0.987	0.990	0.988	0.990	0.984	0.984	0.981	0.981	0.979	0.981
91	0.990	0.988	0.990	0.990	0.990	0.990	0.990	0.991	0.990	0.990	1.003	1.038	1.053	1.031	1.002	0.990	0.984	0.979	0.979	0.979
92	0.988	0.988	0.988	0.990	0.990	0.990	0.990	0.988	0.988	0.987	0.995	1.024	1.047	1.031	1.002	0.988	0.983	0.979	0.978	0.976
93	0.990	0.990	0.991	0.991	0.991	0.993	0.993	0.990	0.990	0.987	0.988	0.987	0.987	0.986	0.984	0.983	0.981	0.979	0.979	0.979
94	0.986	0.988	0.987	0.990	0.988	0.993	0.990	0.993	0.990	0.991	0.987	0.987	0.984	0.987	0.984	0.984	0.981	0.981	0.978	0.979
95	0.990	0.990	0.990	0.990	0.990	0.993	0.994	0.994	0.993	0.990	0.990	0.988	0.987	0.986	0.983	0.983	0.983	0.979	0.979	0.976
96	0.988	0.991	0.990	0.991	0.990	0.993	0.993	0.995	0.995	0.995	0.991	0.990	0.988	0.988	0.987	0.986	0.983	0.986	0.981	0.981
97	0.993	0.993	0.990	0.991	0.990	0.994	0.993	0.994	0.993	0.994	0.991	0.991	0.987	0.987	0.983	0.986	0.981	0.983	0.979	0.983
98	1.020	1.005	0.995	0.993	0.993	0.995	0.993	0.995	0.993	0.995	0.993	0.991	0.988	0.988	0.984	0.987	0.983	0.983	0.981	0.981

NASA/RI OH90 TRANSITION TEST
V416-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VAF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 112

IR SCAN TIME 15.23. SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.983	0.981	0.983	0.984	0.984	0.978	0.971	0.968	0.965	0.965	0.963	0.963	0.961	0.963	0.963	0.961	0.963	0.963	0.959	0.961
65	0.984	0.983	0.981	0.981	0.984	0.986	0.979	0.970	0.965	0.961	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.956
66	0.999	0.988	0.984	0.981	0.981	0.981	0.984	0.978	0.968	0.959	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.952	0.952
67	1.060	1.012	0.993	0.979	0.983	0.978	0.979	0.979	0.983	0.965	0.957	0.948	0.948	0.944	0.948	0.944	0.948	0.944	0.946	0.948
68	1.197	1.116	1.051	1.010	0.990	0.981	0.981	0.978	0.981	0.981	0.970	0.957	0.946	0.944	0.942	0.942	0.942	0.939	0.942	0.939
69	1.220	1.202	1.139	1.059	1.012	0.993	0.981	0.979	0.979	0.978	0.981	0.975	0.957	0.948	0.939	0.937	0.937	0.937	0.937	0.937
70	1.229	1.225	1.210	1.163	1.085	1.027	0.995	0.983	0.978	0.979	0.975	0.978	0.976	0.965	0.948	0.939	0.935	0.937	0.935	0.933
71	1.214	1.209	1.202	1.192	1.162	1.102	1.037	0.998	0.984	0.978	0.978	0.975	0.975	0.975	0.966	0.952	0.939	0.937	0.935	0.935
72	1.196	1.192	1.189	1.187	1.180	1.163	1.116	1.051	1.008	0.987	0.978	0.976	0.975	0.973	0.971	0.965	0.952	0.944	0.937	0.935
73	1.200	1.196	1.189	1.183	1.176	1.171	1.156	1.121	1.065	1.017	0.993	0.981	0.975	0.978	0.970	0.971	0.966	0.959	0.944	0.935
74	1.161	1.162	1.164	1.169	1.170	1.172	1.170	1.162	1.137	1.093	1.033	0.998	0.978	0.978	0.970	0.975	0.966	0.971	0.963	0.952
75	1.140	1.141	1.140	1.142	1.142	1.143	1.140	1.138	1.132	1.118	1.082	1.035	0.998	0.984	0.978	0.976	0.971	0.971	0.971	0.970
76	1.133	1.133	1.133	1.133	1.134	1.136	1.135	1.134	1.132	1.131	1.125	1.102	1.055	1.012	0.990	0.981	0.976	0.975	0.973	0.973
77	1.144	1.145	1.145	1.145	1.147	1.147	1.144	1.143	1.140	1.138	1.135	1.131	1.118	1.082	1.034	0.999	0.984	0.978	0.975	0.975
78	1.139	1.140	1.142	1.145	1.148	1.149	1.151	1.153	1.155	1.153	1.152	1.150	1.147	1.137	1.112	1.063	1.018	0.993	0.979	0.975
79	1.143	1.145	1.146	1.146	1.145	1.144	1.145	1.147	1.147	1.146	1.146	1.148	1.149	1.149	1.146	1.131	1.090	1.039	0.999	0.984
80	1.146	1.148	1.149	1.149	1.151	1.155	1.154	1.155	1.155	1.156	1.153	1.152	1.150	1.150	1.148	1.144	1.131	1.098	1.045	1.003
81	1.148	1.149	1.149	1.151	1.152	1.154	1.152	1.155	1.156	1.157	1.156	1.157	1.156	1.156	1.154	1.156	1.157	1.148	1.117	1.066
82	1.151	1.151	1.151	1.152	1.151	1.152	1.151	1.151	1.152	1.154	1.156	1.159	1.159	1.159	1.159	1.159	1.159	1.158	1.150	1.129
83	1.165	1.162	1.156	1.157	1.155	1.155	1.153	1.153	1.153	1.155	1.157	1.158	1.161	1.163	1.165	1.166	1.167	1.168	1.164	1.158
84	1.193	1.192	1.191	1.191	1.189	1.186	1.183	1.180	1.176	1.173	1.171	1.169	1.168	1.169	1.172	1.175	1.178	1.179	1.175	1.172
85	1.164	1.167	1.172	1.176	1.183	1.191	1.196	1.201	1.204	1.209	1.212	1.214	1.212	1.209	1.205	1.202	1.196	1.190	1.185	1.181
86	1.011	1.013	1.014	1.017	1.020	1.024	1.033	1.039	1.046	1.050	1.059	1.068	1.073	1.073	1.074	1.079	1.080	1.080	1.078	1.077
87	0.987	0.987	0.987	0.988	0.987	0.988	0.987	0.991	0.988	0.987	0.984	0.990	0.993	0.998	0.999	0.997	0.994	0.994	0.993	0.994
88	0.976	0.981	0.976	0.979	0.976	0.981	0.976	0.979	0.976	0.978	0.971	0.978	0.979	0.984	0.984	0.987	0.986	0.986	0.986	0.986
89	0.978	0.979	0.979	0.978	0.976	0.976	0.975	0.978	0.975	0.976	0.975	0.976	0.973	0.975	0.975	0.983	0.979	0.984	0.979	0.983
90	0.979	0.981	0.978	0.978	0.976	0.976	0.975	0.978	0.975	0.978	0.976	0.975	0.971	0.975	0.976	0.987	0.987	0.984	0.981	0.984
91	0.979	0.978	0.978	0.976	0.978	0.976	0.976	0.976	0.979	0.994	1.011	1.010	0.993	0.979	0.975	0.975	0.976	0.978	0.978	0.978
92	0.976	0.978	0.976	0.978	0.975	0.978	0.976	0.976	0.979	0.994	1.017	1.021	1.001	0.986	0.978	0.975	0.973	0.975	0.975	0.975
93	0.976	0.978	0.976	0.976	0.976	0.976	0.976	0.975	0.976	0.976	0.978	0.979	0.978	0.975	0.975	0.973	0.973	0.975	0.975	0.975
94	0.978	0.979	0.978	0.978	0.976	0.978	0.976	0.976	0.975	0.978	0.976	0.976	0.976	0.976	0.975	0.975	0.975	0.978	0.976	0.978
95	0.978	0.976	0.978	0.976	0.978	0.975	0.976	0.975	0.975	0.973	0.976	0.975	0.978	0.976	0.978	0.976	0.976	0.978	0.979	0.978
96	0.979	0.981	0.978	0.979	0.978	0.979	0.978	0.978	0.976	0.978	0.976	0.976	0.975	0.976	0.973	0.978	0.975	0.981	0.978	0.983
97	0.978	0.981	0.979	0.979	0.979	0.979	0.976	0.979	0.978	0.981	0.979	0.979	0.978	0.979	0.979	0.987	0.987	0.988	0.986	0.987
98	0.981	0.983	0.979	0.981	0.979	0.981	0.979	0.981	0.978	0.981	0.978	0.979	0.978	0.981	0.983	0.994	0.997	0.995	0.993	0.991

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
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MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 112

IR SCAN TIME 15.23 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.961	0.965	0.961	0.961	0.961	0.961	0.959	0.959	0.961	0.959	0.959	0.959	0.957	0.957	0.956	0.957	0.956	0.957	0.957	0.956
65	0.957	0.957	0.957	0.956	0.956	0.957	0.956	0.956	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.952	0.952	0.950	0.952	0.950
66	0.954	0.954	0.950	0.952	0.950	0.950	0.950	0.950	0.950	0.950	0.948	0.948	0.948	0.948	0.948	0.948	0.948	0.944	0.944	0.944
67	0.946	0.944	0.946	0.946	0.946	0.944	0.944	0.944	0.944	0.942	0.944	0.939	0.944	0.942	0.942	0.942	0.942	0.939	0.939	0.939
68	0.942	0.937	0.942	0.937	0.939	0.933	0.939	0.935	0.937	0.935	0.937	0.933	0.935	0.933	0.935	0.933	0.937	0.939	0.937	0.935
69	0.937	0.937	0.937	0.937	0.937	0.933	0.935	0.933	0.935	0.933	0.935	0.930	0.933	0.933	0.933	0.930	0.930	0.930	0.930	0.923
70	0.933	0.935	0.933	0.933	0.930	0.933	0.935	0.933	0.930	0.930	0.928	0.930	0.928	0.930	0.928	0.928	0.925	0.928	0.925	0.928
71	0.933	0.935	0.933	0.933	0.933	0.930	0.930	0.930	0.930	0.928	0.930	0.928	0.928	0.928	0.928	0.925	0.928	0.925	0.925	0.925
72	0.930	0.935	0.933	0.933	0.930	0.930	0.928	0.930	0.928	0.930	0.928	0.930	0.928	0.930	0.928	0.925	0.925	0.928	0.923	0.928
73	0.930	0.928	0.930	0.935	0.928	0.933	0.930	0.933	0.930	0.933	0.930	0.930	0.930	0.925	0.930	0.925	0.920	0.928	0.933	0.928
74	0.937	0.937	0.933	0.933	0.930	0.933	0.930	0.930	0.928	0.930	0.928	0.925	0.925	0.930	0.928	0.930	0.928	0.928	0.925	0.928
75	0.957	0.946	0.933	0.935	0.928	0.933	0.928	0.933	0.925	0.930	0.925	0.930	0.925	0.930	0.923	0.930	0.928	0.930	0.928	0.933
76	0.971	0.971	0.959	0.950	0.937	0.937	0.933	0.933	0.933	0.933	0.928	0.930	0.928	0.930	0.930	0.928	0.928	0.930	0.923	0.925
77	0.973	0.973	0.971	0.971	0.965	0.952	0.942	0.937	0.933	0.933	0.930	0.930	0.928	0.930	0.928	0.930	0.928	0.930	0.925	0.930
78	0.971	0.971	0.971	0.971	0.971	0.970	0.965	0.956	0.944	0.939	0.935	0.930	0.930	0.930	0.928	0.928	0.928	0.928	0.928	0.928
79	0.973	0.971	0.971	0.971	0.971	0.971	0.968	0.970	0.970	0.966	0.959	0.948	0.942	0.942	0.937	0.937	0.933	0.935	0.930	0.933
80	0.983	0.975	0.971	0.971	0.971	0.971	0.970	0.970	0.970	0.971	0.970	0.968	0.961	0.961	0.957	0.952	0.948	0.946	0.939	0.937
81	1.017	0.986	0.975	0.971	0.971	0.971	0.971	0.971	0.968	0.971	0.970	0.971	0.968	0.971	0.970	0.970	0.968	0.965	0.965	0.961
82	1.083	1.033	0.993	0.976	0.971	0.973	0.968	0.970	0.965	0.971	0.965	0.968	0.966	0.970	0.970	0.970	0.970	0.971	0.970	0.975
83	1.140	1.102	1.047	1.006	0.981	0.975	0.971	0.971	0.968	0.966	0.966	0.968	0.968	0.968	0.966	0.970	0.963	0.968	0.963	0.966
84	1.165	1.151	1.119	1.068	1.018	0.988	0.975	0.970	0.968	0.968	0.968	0.966	0.968	0.968	0.966	0.968	0.968	0.968	0.966	0.968
85	1.175	1.167	1.152	1.124	1.077	1.027	0.990	0.975	0.968	0.968	0.968	0.970	0.968	0.968	0.966	0.968	0.968	0.970	0.968	0.968
86	1.076	1.071	1.067	1.057	1.039	1.013	0.991	0.979	0.976	0.979	0.978	0.973	0.970	0.966	0.966	0.968	0.966	0.968	0.966	0.968
87	0.990	0.990	0.987	0.984	0.981	0.979	0.978	0.981	0.984	0.987	0.983	0.978	0.971	0.968	0.966	0.968	0.965	0.966	0.968	0.968
88	0.983	0.984	0.978	0.978	0.975	0.975	0.971	0.971	0.971	0.975	0.973	0.971	0.970	0.968	0.966	0.968	0.970	0.968	0.968	0.968
89	0.979	0.983	0.978	0.978	0.973	0.975	0.970	0.971	0.968	0.970	0.968	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.968	0.968
90	0.987	0.990	0.981	0.976	0.975	0.975	0.975	0.971	0.966	0.971	0.968	0.970	0.966	0.970	0.965	0.970	0.966	0.968	0.965	0.970
91	0.978	0.978	0.975	0.971	0.971	0.971	0.970	0.968	0.968	0.968	0.968	0.968	0.968	0.968	0.965	0.966	0.966	0.968	0.968	0.968
92	0.973	0.973	0.971	0.971	0.970	0.970	0.968	0.968	0.968	0.968	0.966	0.968	0.968	0.968	0.966	0.965	0.965	0.968	0.968	0.968
93	0.975	0.975	0.971	0.971	0.970	0.970	0.970	0.970	0.970	0.971	0.968	0.970	0.968	0.968	0.966	0.968	0.966	0.968	0.970	0.970
94	0.976	0.976	0.975	0.973	0.971	0.971	0.968	0.971	0.971	0.971	0.971	0.970	0.968	0.970	0.968	0.968	0.968	0.971	0.968	0.970
95	0.979	0.979	0.978	0.975	0.971	0.971	0.971	0.971	0.971	0.971	0.971	0.971	0.971	0.971	0.970	0.970	0.970	0.971	0.970	0.971
96	0.979	0.983	0.978	0.976	0.971	0.973	0.971	0.973	0.971	0.973	0.971	0.971	0.970	0.970	0.968	0.970	0.968	0.971	0.970	0.971
97	0.987	0.988	0.983	0.983	0.975	0.975	0.973	0.975	0.973	0.973	0.971	0.973	0.968	0.971	0.966	0.971	0.966	0.971	0.966	0.971
98	0.993	0.997	0.990	0.984	0.978	0.976	0.973	0.975	0.971	0.975	0.975	0.975	0.973	0.973	0.971	0.971	0.971	0.971	0.968	0.970

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 112

IR SCAN TIME 15.23 SEC
INITIAL TEMP 554.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.956	0.954	0.956	0.954	0.954	0.956	0.954	0.954	0.954	0.954
65	0.952	0.950	0.950	0.948	0.950	0.950	0.948	0.948	0.948	0.948
66	0.944	0.944	0.944	0.944	0.944	0.944	0.942	0.942	0.944	0.942
67	0.942	0.939	0.937	0.939	0.939	0.939	0.937	0.937	0.937	0.937
68	0.935	0.933	0.933	0.933	0.935	0.933	0.933	0.933	0.933	0.933
69	0.930	0.923	0.930	0.923	0.930	0.923	0.930	0.918	0.930	0.923
70	0.925	0.928	0.925	0.923	0.923	0.928	0.923	0.925	0.923	0.928
71	0.925	0.925	0.923	0.925	0.925	0.923	0.923	0.923	0.923	0.923
72	0.925	0.928	0.928	0.923	0.923	0.928	0.923	0.923	0.925	0.925
73	0.928	0.930	0.925	0.920	0.920	0.920	0.920	0.920	0.920	0.923
74	0.928	0.928	0.925	0.925	0.923	0.925	0.925	0.925	0.923	0.928
75	0.925	0.925	0.923	0.925	0.925	0.925	0.923	0.925	0.923	0.925
76	0.923	0.928	0.923	0.928	0.920	0.928	0.923	0.925	0.920	0.925
77	0.928	0.930	0.928	0.928	0.925	0.928	0.923	0.925	0.923	0.923
78	0.928	0.923	0.925	0.925	0.925	0.925	0.925	0.923	0.923	0.923
79	0.930	0.933	0.930	0.935	0.930	0.935	0.930	0.933	0.930	0.933
80	0.933	0.935	0.928	0.930	0.925	0.930	0.928	0.928	0.923	0.923
81	0.956	0.952	0.948	0.944	0.939	0.939	0.935	0.935	0.930	0.933
82	0.968	0.968	0.965	0.965	0.961	0.957	0.956	0.954	0.948	0.948
83	0.965	0.968	0.965	0.968	0.965	0.968	0.963	0.965	0.959	0.961
84	0.968	0.970	0.966	0.968	0.970	0.968	0.968	0.970	0.968	0.970
85	0.970	0.970	0.970	0.970	0.968	0.968	0.968	0.970	0.968	0.970
86	0.968	0.968	0.968	0.970	0.970	0.971	0.970	0.968	0.970	0.971
87	0.968	0.970	0.966	0.971	0.971	0.971	0.971	0.971	0.971	0.973
88	0.970	0.968	0.968	0.970	0.970	0.971	0.971	0.971	0.971	0.973
89	0.968	0.968	0.968	0.970	0.970	0.971	0.971	0.973	0.971	0.973
90	0.966	0.968	0.966	0.968	0.966	0.970	0.966	0.971	0.970	0.973
91	0.968	0.968	0.968	0.968	0.968	0.971	0.971	0.971	0.971	0.971
92	0.968	0.968	0.968	0.971	0.970	0.971	0.971	0.971	0.971	0.971
93	0.970	0.968	0.971	0.971	0.971	0.971	0.973	0.975	0.973	0.973
94	0.968	0.971	0.968	0.971	0.970	0.973	0.973	0.975	0.973	0.975
95	0.971	0.971	0.971	0.971	0.970	0.970	0.971	0.971	0.971	0.971
96	0.970	0.971	0.968	0.971	0.970	0.973	0.971	0.971	0.973	0.975
97	0.968	0.971	0.968	0.971	0.966	0.971	0.968	0.975	0.973	0.973
98	0.971	0.971	0.971	0.971	0.971	0.971	0.973	0.973	0.975	0.976

IR HEAT TRANSFER COEFFICIENT - H(.9TU)/HREF
IR SCAN TIME 15.23 SEC
GROUP 112 HREF = 0.253E-01

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	0.003	0.003	0.003	0.003	0.003	0.001	0.001	0.000	0.003	0.000	0.001	0.001	0.001	0.000	0.000	0.001	0.001	0.001	0.001	0.000
30	0.003	0.003	0.003	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000
31	0.003	0.003	0.001	0.002	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000
32	0.003	0.002	0.002	0.001	0.003	0.001	0.001	0.001	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
33	0.003	0.003	0.003	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.003
34	0.003	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.002	0.002	0.003	0.003
35	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.002	0.003	0.002	0.001	0.001	0.001
36	0.000	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.003	0.003	0.001	0.001	0.001	0.001	0.001	0.001
37	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
38	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.002	0.003	0.002	0.002	0.002	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.003	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
41	0.003	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
42	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
43	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
44	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002
45	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.004	0.030	0.060
46	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.014	0.055	0.099
47	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.023	0.072	0.117
48	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.040	0.097	0.137
49	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.013	0.058	0.117	0.151
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.024	0.079	0.130	0.157
51	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.039	0.096	0.136	0.158
52	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.005	0.047	0.105	0.141	0.159
53	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.006	0.056	0.115	0.147	0.163
54	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.009	0.066	0.120	0.147	0.162
55	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.022	0.079	0.124	0.145	0.157
56	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.041	0.096	0.130	0.145	0.154
57	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.009	0.060	0.111	0.136	0.148	0.157
58	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.019	0.077	0.122	0.142	0.153	0.160
59	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.032	0.092	0.130	0.146	0.156	0.165
60	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.030	0.080	0.110	0.125	0.138	0.148
61	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.027	0.060	0.078	0.088	0.097	0.106
62	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.030	0.056	0.067	0.072	0.075	0.079
63	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.009	0.049	0.078	0.087	0.089	0.088	0.088

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 15.23 SEC
GROUP 112 HREF = 0.253E-01

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.002	0.001	0.002	0.001	0.001
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.002	0.003	0.002	0.002	0.003	0.001	0.002	0.001	0.001	0.001	0.001
31	0.000	0.000	0.000	0.002	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
32	0.001	0.001	0.002	0.003	0.003	0.004	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
33	0.003	0.003	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
37	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
41	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
42	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
43	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
44	0.006	0.006	0.006	0.005	0.004	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
45	0.077	0.087	0.093	0.095	0.093	0.088	0.079	0.068	0.059	0.051	0.038	0.022	0.008	0.002	0.002	0.002	0.002	0.002	0.002	0.002
46	0.126	0.144	0.159	0.172	0.185	0.197	0.206	0.207	0.213	0.227	0.207	0.142	0.082	0.038	0.016	0.006	0.001	0.000	0.000	0.000
47	0.142	0.158	0.171	0.184	0.194	0.206	0.218	0.229	0.236	0.249	0.276	0.261	0.183	0.106	0.054	0.026	0.013	0.007	0.004	0.004
48	0.158	0.174	0.189	0.203	0.215	0.224	0.231	0.236	0.241	0.244	0.247	0.261	0.255	0.189	0.109	0.054	0.023	0.012	0.009	0.008
49	0.170	0.186	0.201	0.217	0.232	0.245	0.255	0.262	0.265	0.262	0.256	0.251	0.250	0.239	0.182	0.107	0.053	0.022	0.009	0.006
50	0.175	0.190	0.208	0.227	0.248	0.266	0.278	0.287	0.292	0.290	0.284	0.274	0.263	0.254	0.236	0.182	0.109	0.053	0.022	0.009
51	0.174	0.189	0.204	0.221	0.240	0.259	0.275	0.293	0.309	0.316	0.314	0.311	0.301	0.287	0.271	0.247	0.195	0.124	0.066	0.030
52	0.172	0.186	0.199	0.216	0.232	0.244	0.252	0.261	0.278	0.300	0.319	0.332	0.335	0.331	0.321	0.306	0.288	0.250	0.178	0.101
53	0.174	0.185	0.198	0.214	0.229	0.244	0.252	0.259	0.264	0.264	0.262	0.270	0.289	0.311	0.326	0.332	0.330	0.323	0.301	0.240
54	0.176	0.189	0.202	0.217	0.234	0.246	0.255	0.264	0.275	0.286	0.287	0.273	0.248	0.230	0.233	0.257	0.288	0.316	0.331	0.330
55	0.167	0.178	0.191	0.206	0.221	0.235	0.249	0.264	0.280	0.295	0.307	0.314	0.311	0.292	0.255	0.214	0.190	0.194	0.225	0.269
56	0.163	0.173	0.184	0.195	0.202	0.206	0.213	0.227	0.248	0.273	0.295	0.313	0.324	0.325	0.321	0.306	0.273	0.226	0.182	0.160
57	0.165	0.176	0.190	0.202	0.212	0.219	0.224	0.227	0.227	0.226	0.230	0.243	0.266	0.293	0.316	0.328	0.332	0.327	0.300	0.251
58	0.168	0.179	0.192	0.203	0.214	0.223	0.233	0.244	0.256	0.262	0.259	0.243	0.221	0.203	0.203	0.225	0.261	0.297	0.326	0.334
59	0.173	0.183	0.196	0.208	0.220	0.229	0.238	0.249	0.262	0.275	0.287	0.297	0.296	0.278	0.247	0.209	0.179	0.170	0.189	0.229
60	0.160	0.173	0.188	0.205	0.221	0.236	0.247	0.260	0.273	0.285	0.298	0.308	0.311	0.316	0.320	0.311	0.285	0.243	0.198	0.162
61	0.116	0.127	0.140	0.156	0.175	0.196	0.214	0.233	0.256	0.276	0.295	0.309	0.319	0.327	0.329	0.326	0.325	0.320	0.307	0.283
62	0.085	0.090	0.096	0.104	0.114	0.126	0.138	0.152	0.172	0.196	0.221	0.249	0.279	0.303	0.325	0.337	0.341	0.340	0.340	0.341
63	0.088	0.088	0.088	0.092	0.095	0.099	0.103	0.107	0.113	0.121	0.131	0.143	0.158	0.177	0.200	0.226	0.252	0.282	0.314	0.339

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 15.23 SEC
GROUP 112 HREF = 0.253E-01

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
31	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
32	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
37	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
41	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
42	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
43	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
44	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
45	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
46	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
47	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48	0.008	0.005	0.003	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
49	0.005	0.008	0.008	0.007	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.004	0.003	0.003	0.005	0.007	0.007	0.004	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
51	0.011	0.004	0.001	0.001	0.001	0.003	0.005	0.004	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
52	0.048	0.020	0.006	0.002	0.000	0.001	0.001	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
53	0.150	0.077	0.033	0.013	0.003	0.001	0.000	0.001	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
54	0.292	0.205	0.113	0.052	0.020	0.006	0.001	0.001	0.001	0.000	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
55	0.308	0.309	0.245	0.148	0.073	0.031	0.010	0.003	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
56	0.169	0.207	0.248	0.240	0.166	0.088	0.040	0.015	0.004	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002	0.002	0.002
57	0.195	0.155	0.139	0.155	0.189	0.172	0.107	0.052	0.021	0.006	0.006	0.006	0.006	0.006	0.001	0.001	0.001	0.001	0.001	0.001
58	0.316	0.269	0.209	0.158	0.128	0.116	0.102	0.062	0.026	0.009	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
59	0.274	0.307	0.313	0.285	0.231	0.174	0.132	0.099	0.064	0.029	0.011	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
60	0.146	0.155	0.188	0.232	0.273	0.285	0.254	0.199	0.147	0.100	0.054	0.021	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
61	0.240	0.193	0.154	0.133	0.132	0.153	0.193	0.226	0.224	0.190	0.147	0.095	0.045	0.016	0.003	0.003	0.003	0.003	0.003	0.003
62	0.337	0.318	0.285	0.237	0.185	0.144	0.122	0.117	0.130	0.156	0.170	0.158	0.111	0.055	0.023	0.006	0.006	0.006	0.006	0.006
63	0.353	0.352	0.346	0.343	0.320	0.278	0.220	0.165	0.127	0.107	0.101	0.106	0.113	0.102	0.070	0.032	0.009	0.009	0.009	0.009

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREFR
IR SCAN TIME 15.23 SEC
HREFR = 0.253E-01.

GROUP 112

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
31	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
32	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
37	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
41	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
42	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
43	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
44	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
45	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
46	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
47	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
49	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
51	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
52	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
53	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
54	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
55	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
56	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
57	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
58	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
59	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
60	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
61	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
62	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
63	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 15.23 SEC
HREF = 0.253E-01

GROUP 112

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
31	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
32	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
37	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
41	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
42	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
43	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
44	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
45	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
46	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
47	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
49	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
51	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
52	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
53	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
54	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
55	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
56	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
57	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
58	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
59	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
60	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
61	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
62	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
63	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 15.23 SEC
GROUP 112 HREF = 0.253E-01

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
31	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
32	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
37	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
41	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
42	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
43	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
44	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
45	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
46	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
47	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
49	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
51	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
52	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
53	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
54	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
55	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
56	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
57	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
58	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
59	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
60	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
61	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
62	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
63	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 15.23 SEC
GROUP 112 HREF = 0.253E-01

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.024	0.077	0.103	0.112	0.116	0.119	0.120
65	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.043	0.096	0.119	0.128	0.135	0.140	0.145
66	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.009	0.061	0.103	0.122	0.132	0.139	0.147	0.154
67	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.012	0.061	0.092	0.106	0.115	0.124	0.133	0.141
68	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.008	0.049	0.071	0.081	0.088	0.095	0.102	0.109
69	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.010	0.048	0.065	0.072	0.078	0.083	0.087	0.091
70	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.017	0.055	0.069	0.075	0.078	0.081	0.083	0.086
71	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.028	0.062	0.074	0.079	0.083	0.086	0.089	0.090
72	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.038	0.063	0.070	0.075	0.079	0.083	0.087	0.089
73	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.039	0.055	0.060	0.063	0.068	0.072	0.076	0.078
74	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.010	0.036	0.045	0.050	0.053	0.056	0.059	0.062	0.065
75	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.019	0.035	0.041	0.044	0.047	0.050	0.052	0.055	0.057
76	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.004	0.025	0.036	0.041	0.044	0.046	0.048	0.051	0.053	0.054
77	0.005	0.014	0.016	0.018	0.022	0.023	0.022	0.005	0.005	0.005	0.006	0.029	0.039	0.043	0.046	0.048	0.051	0.052	0.054	0.057
78	0.009	0.025	0.013	0.027	0.045	0.036	0.039	0.045	0.019	0.019	0.015	0.032	0.041	0.044	0.048	0.050	0.053	0.055	0.057	0.058
79	0.015	0.028	0.012	0.020	0.041	0.049	0.043	0.045	0.044	0.023	0.027	0.040	0.045	0.048	0.050	0.053	0.055	0.057	0.060	0.062
80	0.017	0.030	0.028	0.026	0.028	0.037	0.049	0.041	0.038	0.040	0.041	0.048	0.050	0.052	0.054	0.056	0.058	0.061	0.062	0.066
81	0.022	0.031	0.036	0.037	0.026	0.024	0.023	0.026	0.030	0.037	0.046	0.053	0.056	0.058	0.059	0.061	0.062	0.065	0.066	0.070
82	0.027	0.031	0.038	0.041	0.029	0.022	0.011	0.004	0.011	0.030	0.049	0.058	0.060	0.061	0.063	0.065	0.067	0.070	0.071	0.073
83	0.030	0.027	0.031	0.036	0.030	0.023	0.009	0.009	0.002	0.028	0.055	0.067	0.070	0.071	0.071	0.072	0.073	0.076	0.076	0.074
84	0.025	0.021	0.025	0.029	0.023	0.012	0.003	0.002	0.005	0.010	0.024	0.031	0.036	0.042	0.049	0.055	0.059	0.062	0.066	0.066
85	0.011	0.013	0.021	0.027	0.022	0.011	0.003	0.006	0.004	0.001	0.001	0.001	0.001	0.002	0.001	0.004	0.005	0.006	0.008	0.011
86	0.012	0.012	0.003	0.007	0.005	0.000	0.000	0.002	0.005	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
87	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.000	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
88	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
89	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
92	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
93	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000
94	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.003	0.001	0.003	0.003	0.004	0.003	0.004	0.003	0.001	0.001	0.001
95	0.003	0.001	0.001	0.001	0.001	0.000	0.000	0.001	0.004	0.005	0.004	0.005	0.005	0.005	0.006	0.006	0.005	0.003	0.001	0.001
96	0.004	0.004	0.003	0.004	0.003	0.003	0.001	0.002	0.005	0.007	0.007	0.008	0.008	0.009	0.009	0.009	0.008	0.006	0.001	0.001
97	0.006	0.005	0.005	0.004	0.004	0.003	0.001	0.003	0.006	0.005	0.005	0.007	0.008	0.010	0.010	0.010	0.008	0.005	0.003	0.002
98	0.006	0.007	0.007	0.006	0.005	0.004	0.003	0.004	0.005	0.005	0.005	0.006	0.007	0.009	0.009	0.009	0.008	0.006	0.005	0.004

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 15.23 SEC
GROUP 112 HREF = 0.253E-01

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	0.118	0.116	0.115	0.114	0.112	0.109	0.106	0.104	0.104	0.106	0.108	0.110	0.113	0.115	0.118	0.123	0.131	0.146	0.165	0.190
65	0.148	0.152	0.156	0.160	0.160	0.157	0.152	0.142	0.136	0.126	0.120	0.112	0.109	0.107	0.107	0.106	0.108	0.109	0.110	0.111
66	0.161	0.169	0.178	0.188	0.196	0.200	0.203	0.204	0.201	0.194	0.184	0.173	0.159	0.144	0.131	0.121	0.116	0.113	0.111	0.110
67	0.152	0.164	0.178	0.191	0.202	0.211	0.220	0.230	0.240	0.244	0.245	0.246	0.243	0.229	0.210	0.191	0.171	0.155	0.142	0.132
68	0.118	0.130	0.143	0.158	0.168	0.175	0.184	0.197	0.222	0.242	0.256	0.266	0.278	0.286	0.287	0.283	0.272	0.256	0.232	0.208
69	0.097	0.105	0.111	0.118	0.125	0.133	0.142	0.149	0.161	0.174	0.189	0.202	0.215	0.229	0.243	0.257	0.268	0.276	0.279	0.278
70	0.089	0.094	0.098	0.101	0.104	0.108	0.112	0.115	0.119	0.123	0.127	0.133	0.137	0.141	0.146	0.150	0.157	0.166	0.176	0.187
71	0.093	0.097	0.100	0.101	0.102	0.103	0.105	0.106	0.107	0.108	0.109	0.110	0.111	0.112	0.113	0.115	0.117	0.119	0.120	0.121
72	0.092	0.097	0.101	0.102	0.104	0.107	0.109	0.110	0.111	0.111	0.110	0.110	0.107	0.106	0.102	0.099	0.098	0.099	0.099	0.100
73	0.080	0.084	0.087	0.089	0.092	0.095	0.098	0.101	0.103	0.103	0.104	0.103	0.104	0.102	0.100	0.098	0.095	0.092	0.092	0.090
74	0.066	0.069	0.071	0.074	0.077	0.078	0.081	0.085	0.087	0.088	0.088	0.089	0.090	0.091	0.090	0.088	0.087	0.086	0.084	0.084
75	0.058	0.060	0.062	0.065	0.067	0.069	0.071	0.073	0.075	0.076	0.077	0.077	0.077	0.078	0.078	0.078	0.078	0.078	0.078	0.078
76	0.056	0.058	0.059	0.062	0.065	0.066	0.067	0.068	0.070	0.071	0.071	0.072	0.072	0.072	0.072	0.072	0.071	0.071	0.071	0.071
77	0.058	0.059	0.061	0.063	0.065	0.067	0.068	0.070	0.071	0.071	0.072	0.072	0.071	0.070	0.071	0.071	0.070	0.069	0.069	0.069
78	0.061	0.063	0.063	0.065	0.067	0.070	0.071	0.072	0.073	0.074	0.074	0.074	0.073	0.072	0.072	0.072	0.071	0.070	0.070	0.070
79	0.064	0.066	0.068	0.070	0.070	0.072	0.073	0.075	0.076	0.077	0.077	0.078	0.076	0.077	0.076	0.076	0.074	0.074	0.073	0.073
80	0.068	0.070	0.072	0.074	0.075	0.077	0.079	0.080	0.081	0.082	0.082	0.082	0.081	0.081	0.079	0.079	0.079	0.079	0.078	0.077
81	0.072	0.075	0.077	0.080	0.082	0.085	0.086	0.088	0.089	0.091	0.091	0.092	0.091	0.090	0.090	0.089	0.088	0.087	0.087	0.086
82	0.075	0.077	0.079	0.083	0.086	0.089	0.091	0.094	0.096	0.097	0.098	0.099	0.099	0.099	0.099	0.099	0.099	0.099	0.098	0.098
83	0.071	0.072	0.075	0.077	0.079	0.082	0.085	0.090	0.094	0.097	0.098	0.099	0.099	0.099	0.099	0.099	0.098	0.098	0.098	0.099
84	0.067	0.068	0.069	0.071	0.073	0.074	0.077	0.083	0.088	0.093	0.096	0.098	0.099	0.099	0.100	0.100	0.099	0.099	0.099	0.099
85	0.012	0.016	0.019	0.022	0.027	0.029	0.029	0.031	0.034	0.040	0.043	0.047	0.049	0.051	0.054	0.056	0.059	0.061	0.063	0.065
86	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.001
87	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
89	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.009	0.004	0.004	0.004	0.004	0.004	0.004
91	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.006	0.032	0.052	0.041	0.017	0.001	0.001	0.001	0.001	0.001
92	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.008	0.022	0.019	0.006	0.006	0.006	0.006	0.006	0.006
93	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
94	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
95	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.001	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
96	0.001	0.001	0.001	0.001	0.000	0.003	0.003	0.003	0.004	0.004	0.004	0.004	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002
97	0.000	0.001	0.001	0.003	0.002	0.003	0.004	0.004	0.004	0.003	0.004	0.004	0.003	0.003	0.001	0.000	0.000	0.000	0.000	0.000
98	0.004	0.004	0.004	0.004	0.004	0.005	0.005	0.005	0.005	0.005	0.004	0.004	0.004	0.003	0.002	0.001	0.001	0.003	0.009	0.014

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 15.23 SEC
GROUP 112 HREF = 0.253E-01

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	0.219	0.249	0.283	0.314	0.337	0.351	0.340	0.304	0.244	0.182	0.135	0.106	0.090	0.080	0.068	0.042	0.016	0.002	0.002	0.002
65	0.114	0.118	0.130	0.145	0.168	0.197	0.231	0.267	0.294	0.299	0.272	0.219	0.163	0.121	0.095	0.076	0.052	0.023	0.005	0.005
66	0.111	0.112	0.113	0.115	0.117	0.117	0.119	0.123	0.136	0.158	0.192	0.226	0.242	0.224	0.180	0.138	0.107	0.078	0.043	0.014
67	0.128	0.125	0.124	0.124	0.126	0.127	0.126	0.126	0.125	0.124	0.124	0.124	0.131	0.149	0.169	0.175	0.162	0.136	0.106	0.066
68	0.183	0.160	0.145	0.135	0.126	0.124	0.122	0.121	0.122	0.123	0.125	0.125	0.124	0.121	0.120	0.121	0.127	0.139	0.146	0.135
69	0.273	0.262	0.240	0.214	0.188	0.165	0.145	0.131	0.123	0.119	0.118	0.118	0.119	0.119	0.118	0.119	0.120	0.118	0.117	0.115
70	0.199	0.212	0.222	0.230	0.229	0.221	0.208	0.193	0.175	0.160	0.148	0.137	0.128	0.123	0.120	0.119	0.120	0.121	0.121	0.121
71	0.123	0.126	0.130	0.134	0.141	0.149	0.154	0.158	0.161	0.160	0.156	0.149	0.142	0.136	0.131	0.126	0.123	0.119	0.115	0.113
72	0.101	0.102	0.103	0.106	0.107	0.109	0.111	0.115	0.117	0.119	0.120	0.123	0.126	0.127	0.124	0.117	0.111	0.108	0.104	0.102
73	0.089	0.088	0.088	0.088	0.088	0.088	0.089	0.091	0.092	0.093	0.094	0.095	0.095	0.096	0.095	0.097	0.099	0.102	0.104	0.103
74	0.083	0.082	0.081	0.080	0.078	0.077	0.076	0.075	0.075	0.078	0.078	0.077	0.076	0.076	0.076	0.076	0.077	0.078	0.078	0.080
75	0.079	0.079	0.078	0.078	0.077	0.076	0.074	0.072	0.070	0.070	0.069	0.069	0.067	0.066	0.066	0.067	0.067	0.067	0.067	0.068
76	0.071	0.071	0.071	0.071	0.071	0.072	0.071	0.071	0.070	0.070	0.069	0.069	0.069	0.069	0.067	0.066	0.066	0.066	0.065	0.065
77	0.069	0.069	0.068	0.068	0.067	0.066	0.065	0.065	0.064	0.065	0.065	0.066	0.066	0.066	0.066	0.067	0.067	0.068	0.068	0.070
78	0.070	0.070	0.070	0.069	0.068	0.068	0.067	0.068	0.065	0.064	0.064	0.063	0.064	0.064	0.062	0.062	0.064	0.065	0.065	0.066
79	0.072	0.072	0.072	0.071	0.071	0.071	0.070	0.070	0.068	0.068	0.067	0.067	0.066	0.066	0.066	0.066	0.066	0.067	0.068	0.069
80	0.077	0.077	0.075	0.075	0.074	0.074	0.072	0.072	0.071	0.071	0.071	0.071	0.070	0.070	0.069	0.070	0.070	0.071	0.071	0.071
81	0.085	0.084	0.083	0.083	0.082	0.080	0.079	0.078	0.076	0.075	0.074	0.074	0.073	0.072	0.072	0.073	0.073	0.073	0.073	0.074
82	0.098	0.099	0.098	0.098	0.096	0.095	0.093	0.092	0.089	0.087	0.084	0.082	0.080	0.078	0.077	0.076	0.076	0.075	0.075	0.075
83	0.099	0.101	0.101	0.102	0.102	0.103	0.103	0.102	0.102	0.101	0.100	0.098	0.096	0.095	0.093	0.092	0.090	0.088	0.086	0.084
84	0.099	0.099	0.099	0.099	0.099	0.099	0.098	0.096	0.095	0.095	0.094	0.094	0.094	0.094	0.094	0.094	0.095	0.097	0.097	0.098
85	0.068	0.070	0.072	0.075	0.077	0.078	0.078	0.077	0.076	0.076	0.075	0.074	0.074	0.074	0.074	0.075	0.075	0.076	0.077	0.079
86	0.001	0.001	0.001	0.002	0.002	0.002	0.003	0.003	0.003	0.002	0.003	0.003	0.003	0.004	0.004	0.004	0.003	0.004	0.004	0.005
87	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
89	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
91	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.017	0.024	0.014	0.001	0.001	0.001	0.001	0.001	0.001
92	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.011	0.021	0.014	0.001	0.001	0.001	0.001	0.001	0.001
93	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
94	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
95	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
96	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
97	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
98	0.009	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 15.23 SEC
HREF = 0.253E-01.

GROUP 112

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
65	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
66	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
67	0.027	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
68	0.100	0.055	0.023	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
69	0.114	0.103	0.067	0.027	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
70	0.120	0.117	0.108	0.080	0.040	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
71	0.110	0.107	0.103	0.097	0.080	0.048	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017
72	0.099	0.097	0.096	0.094	0.090	0.081	0.055	0.023	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
73	0.102	0.099	0.095	0.092	0.088	0.085	0.076	0.058	0.030	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
74	0.079	0.080	0.081	0.084	0.084	0.086	0.084	0.080	0.066	0.043	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
75	0.068	0.068	0.068	0.069	0.069	0.069	0.068	0.067	0.063	0.056	0.038	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016
76	0.064	0.064	0.064	0.064	0.064	0.065	0.065	0.065	0.064	0.063	0.060	0.048	0.025	0.005	0.005	0.005	0.005	0.005	0.005	0.005
77	0.070	0.071	0.071	0.071	0.071	0.072	0.070	0.069	0.068	0.066	0.065	0.063	0.056	0.038	0.015	0.015	0.015	0.015	0.015	0.015
78	0.067	0.068	0.069	0.071	0.072	0.073	0.074	0.075	0.076	0.075	0.074	0.073	0.071	0.066	0.053	0.029	0.008	0.008	0.008	0.008
79	0.069	0.071	0.071	0.071	0.070	0.070	0.071	0.072	0.072	0.071	0.071	0.072	0.072	0.073	0.071	0.063	0.042	0.017	0.017	0.017
80	0.071	0.072	0.072	0.073	0.074	0.076	0.075	0.076	0.076	0.077	0.075	0.074	0.073	0.073	0.072	0.070	0.063	0.046	0.020	0.001
81	0.072	0.073	0.072	0.074	0.075	0.075	0.075	0.076	0.076	0.077	0.077	0.077	0.076	0.077	0.076	0.076	0.077	0.072	0.056	0.030
82	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.076	0.077	0.078	0.078	0.078	0.078	0.078	0.078	0.078	0.073	0.062
83	0.081	0.080	0.078	0.077	0.076	0.076	0.075	0.075	0.075	0.076	0.077	0.078	0.079	0.081	0.082	0.082	0.083	0.083	0.081	0.078
84	0.098	0.097	0.097	0.096	0.095	0.094	0.092	0.090	0.088	0.086	0.085	0.084	0.083	0.084	0.085	0.087	0.089	0.090	0.087	0.085
85	0.081	0.083	0.086	0.088	0.092	0.096	0.099	0.102	0.104	0.107	0.109	0.110	0.109	0.107	0.105	0.103	0.100	0.096	0.093	0.091
86	0.005	0.006	0.006	0.007	0.009	0.011	0.015	0.017	0.021	0.023	0.027	0.031	0.034	0.033	0.034	0.036	0.037	0.037	0.036	0.035
87	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
89	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
91	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.005	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
92	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000
93	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
94	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
95	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
96	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
97	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
98	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 15.23 SEC
HREF = 0.253E-01

GROUP 112

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
65	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
66	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
67	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
68	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
69	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
70	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
71	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017
72	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
73	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
74	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
75	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016
76	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
77	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
78	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
79	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017
80	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
81	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
82	0.038	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
83	0.068	0.046	0.021	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
84	0.082	0.074	0.057	0.031	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
85	0.088	0.083	0.075	0.059	0.035	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
86	0.035	0.033	0.031	0.026	0.017	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
87	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
89	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
91	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
92	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
93	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
94	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
95	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
96	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
97	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
98	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 15.23 SEC
HREF = 0.253E-01

GROUP 112

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
65	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
66	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
67	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
68	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
69	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
70	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
71	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017
72	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
73	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
74	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
75	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016
76	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
77	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
78	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
79	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017
80	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
81	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
82	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
83	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
84	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
85	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
86	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
87	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
89	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
91	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
92	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
93	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
94	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
95	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
96	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
97	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
98	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

GROUP	* * * * TITLE TYPE	MODEL DESCRIPTION * * * * GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
114	RSI AFT	0.02	0.010	0.02	29.98	0.053	5	16	25

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/F FT-1	HREF BTU/F12-SEC-R	INITIAL TEMP DEG R
7.98	425.16	1290.67	93.96	0.0443	3792.	0.395E-04	0.756E-07	0.198E+07	0.290E-01	536.7

IR CAMERA INFORMATION

MOUNTING LOCATION	260
F STOP	1.8
LENS-DEG	15
SENSITIVITY	1000.
BLACK LEVEL VOLTAGE	2.4541
LINE SCAN PHI	90
MODEL EMISSIVITY	0.96
REF EMISSIVITY	0.94
WINDOW FACTOR	0.860

TIME RECORDS

LIFT OFF	0.00
CENTER LINE	1.99
IR SCAN TIME	11.23
DELTA TIME,SEC	10.11
PHOTO 1 TIME	516
PHOTO 2 TIME	0
PHOTO 3 TIME	0
PHOTO 4 TIME	0

REFERENCE TARGET INFORMATION

TCR5	502.11
TCR6	-228.49

DIGITAL DATA AREA PRINTOUT LOCATION

LINE 29 THROUGH 96
POINT 1 THROUGH 110

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 114

IR SCAN TIME 10.11 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	1.054	1.057	1.057	1.053	1.054	1.053	1.051	1.052	1.052	1.052	1.052	1.048	1.052	1.054	1.051	1.050	1.052	1.052	1.053	1.048
30	1.059	1.057	1.057	1.053	1.053	1.051	1.052	1.052	1.053	1.052	1.052	1.052	1.054	1.052	1.053	1.051	1.053	1.052	1.052	1.050
31	1.057	1.054	1.054	1.054	1.054	1.054	1.057	1.054	1.055	1.052	1.054	1.053	1.054	1.053	1.053	1.052	1.052	1.048	1.051	1.048
32	1.057	1.054	1.054	1.055	1.057	1.057	1.057	1.054	1.053	1.053	1.052	1.052	1.051	1.050	1.050	1.051	1.050	1.051	1.051	1.053
33	1.058	1.058	1.058	1.058	1.054	1.054	1.054	1.054	1.052	1.053	1.051	1.051	1.048	1.050	1.050	1.054	1.053	1.057	1.057	1.058
34	1.061	1.059	1.057	1.057	1.054	1.054	1.051	1.051	1.050	1.050	1.050	1.051	1.051	1.053	1.054	1.057	1.058	1.059	1.060	1.060
35	1.058	1.055	1.050	1.052	1.047	1.051	1.045	1.051	1.047	1.052	1.050	1.054	1.052	1.057	1.054	1.059	1.059	1.057	1.051	1.045
36	1.053	1.052	1.051	1.051	1.050	1.051	1.051	1.053	1.052	1.055	1.055	1.057	1.057	1.058	1.055	1.052	1.045	1.037	1.026	1.020
37	1.051	1.051	1.050	1.052	1.052	1.054	1.053	1.055	1.055	1.058	1.057	1.057	1.052	1.048	1.038	1.030	1.020	1.016	1.012	1.011
38	1.052	1.053	1.054	1.054	1.057	1.055	1.058	1.057	1.059	1.055	1.051	1.042	1.034	1.023	1.019	1.014	1.016	1.012	1.014	1.012
39	1.055	1.057	1.054	1.057	1.057	1.058	1.057	1.055	1.046	1.037	1.027	1.020	1.016	1.016	1.014	1.014	1.014	1.016	1.014	1.016
40	1.059	1.059	1.059	1.059	1.059	1.051	1.042	1.033	1.025	1.019	1.019	1.016	1.017	1.016	1.017	1.016	1.017	1.017	1.017	1.017
41	1.062	1.063	1.061	1.052	1.042	1.030	1.023	1.017	1.020	1.017	1.019	1.017	1.019	1.017	1.019	1.019	1.020	1.019	1.020	1.020
42	1.063	1.054	1.043	1.027	1.023	1.017	1.020	1.014	1.020	1.016	1.019	1.017	1.022	1.020	1.020	1.020	1.020	1.020	1.022	1.022
43	1.045	1.032	1.026	1.023	1.023	1.023	1.023	1.020	1.022	1.022	1.023	1.023	1.023	1.023	1.023	1.020	1.023	1.022	1.025	1.022
44	1.034	1.029	1.029	1.023	1.026	1.027	1.016	1.022	1.017	1.029	1.025	1.027	1.026	1.026	1.027	1.029	1.029	1.032	1.037	1.045
45	1.034	1.033	1.032	1.030	1.030	1.030	1.029	1.032	1.029	1.029	1.029	1.032	1.032	1.033	1.032	1.032	1.036	1.051	1.097	1.152
46	1.037	1.036	1.036	1.036	1.036	1.034	1.034	1.034	1.036	1.036	1.034	1.036	1.037	1.038	1.040	1.040	1.042	1.065	1.147	1.230
47	1.041	1.040	1.040	1.040	1.038	1.038	1.040	1.038	1.038	1.038	1.040	1.041	1.040	1.041	1.042	1.043	1.050	1.088	1.186	1.267
48	1.041	1.041	1.042	1.041	1.041	1.041	1.041	1.041	1.041	1.042	1.041	1.042	1.043	1.045	1.047	1.047	1.059	1.128	1.236	1.303
49	1.042	1.040	1.042	1.041	1.043	1.041	1.041	1.040	1.042	1.041	1.043	1.043	1.046	1.047	1.050	1.051	1.073	1.165	1.268	1.322
50	1.040	1.042	1.040	1.038	1.038	1.038	1.040	1.040	1.041	1.041	1.041	1.042	1.045	1.045	1.048	1.050	1.093	1.196	1.284	1.327
51	1.036	1.037	1.036	1.034	1.036	1.036	1.036	1.036	1.036	1.036	1.038	1.038	1.040	1.041	1.047	1.054	1.117	1.225	1.296	1.329
52	1.027	1.026	1.027	1.026	1.026	1.026	1.026	1.026	1.027	1.027	1.029	1.030	1.032	1.033	1.036	1.651	1.132	1.243	1.306	1.334
53	1.019	1.022	1.020	1.019	1.019	1.017	1.020	1.017	1.020	1.020	1.023	1.023	1.025	1.025	1.029	1.051	1.149	1.258	1.313	1.336
54	1.012	1.011	1.014	1.011	1.014	1.011	1.012	1.012	1.014	1.014	1.017	1.017	1.020	1.020	1.025	1.053	1.160	1.264	1.313	1.336
55	1.009	1.009	1.011	1.007	1.011	1.009	1.012	1.011	1.014	1.016	1.017	1.016	1.020	1.022	1.029	1.079	1.193	1.280	1.317	1.335
56	1.009	1.011	1.004	1.011	1.004	1.011	1.004	1.011	1.007	1.014	1.014	1.017	1.017	1.022	1.037	1.119	1.230	1.293	1.317	1.330
57	1.011	1.007	1.006	1.009	1.007	1.007	1.009	1.011	1.011	1.011	1.014	1.016	1.017	1.023	1.052	1.156	1.256	1.302	1.320	1.333
58	1.012	1.011	1.011	1.011	1.011	1.011	1.011	1.012	1.012	1.012	1.014	1.017	1.017	1.026	1.070	1.185	1.274	1.311	1.326	1.336
59	1.014	1.014	1.011	1.014	1.011	1.014	1.012	1.014	1.014	1.016	1.017	1.019	1.022	1.033	1.102	1.226	1.295	1.320	1.332	1.342
60	1.016	1.014	1.014	1.014	1.014	1.014	1.016	1.016	1.017	1.017	1.019	1.022	1.023	1.038	1.126	1.244	1.304	1.327	1.340	1.349
61	1.017	1.017	1.017	1.017	1.017	1.017	1.017	1.019	1.020	1.022	1.020	1.023	1.025	1.045	1.134	1.240	1.288	1.308	1.322	1.334
62	1.019	1.017	1.019	1.017	1.019	1.020	1.020	1.020	1.022	1.022	1.023	1.025	1.029	1.053	1.145	1.239	1.278	1.292	1.300	1.306
63	1.016	1.017	1.012	1.016	1.012	1.017	1.014	1.019	1.017	1.020	1.020	1.025	1.027	1.069	1.174	1.255	1.285	1.300	1.310	1.318

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 114

IR SCAN TIME 10.11 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	1.051	1.048	1.050	1.047	1.050	1.045	1.048	1.046	1.048	1.047	1.051	1.050	1.050	1.050	1.053	1.054	1.055	1.055	1.055	1.055
30	1.050	1.047	1.050	1.047	1.050	1.050	1.051	1.048	1.054	1.054	1.058	1.058	1.060	1.058	1.060	1.057	1.057	1.050	1.050	1.043
31	1.050	1.048	1.052	1.053	1.057	1.057	1.059	1.057	1.060	1.059	1.062	1.060	1.060	1.052	1.050	1.045	1.037	1.033	1.029	1.023
32	1.052	1.057	1.057	1.058	1.059	1.061	1.060	1.058	1.055	1.052	1.046	1.042	1.036	1.027	1.022	1.016	1.006	1.006	1.004	1.004
33	1.059	1.060	1.059	1.060	1.055	1.051	1.045	1.037	1.032	1.026	1.017	1.009	1.006	1.002	1.002	1.002	1.002	1.002	1.001	1.002
34	1.058	1.053	1.047	1.038	1.032	1.025	1.016	1.009	1.006	1.006	1.004	1.004	1.004	1.004	1.002	1.004	1.004	1.004	1.002	1.004
35	1.036	1.027	1.020	1.012	1.007	1.007	1.006	1.007	1.006	1.006	1.006	1.004	1.006	1.006	1.007	1.006	1.006	1.007	1.006	1.007
36	1.009	1.009	1.006	1.009	1.006	1.009	1.007	1.007	1.006	1.009	1.006	1.007	1.006	1.011	1.007	1.011	1.009	1.009	1.009	1.009
37	1.011	1.012	1.011	1.011	1.011	1.009	1.009	1.011	1.009	1.009	1.009	1.011	1.009	1.011	1.009	1.012	1.006	1.012	1.006	1.012
38	1.016	1.014	1.014	1.012	1.014	1.012	1.014	1.014	1.014	1.014	1.014	1.014	1.014	1.014	1.012	1.014	1.012	1.016	1.014	1.014	1.012
39	1.016	1.016	1.016	1.016	1.016	1.016	1.014	1.017	1.016	1.016	1.016	1.017	1.016	1.017	1.016	1.016	1.014	1.016	1.016	1.016
40	1.020	1.017	1.019	1.017	1.020	1.019	1.023	1.017	1.020	1.019	1.020	1.020	1.020	1.017	1.020	1.019	1.020	1.020	1.020	1.019
41	1.022	1.020	1.023	1.020	1.022	1.020	1.023	1.022	1.022	1.022	1.023	1.023	1.022	1.022	1.023	1.023	1.023	1.020	1.022	1.020
42	1.023	1.022	1.023	1.023	1.025	1.023	1.026	1.025	1.026	1.026	1.025	1.025	1.025	1.025	1.025	1.025	1.025	1.023	1.023	1.023
43	1.025	1.023	1.027	1.027	1.027	1.027	1.027	1.026	1.027	1.026	1.030	1.029	1.029	1.026	1.027	1.026	1.027	1.027	1.027	1.026
44	1.051	1.055	1.051	1.051	1.048	1.048	1.042	1.040	1.038	1.037	1.036	1.037	1.034	1.036	1.034	1.033	1.033	1.033	1.032	1.032
45	1.185	1.202	1.211	1.212	1.210	1.201	1.187	1.168	1.151	1.135	1.112	1.084	1.061	1.051	1.045	1.042	1.041	1.040	1.041	1.038
46	1.277	1.305	1.326	1.345	1.362	1.378	1.391	1.395	1.397	1.407	1.383	1.298	1.206	1.125	1.080	1.059	1.053	1.048	1.048	1.047
47	1.308	1.330	1.348	1.362	1.375	1.388	1.404	1.420	1.433	1.449	1.480	1.471	1.382	1.267	1.170	1.106	1.077	1.063	1.057	1.055
48	1.336	1.356	1.376	1.392	1.405	1.414	1.420	1.426	1.432	1.437	1.445	1.471	1.482	1.413	1.290	1.181	1.110	1.078	1.070	1.067
49	1.350	1.371	1.391	1.411	1.430	1.443	1.454	1.461	1.462	1.458	1.452	1.446	1.453	1.459	1.402	1.287	1.181	1.107	1.075	1.063
50	1.352	1.372	1.395	1.419	1.444	1.465	1.479	1.490	1.497	1.496	1.489	1.479	1.466	1.455	1.446	1.397	1.291	1.182	1.110	1.073
51	1.351	1.370	1.389	1.411	1.435	1.458	1.477	1.496	1.514	1.523	1.524	1.520	1.511	1.495	1.477	1.454	1.403	1.308	1.207	1.128
52	1.351	1.367	1.384	1.404	1.426	1.445	1.461	1.478	1.501	1.524	1.540	1.549	1.551	1.544	1.533	1.516	1.496	1.460	1.379	1.261
53	1.352	1.365	1.382	1.400	1.420	1.437	1.450	1.463	1.481	1.501	1.517	1.531	1.545	1.555	1.558	1.555	1.546	1.532	1.507	1.442
54	1.352	1.368	1.384	1.402	1.422	1.437	1.447	1.458	1.472	1.487	1.502	1.513	1.520	1.524	1.529	1.537	1.548	1.556	1.557	1.547
55	1.349	1.365	1.382	1.400	1.419	1.433	1.446	1.460	1.475	1.491	1.505	1.515	1.522	1.526	1.525	1.515	1.500	1.495	1.508	1.532
56	1.341	1.355	1.371	1.390	1.404	1.416	1.431	1.450	1.472	1.491	1.506	1.517	1.524	1.525	1.526	1.528	1.526	1.513	1.483	1.448
57	1.343	1.356	1.375	1.391	1.404	1.416	1.429	1.446	1.466	1.487	1.506	1.520	1.531	1.538	1.541	1.541	1.541	1.544	1.545	1.533
58	1.345	1.359	1.376	1.391	1.405	1.416	1.428	1.442	1.459	1.476	1.491	1.504	1.515	1.525	1.533	1.541	1.548	1.553	1.557	1.557
59	1.351	1.364	1.379	1.394	1.408	1.420	1.430	1.443	1.458	1.474	1.488	1.502	1.513	1.518	1.522	1.524	1.524	1.526	1.535	1.549
60	1.358	1.370	1.384	1.401	1.416	1.430	1.440	1.453	1.467	1.480	1.495	1.506	1.512	1.520	1.529	1.532	1.531	1.526	1.516	1.502
61	1.345	1.360	1.376	1.395	1.414	1.434	1.446	1.458	1.473	1.485	1.497	1.507	1.514	1.522	1.526	1.526	1.528	1.529	1.530	1.532
62	1.313	1.319	1.329	1.344	1.363	1.386	1.407	1.426	1.451	1.477	1.497	1.514	1.527	1.535	1.541	1.543	1.541	1.538	1.538	1.541
63	1.324	1.329	1.333	1.340	1.346	1.351	1.353	1.356	1.370	1.388	1.412	1.442	1.469	1.494	1.517	1.532	1.541	1.551	1.560	1.564

NASA/R1 OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 10.11 SEC
INITIAL TEMP 536.7 DEG. R

GROUP 114

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	1.055	1.053	1.052	1.048	1.045	1.041	1.041	1.037	1.032	1.027	1.025	1.020	1.019	1.016	1.012	1.011	1.011	1.006	1.007	1.006
30	1.042	1.036	1.033	1.026	1.026	1.019	1.017	1.009	1.007	1.002	1.002	0.997	1.001	1.001	1.001	1.001	0.999	0.999	1.001	0.999
31	1.017	1.011	1.007	1.004	1.002	1.001	1.001	1.001	0.999	0.999	0.999	0.997	0.997	0.997	0.997	0.993	0.997	0.997	0.997	0.993
32	1.004	1.001	1.001	1.004	1.001	1.001	1.001	0.999	0.999	0.999	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997
33	1.002	1.002	1.002	1.002	1.002	1.002	1.001	1.002	1.001	1.001	1.001	0.999	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997
34	1.004	1.004	1.002	1.004	1.004	1.004	1.002	1.006	1.004	1.001	1.001	1.001	1.001	1.001	0.999	1.001	0.997	0.999	0.999	0.997
35	1.007	1.007	1.007	1.006	1.006	1.006	1.006	1.006	1.006	1.006	1.004	1.004	1.002	1.002	1.002	1.002	1.002	1.002	1.001	1.001
36	1.007	1.011	1.007	1.009	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.006	1.006	1.006	1.006	1.006	1.004	1.002	1.002
37	1.006	1.011	1.006	1.012	1.006	1.011	1.006	1.011	1.004	1.009	1.004	1.011	1.009	1.009	1.007	1.009	1.007	1.006	1.004	1.006
38	1.016	1.014	1.014	1.012	1.014	1.012	1.014	1.011	1.014	1.011	1.012	1.009	1.012	1.006	1.011	1.007	1.011	1.006	1.009	1.006
39	1.016	1.017	1.016	1.016	1.014	1.014	1.014	1.014	1.014	1.014	1.014	1.012	1.012	1.012	1.011	1.012	1.011	1.012	1.007	1.009
40	1.020	1.017	1.019	1.017	1.019	1.016	1.017	1.016	1.019	1.016	1.016	1.014	1.016	1.014	1.016	1.012	1.014	1.011	1.012	1.011
41	1.020	1.020	1.020	1.019	1.020	1.020	1.019	1.017	1.022	1.017	1.019	1.016	1.017	1.016	1.017	1.014	1.016	1.014	1.014	1.011
42	1.025	1.023	1.023	1.022	1.023	1.022	1.022	1.020	1.020	1.020	1.019	1.020	1.019	1.016	1.016	1.016	1.019	1.014	1.014	1.014
43	1.026	1.026	1.025	1.023	1.023	1.023	1.023	1.023	1.023	1.022	1.022	1.022	1.022	1.020	1.020	1.020	1.020	1.019	1.020	1.017
44	1.032	1.030	1.032	1.029	1.030	1.030	1.026	1.027	1.026	1.025	1.026	1.025	1.026	1.026	1.023	1.025	1.026	1.030	1.023	1.023
45	1.038	1.036	1.034	1.036	1.034	1.034	1.033	1.033	1.032	1.030	1.030	1.032	1.027	1.032	1.029	1.029	1.026	1.029	1.026	1.027
46	1.047	1.046	1.045	1.042	1.042	1.040	1.038	1.038	1.040	1.038	1.036	1.036	1.036	1.033	1.034	1.033	1.034	1.033	1.033	1.032
47	1.051	1.052	1.048	1.050	1.047	1.046	1.042	1.042	1.040	1.040	1.038	1.038	1.038	1.037	1.038	1.037	1.037	1.037	1.036	1.036
48	1.064	1.061	1.058	1.053	1.052	1.048	1.047	1.046	1.045	1.042	1.042	1.041	1.041	1.040	1.041	1.040	1.041	1.038	1.040	1.037
49	1.063	1.064	1.067	1.063	1.060	1.053	1.052	1.047	1.047	1.046	1.046	1.043	1.042	1.042	1.042	1.041	1.041	1.040	1.041	1.040
50	1.061	1.055	1.057	1.058	1.063	1.063	1.060	1.053	1.050	1.047	1.048	1.046	1.046	1.045	1.042	1.042	1.043	1.041	1.041	1.041
51	1.083	1.059	1.057	1.052	1.054	1.054	1.062	1.060	1.054	1.047	1.045	1.042	1.041	1.040	1.041	1.038	1.040	1.038	1.040	1.038
52	1.161	1.096	1.069	1.057	1.055	1.052	1.055	1.055	1.057	1.045	1.038	1.033	1.032	1.027	1.029	1.026	1.029	1.026	1.029	1.029
53	1.327	1.207	1.122	1.077	1.060	1.052	1.054	1.052	1.058	1.054	1.046	1.032	1.026	1.023	1.023	1.020	1.020	1.020	1.023	1.025
54	1.510	1.415	1.262	1.169	1.100	1.067	1.055	1.052	1.054	1.052	1.055	1.046	1.034	1.025	1.019	1.017	1.019	1.020	1.022	1.026
55	1.550	1.540	1.468	1.337	1.209	1.122	1.076	1.057	1.051	1.048	1.051	1.053	1.052	1.038	1.029	1.020	1.022	1.020	1.026	1.027
56	1.442	1.475	1.506	1.477	1.363	1.227	1.132	1.080	1.057	1.051	1.047	1.050	1.048	1.053	1.041	1.026	1.023	1.023	1.023	1.027
57	1.498	1.439	1.386	1.390	1.410	1.357	1.248	1.155	1.093	1.063	1.051	1.048	1.045	1.051	1.052	1.045	1.029	1.023	1.022	1.025
58	1.555	1.545	1.513	1.450	1.373	1.327	1.283	1.195	1.114	1.075	1.057	1.050	1.043	1.043	1.045	1.051	1.045	1.033	1.025	1.022
59	1.559	1.562	1.560	1.556	1.533	1.473	1.384	1.287	1.192	1.116	1.073	1.057	1.045	1.042	1.038	1.041	1.047	1.045	1.032	1.025
60	1.493	1.501	1.522	1.543	1.557	1.560	1.542	1.488	1.398	1.284	1.177	1.105	1.068	1.051	1.041	1.038	1.038	1.041	1.042	1.036
61	1.523	1.502	1.466	1.430	1.423	1.452	1.494	1.523	1.521	1.477	1.394	1.278	1.163	1.094	1.060	1.046	1.038	1.038	1.038	1.041
62	1.544	1.544	1.541	1.527	1.491	1.435	1.376	1.347	1.370	1.420	1.443	1.406	1.303	1.188	1.111	1.070	1.052	1.040	1.036	1.036
63	1.563	1.556	1.551	1.554	1.553	1.547	1.523	1.472	1.400	1.330	1.291	1.298	1.313	1.288	1.220	1.134	1.077	1.052	1.040	1.037

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 114

IR SCAN TIME 10.11 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	1.004	1.004	1.004	1.002	1.002	1.001	1.002	1.001	1.001	1.001	0.999	1.001	1.001	1.002	1.004	1.001	1.002	1.002	1.002	1.002
30	1.001	0.999	0.997	0.997	0.999	0.997	0.997	0.997	0.999	0.999	0.997	0.997	0.997	0.999	0.999	0.999	0.999	0.999	0.997	1.001
31	0.997	0.993	0.999	0.995	0.997	0.995	0.995	0.993	0.995	0.992	0.995	0.995	0.995	0.995	0.997	0.995	0.997	0.997	0.997	0.995
32	0.997	0.997	0.997	0.997	0.995	0.995	0.993	0.995	0.993	0.995	0.993	0.993	0.995	0.995	0.990	0.995	0.993	0.995	0.990	0.995
33	0.997	0.997	0.997	0.997	0.997	0.995	0.995	0.995	0.995	0.995	0.995	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.995	0.992
34	0.997	0.999	0.997	0.997	0.997	0.997	0.997	0.997	0.995	0.997	0.997	0.997	0.995	0.995	0.993	0.993	0.993	0.993	0.993	0.993
35	1.001	1.001	1.001	1.001	1.002	0.997	0.999	0.999	0.997	0.997	0.999	0.997	0.997	0.997	0.997	0.997	0.997	0.995	0.995	0.995
36	1.002	1.002	1.001	1.002	1.001	1.001	1.001	1.001	1.001	0.999	1.001	1.001	1.001	0.999	0.997	0.997	0.997	0.997	0.997	0.997
37	1.004	1.006	1.006	1.004	1.004	1.004	1.002	1.002	1.002	1.004	1.001	1.004	1.001	1.001	1.002	1.002	1.001	0.999	1.001	1.001
38	1.009	1.006	1.007	1.006	1.007	1.004	1.007	1.002	1.004	1.004	1.006	1.004	1.006	1.004	1.006	1.004	1.004	1.004	1.004	1.002
39	1.009	1.009	1.007	1.009	1.007	1.007	1.007	1.007	1.006	1.006	1.004	1.007	1.004	1.007	1.002	1.006	1.002	1.006	1.001	1.006
40	1.012	1.009	1.011	1.009	1.011	1.009	1.011	1.007	1.011	1.007	1.011	1.007	1.009	1.007	1.009	1.007	1.009	1.006	1.007	1.006
41	1.014	1.012	1.012	1.011	1.012	1.009	1.014	1.011	1.011	1.009	1.011	1.009	1.014	1.007	1.011	1.007	1.011	1.007	1.011	1.007
42	1.014	1.014	1.016	1.012	1.014	1.014	1.012	1.014	1.014	1.012	1.012	1.011	1.012	1.011	1.012	1.011	1.012	1.011	1.014	1.011
43	1.019	1.019	1.017	1.016	1.017	1.016	1.016	1.016	1.016	1.014	1.016	1.014	1.016	1.014	1.016	1.014	1.012	1.012	1.014	1.012
44	1.022	1.022	1.022	1.020	1.020	1.020	1.019	1.022	1.020	1.017	1.020	1.025	1.017	1.019	1.017	1.020	1.022	1.019	1.019	1.017
45	1.026	1.027	1.026	1.026	1.025	1.026	1.025	1.026	1.026	1.025	1.025	1.025	1.025	1.025	1.025	1.023	1.023	1.025	1.023	1.025
46	1.032	1.033	1.032	1.032	1.032	1.030	1.030	1.030	1.030	1.022	1.030	1.023	1.030	1.023	1.029	1.023	1.030	1.022	1.027	1.022
47	1.036	1.034	1.034	1.033	1.033	1.033	1.033	1.032	1.032	1.032	1.032	1.032	1.032	1.030	1.030	1.030	1.030	1.030	1.032	1.032
48	1.038	1.037	1.036	1.036	1.036	1.034	1.036	1.034	1.036	1.034	1.034	1.033	1.033	1.033	1.033	1.033	1.033	1.032	1.033	1.033
49	1.040	1.040	1.040	1.037	1.038	1.038	1.037	1.037	1.036	1.034	1.037	1.036	1.036	1.034	1.036	1.036	1.034	1.036	1.036	1.034
50	1.042	1.040	1.040	1.040	1.041	1.038	1.038	1.037	1.038	1.037	1.038	1.038	1.038	1.037	1.037	1.036	1.037	1.036	1.036	1.036
51	1.038	1.038	1.040	1.041	1.040	1.041	1.041	1.040	1.040	1.040	1.041	1.040	1.040	1.038	1.040	1.038	1.038	1.038	1.040	1.037
52	1.034	1.034	1.036	1.037	1.040	1.041	1.041	1.040	1.042	1.041	1.040	1.040	1.040	1.040	1.040	1.040	1.038	1.038	1.037	1.036
53	1.030	1.032	1.036	1.038	1.040	1.038	1.041	1.038	1.041	1.038	1.042	1.038	1.041	1.038	1.040	1.040	1.038	1.036	1.040	1.036
54	1.030	1.033	1.036	1.038	1.041	1.041	1.041	1.041	1.042	1.041	1.042	1.042	1.042	1.041	1.041	1.041	1.041	1.040	1.040	1.038
55	1.030	1.036	1.038	1.040	1.041	1.041	1.041	1.041	1.041	1.041	1.042	1.041	1.041	1.041	1.041	1.040	1.038	1.040	1.038	1.037
56	1.030	1.033	1.036	1.036	1.036	1.036	1.036	1.037	1.036	1.034	1.036	1.036	1.036	1.036	1.033	1.033	1.033	1.032	1.032	1.029
57	1.026	1.026	1.026	1.027	1.026	1.026	1.026	1.027	1.026	1.026	1.025	1.025	1.025	1.025	1.025	1.025	1.025	1.023	1.023	1.023
58	1.020	1.023	1.022	1.020	1.022	1.022	1.020	1.020	1.020	1.020	1.019	1.019	1.019	1.017	1.016	1.017	1.014	1.017	1.014	1.016
59	1.019	1.017	1.016	1.019	1.017	1.017	1.016	1.016	1.014	1.014	1.014	1.014	1.011	1.012	1.011	1.011	1.007	1.011	1.007	1.011
60	1.026	1.023	1.020	1.017	1.017	1.017	1.012	1.017	1.012	1.014	1.009	1.012	1.007	1.011	1.007	1.011	1.007	1.009	1.007	1.009
61	1.038	1.029	1.023	1.020	1.020	1.019	1.017	1.016	1.014	1.014	1.014	1.012	1.011	1.011	1.007	1.011	1.011	1.009	1.011	1.011
62	1.038	1.038	1.033	1.026	1.022	1.019	1.019	1.016	1.017	1.014	1.016	1.011	1.014	1.011	1.014	1.011	1.014	1.011	1.012	1.011
63	1.036	1.036	1.038	1.036	1.026	1.022	1.017	1.016	1.014	1.014	1.012	1.012	1.009	1.011	1.009	1.011	1.009	1.011	1.007	1.011

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 114

IR SCAN TIME 10.11 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	1.004	1.002	1.004	1.002	1.006	1.002	1.004	1.001	1.002	1.002	1.002	1.001	1.001	0.999	0.999	0.997	0.997	0.995	0.997	0.997
30	1.001	1.002	1.001	1.001	1.001	0.999	1.001	1.001	1.001	0.999	0.999	0.997	0.999	0.997	0.997	0.995	0.997	0.995	0.995	0.993
31	0.999	0.997	0.997	0.997	0.997	0.997	0.999	0.997	0.997	0.997	0.997	0.997	0.997	0.995	0.995	0.995	0.993	0.993	0.992	0.992
32	0.990	0.997	0.990	0.995	0.992	0.995	0.992	0.995	0.992	0.995	0.995	0.995	0.993	0.993	0.993	0.992	0.993	0.993	0.992	0.992
33	0.993	0.992	0.993	0.992	0.993	0.992	0.993	0.993	0.992	0.990	0.992	0.992	0.990	0.990	0.986	0.990	0.986	0.990	0.986	0.990
34	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.992	0.992	0.990	0.990	0.992	0.992	0.990	0.990	0.990	0.990	0.990
35	0.995	0.995	0.995	0.993	0.993	0.995	0.993	0.993	0.993	0.992	0.993	0.993	0.993	0.992	0.992	0.992	0.992	0.990	0.992	0.993
36	0.997	0.997	0.997	0.997	0.995	0.995	0.997	0.995	0.995	0.995	0.993	0.995	0.993	0.993	0.993	0.993	0.995	0.993	0.995	0.993
37	0.999	1.001	0.999	0.999	0.997	0.999	0.997	0.997	0.997	0.999	0.997	0.997	0.997	0.997	0.999	0.995	0.997	0.995	0.995	0.997
38	1.004	1.001	1.002	1.001	1.002	1.001	1.001	1.001	1.001	0.999	1.001	0.999	1.001	1.001	0.999	0.999	0.999	0.999	1.001	1.001
39	1.001	1.004	1.002	1.001	1.001	1.002	0.997	1.002	1.002	1.002	1.001	1.002	1.001	1.001	1.001	1.002	1.001	1.001	1.001	1.001
40	1.011	1.007	1.007	1.004	1.006	1.004	1.006	1.004	1.004	1.001	1.004	0.999	1.004	0.999	1.002	0.999	1.004	1.001	1.004	1.001
41	1.007	1.007	1.009	1.007	1.007	1.006	1.007	1.004	1.007	1.006	1.007	1.004	1.006	1.002	1.006	1.002	1.006	1.002	1.004	1.002
42	1.012	1.011	1.011	1.007	1.011	1.009	1.009	1.007	1.009	1.006	1.009	1.009	1.009	1.007	1.009	1.007	1.007	1.006	1.007	1.007
43	1.014	1.012	1.014	1.011	1.011	1.011	1.014	1.009	1.007	1.011	1.012	1.011	1.011	1.009	1.012	1.011	1.011	1.011	1.011	1.009
44	1.017	1.017	1.017	1.022	1.017	1.017	1.020	1.020	1.017	1.017	1.017	1.017	1.014	1.017	1.017	1.016	1.017	1.016	1.016	1.014
45	1.023	1.026	1.023	1.026	1.025	1.025	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.022	1.023
46	1.030	1.026	1.032	1.026	1.032	1.032	1.030	1.029	1.029	1.027	1.029	1.029	1.029	1.029	1.027	1.027	1.029	1.027	1.027	1.027
47	1.030	1.033	1.034	1.034	1.033	1.032	1.032	1.032	1.029	1.032	1.029	1.032	1.027	1.030	1.029	1.032	1.029	1.030	1.027	1.029
48	1.034	1.034	1.036	1.036	1.036	1.034	1.034	1.033	1.034	1.033	1.033	1.032	1.033	1.032	1.032	1.032	1.032	1.030	1.030	1.030
49	1.036	1.036	1.037	1.034	1.036	1.036	1.034	1.034	1.033	1.033	1.033	1.034	1.033	1.033	1.033	1.032	1.033	1.033	1.033	1.032
50	1.036	1.036	1.036	1.036	1.036	1.034	1.036	1.034	1.034	1.033	1.033	1.033	1.034	1.032	1.032	1.032	1.032	1.032	1.032	1.030
51	1.037	1.036	1.037	1.034	1.034	1.033	1.032	1.030	1.030	1.027	1.030	1.027	1.029	1.026	1.029	1.027	1.026	1.026	1.026	1.026
52	1.037	1.037	1.036	1.034	1.033	1.029	1.027	1.025	1.025	1.022	1.022	1.020	1.022	1.020	1.020	1.020	1.020	1.019	1.019	1.017
53	1.036	1.033	1.036	1.032	1.029	1.026	1.023	1.019	1.017	1.014	1.014	1.012	1.014	1.011	1.012	1.009	1.009	1.007	1.011	1.007
54	1.038	1.036	1.034	1.032	1.030	1.025	1.022	1.016	1.014	1.007	1.009	1.006	1.007	1.006	1.006	1.004	1.006	1.001	1.002	1.001
55	1.034	1.034	1.033	1.030	1.029	1.025	1.023	1.017	1.014	1.009	1.009	1.007	1.006	1.004	1.006	1.002	1.002	1.001	1.001	0.997
56	1.029	1.027	1.026	1.026	1.023	1.022	1.016	1.014	1.007	1.009	1.006	1.006	1.002	1.002	1.001	1.001	1.001	0.999	0.999	0.999
57	1.022	1.022	1.020	1.020	1.019	1.017	1.014	1.012	1.009	1.007	1.006	1.007	1.006	1.004	1.006	1.006	1.004	1.004	1.007	1.004
58	1.014	1.014	1.012	1.012	1.011	1.011	1.009	1.007	1.007	1.006	1.006	1.006	1.004	1.004	1.004	1.004	1.002	1.004	1.002	1.001
59	1.009	1.009	1.011	1.007	1.007	1.006	1.006	1.006	1.004	1.004	1.002	1.004	1.002	1.002	1.001	1.001	1.001	1.001	1.001	0.999
60	1.007	1.011	1.011	1.009	1.007	1.009	1.006	1.007	1.004	1.007	1.004	1.006	1.004	1.006	1.002	1.002	1.001	1.004	1.002	1.002
61	1.007	1.011	1.007	1.009	1.006	1.007	1.004	1.007	1.002	1.006	1.004	1.006	1.001	1.004	1.002	1.004	1.001	1.002	1.001	1.004
62	1.014	1.009	1.011	1.009	1.011	1.007	1.009	1.007	1.009	1.006	1.007	1.006	1.006	1.002	1.006	1.002	1.004	1.001	1.004	1.001
63	1.007	1.009	1.009	1.009	1.007	1.006	1.006	1.007	1.006	1.006	1.004	1.004	1.004	1.004	1.001	1.002	1.002	1.001	1.001	0.999

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 10.11 SEC
INITIAL TEMP 536.7 DEG. R

GROUP 114

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.993	0.995	0.995	0.993	0.993	0.993	0.993	0.993	0.993	0.993
30	0.993	0.993	0.995	0.992	0.990	0.990	0.992	0.990	0.992	0.990
31	0.993	0.990	0.990	0.988	0.988	0.988	0.990	0.990	0.990	0.988
32	0.988	0.990	0.988	0.988	0.988	0.986	0.988	0.988	0.990	0.988
33	0.984	0.988	0.986	0.988	0.982	0.988	0.984	0.986	0.988	0.988
34	0.990	0.988	0.988	0.990	0.988	0.986	0.986	0.988	0.986	0.990
35	0.993	0.990	0.992	0.992	0.990	0.992	0.990	0.990	0.990	0.990
36	0.995	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
37	0.997	0.995	0.997	0.997	0.997	0.997	0.995	0.997	0.997	0.995
38	0.999	0.999	0.999	0.999	1.001	0.999	0.999	0.997	0.997	0.999
39	1.001	1.001	0.999	1.001	1.001	1.001	1.001	1.001	1.001	1.001
40	1.004	0.999	1.001	1.001	1.004	1.002	1.004	1.004	1.004	1.004
41	1.004	1.004	1.007	1.004	1.004	1.004	1.006	1.002	1.006	1.001
42	1.007	1.006	1.007	1.007	1.007	1.006	1.007	1.007	1.009	1.007
43	1.012	1.009	1.014	1.009	1.011	1.011	1.012	1.011	1.011	1.009
44	1.017	1.016	1.016	1.017	1.016	1.017	1.017	1.016	1.016	1.016
45	1.022	1.023	1.022	1.022	1.020	1.022	1.022	1.022	1.022	1.020
46	1.027	1.027	1.026	1.027	1.026	1.026	1.026	1.026	1.026	1.026
47	1.026	1.029	1.027	1.029	1.029	1.029	1.029	1.027	1.029	1.027
48	1.030	1.030	1.030	1.030	1.032	1.027	1.030	1.027	1.030	1.027
49	1.033	1.032	1.030	1.030	1.030	1.032	1.032	1.030	1.029	1.029
50	1.030	1.029	1.030	1.029	1.029	1.027	1.029	1.027	1.029	1.026
51	1.026	1.025	1.026	1.023	1.026	1.023	1.025	1.022	1.023	1.023
52	1.019	1.017	1.017	1.016	1.016	1.014	1.016	1.014	1.014	1.014
53	1.009	1.007	1.007	1.006	1.007	1.006	1.006	1.004	1.006	1.004
54	1.002	1.001	1.001	0.999	0.999	0.997	0.999	0.997	0.997	0.995
55	0.999	0.997	0.997	0.990	0.995	0.988	0.995	0.986	0.993	0.986
56	0.997	0.997	0.997	0.997	0.993	0.993	0.995	0.993	0.993	0.993
57	1.004	1.002	1.002	1.004	1.001	1.001	1.001	1.002	1.001	1.001
58	1.001	1.004	1.001	1.001	0.997	0.997	0.999	0.997	0.997	0.997
59	1.001	0.997	1.001	0.999	0.999	0.999	0.997	0.997	0.997	0.997
60	1.002	1.001	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001
61	1.001	1.004	1.002	1.002	1.002	1.002	1.001	1.002	0.999	1.001
62	1.004	0.999	1.002	0.999	1.001	0.997	1.001	0.997	1.001	0.995
63	0.997	0.999	0.997	0.999	0.997	0.997	0.997	0.997	0.997	0.993

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 114

IR SCAN TIME 10.11 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	1.014	1.014	1.014	1.011	1.014	1.012	1.014	1.014	1.017	1.014	1.020	1.020	1.032	1.097	1.208	1.265	1.288	1.300	1.313	1.322
65	1.007	1.011	1.011	1.006	1.007	1.006	1.011	1.007	1.012	1.011	1.014	1.016	1.036	1.125	1.228	1.271	1.288	1.301	1.312	1.321
66	1.002	1.004	1.001	0.999	1.002	1.001	1.002	1.001	1.006	1.004	1.009	1.016	1.062	1.166	1.246	1.277	1.293	1.303	1.313	1.322
67	0.997	0.997	0.999	0.993	0.997	0.997	0.997	0.995	0.999	1.001	1.006	1.014	1.084	1.194	1.255	1.278	1.292	1.303	1.313	1.322
68	0.993	0.992	0.992	0.990	0.992	0.990	0.993	0.990	0.995	0.997	1.001	1.011	1.085	1.196	1.250	1.270	1.283	1.294	1.303	1.311
69	0.990	0.988	0.990	0.990	0.990	0.990	0.990	0.992	0.992	0.995	0.999	1.009	1.089	1.200	1.247	1.267	1.280	1.290	1.300	1.307
70	0.993	0.993	0.986	0.990	0.984	0.990	0.990	0.990	0.992	0.993	0.997	1.012	1.104	1.208	1.249	1.266	1.278	1.288	1.296	1.304
71	0.997	0.992	0.986	0.990	0.993	0.993	0.993	0.988	0.986	0.995	1.001	1.026	1.136	1.223	1.254	1.268	1.279	1.288	1.298	1.306
72	0.992	0.992	0.992	0.990	0.992	0.990	0.993	0.992	0.993	0.993	0.999	1.052	1.171	1.233	1.254	1.267	1.277	1.288	1.297	1.304
73	0.992	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.993	0.993	1.006	1.084	1.193	1.238	1.255	1.265	1.274	1.287	1.296	1.301
74	0.993	0.990	0.990	0.988	0.988	0.990	0.990	0.988	0.990	0.993	1.019	1.126	1.215	1.244	1.258	1.268	1.278	1.288	1.298	1.302
75	0.992	0.990	0.990	0.988	0.986	0.986	0.990	0.990	0.990	0.997	1.051	1.157	1.219	1.241	1.254	1.264	1.273	1.284	1.294	1.300
76	0.995	1.001	1.006	0.997	0.997	0.997	0.993	0.990	0.990	1.001	1.064	1.152	1.199	1.217	1.229	1.237	1.245	1.252	1.261	1.268
77	1.022	1.047	1.054	1.048	1.048	1.048	1.042	1.019	0.997	1.004	1.071	1.151	1.187	1.199	1.208	1.214	1.220	1.224	1.229	1.234
78	1.053	1.078	1.051	1.068	1.086	1.072	1.073	1.084	1.042	1.026	1.090	1.162	1.191	1.203	1.209	1.215	1.221	1.227	1.231	1.235
79	1.070	1.094	1.067	1.068	1.092	1.100	1.093	1.103	1.113	1.089	1.129	1.184	1.205	1.213	1.220	1.225	1.231	1.236	1.243	1.248
80	1.078	1.110	1.110	1.096	1.092	1.100	1.120	1.116	1.130	1.147	1.172	1.207	1.220	1.227	1.231	1.236	1.240	1.245	1.252	1.259
81	1.087	1.113	1.135	1.132	1.103	1.098	1.092	1.099	1.116	1.150	1.194	1.222	1.231	1.238	1.242	1.246	1.249	1.253	1.258	1.264
82	1.100	1.113	1.138	1.142	1.113	1.104	1.078	1.057	1.073	1.134	1.199	1.226	1.236	1.242	1.248	1.253	1.259	1.265	1.271	1.274
83	1.105	1.100	1.116	1.125	1.116	1.106	1.077	1.042	1.057	1.130	1.200	1.225	1.236	1.244	1.250	1.258	1.268	1.283	1.296	1.286
84	1.096	1.083	1.094	1.104	1.094	1.076	1.057	1.050	1.059	1.082	1.125	1.137	1.150	1.167	1.185	1.202	1.216	1.232	1.244	1.249
85	1.068	1.068	1.084	1.095	1.088	1.068	1.050	1.055	1.057	1.053	1.050	1.055	1.055	1.061	1.064	1.071	1.075	1.082	1.086	1.094
86	1.033	1.036	1.050	1.057	1.054	1.045	1.042	1.047	1.057	1.050	1.047	1.047	1.048	1.048	1.051	1.051	1.053	1.051	1.055	1.053
87	1.022	1.020	1.019	1.022	1.023	1.026	1.029	1.041	1.051	1.047	1.045	1.042	1.042	1.041	1.046	1.046	1.047	1.047	1.047	1.047
88	1.009	1.004	1.002	1.007	1.014	1.017	1.026	1.037	1.048	1.047	1.047	1.045	1.041	1.045	1.045	1.045	1.041	1.042	1.042	1.043
89	0.995	0.995	0.993	1.001	1.011	1.017	1.020	1.030	1.043	1.048	1.047	1.047	1.047	1.046	1.043	1.042	1.040	1.041	1.041	1.042
90	0.990	0.990	0.992	0.999	1.011	1.014	1.016	1.023	1.041	1.047	1.047	1.047	1.047	1.047	1.042	1.042	1.041	1.040	1.040	1.041
91	0.988	0.988	0.990	0.999	1.007	1.012	1.012	1.022	1.038	1.045	1.047	1.047	1.047	1.047	1.047	1.045	1.046	1.043	1.041	1.042
92	0.992	0.992	0.988	1.001	1.004	1.012	1.007	1.020	1.036	1.047	1.043	1.048	1.047	1.047	1.047	1.047	1.041	1.045	1.041	1.042
93	1.017	1.016	1.012	1.014	1.016	1.019	1.022	1.026	1.038	1.046	1.046	1.050	1.050	1.050	1.048	1.048	1.047	1.045	1.041	1.040
94	1.034	1.033	1.032	1.032	1.032	1.030	1.032	1.036	1.047	1.050	1.051	1.050	1.054	1.053	1.055	1.052	1.053	1.047	1.042	1.040
95	1.048	1.047	1.048	1.047	1.047	1.042	1.041	1.041	1.054	1.057	1.058	1.054	1.059	1.058	1.061	1.059	1.059	1.053	1.050	1.038
96	1.053	1.051	1.051	1.051	1.051	1.047	1.042	1.045	1.053	1.058	1.057	1.061	1.063	1.065	1.065	1.068	1.063	1.057	1.047	1.040
97	1.057	1.055	1.054	1.053	1.052	1.050	1.046	1.047	1.051	1.052	1.052	1.058	1.063	1.068	1.068	1.069	1.063	1.058	1.048	1.047
98	1.059	1.059	1.060	1.057	1.054	1.051	1.046	1.052	1.050	1.054	1.057	1.054	1.059	1.063	1.064	1.063	1.064	1.059	1.055	1.055

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 114

IR SCAN TIME 10.11 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	1.331	1.339	1.351	1.366	1.379	1.385	1.385	1.380	1.373	1.365	1.355	1.345	1.343	1.350	1.363	1.386	1.415	1.450	1.485	1.515
65	1.331	1.342	1.355	1.372	1.387	1.400	1.411	1.420	1.430	1.436	1.438	1.424	1.404	1.376	1.343	1.312	1.295	1.288	1.294	1.307
66	1.332	1.344	1.358	1.373	1.388	1.400	1.413	1.425	1.437	1.447	1.459	1.472	1.480	1.478	1.468	1.446	1.415	1.378	1.336	1.300
67	1.335	1.350	1.367	1.383	1.394	1.402	1.412	1.426	1.440	1.449	1.458	1.469	1.479	1.482	1.484	1.485	1.487	1.485	1.471	1.446
68	1.325	1.342	1.360	1.380	1.393	1.393	1.395	1.411	1.440	1.458	1.468	1.476	1.486	1.494	1.499	1.502	1.504	1.505	1.503	1.505
69	1.319	1.337	1.352	1.365	1.380	1.395	1.411	1.423	1.440	1.457	1.475	1.488	1.496	1.503	1.507	1.512	1.517	1.519	1.519	1.519
70	1.315	1.331	1.344	1.354	1.366	1.379	1.393	1.406	1.417	1.432	1.445	1.460	1.472	1.480	1.486	1.491	1.497	1.503	1.509	1.516
71	1.314	1.329	1.342	1.350	1.359	1.371	1.382	1.391	1.399	1.408	1.416	1.423	1.429	1.432	1.431	1.435	1.440	1.443	1.447	1.452
72	1.314	1.328	1.341	1.349	1.360	1.371	1.385	1.395	1.406	1.413	1.420	1.425	1.427	1.426	1.419	1.409	1.402	1.395	1.390	1.382
73	1.310	1.321	1.332	1.340	1.349	1.359	1.373	1.386	1.397	1.407	1.414	1.420	1.428	1.432	1.434	1.434	1.434	1.430	1.425	1.419	1.410
74	1.309	1.318	1.329	1.340	1.349	1.356	1.369	1.382	1.390	1.394	1.394	1.396	1.401	1.402	1.402	1.399	1.397	1.397	1.398	1.399
75	1.307	1.315	1.326	1.340	1.354	1.363	1.373	1.387	1.398	1.407	1.415	1.418	1.423	1.424	1.420	1.411	1.398	1.386	1.371	1.357
76	1.275	1.284	1.293	1.307	1.321	1.333	1.343	1.356	1.371	1.383	1.395	1.407	1.417	1.423	1.431	1.434	1.434	1.434	1.434	1.429
77	1.239	1.243	1.248	1.255	1.264	1.271	1.278	1.286	1.293	1.298	1.304	1.308	1.311	1.315	1.323	1.328	1.328	1.334	1.341	1.348
78	1.241	1.245	1.248	1.252	1.258	1.264	1.269	1.273	1.277	1.280	1.280	1.278	1.275	1.271	1.269	1.268	1.261	1.256	1.253	1.252
79	1.254	1.260	1.266	1.269	1.275	1.280	1.286	1.290	1.295	1.298	1.300	1.299	1.298	1.295	1.292	1.288	1.282	1.275	1.270	1.264
80	1.265	1.273	1.279	1.286	1.292	1.298	1.305	1.312	1.318	1.322	1.324	1.324	1.323	1.322	1.319	1.316	1.312	1.309	1.303	1.297
81	1.271	1.277	1.285	1.293	1.302	1.310	1.319	1.328	1.335	1.343	1.347	1.350	1.351	1.351	1.350	1.349	1.346	1.342	1.338	1.334
82	1.276	1.281	1.288	1.295	1.305	1.316	1.326	1.335	1.343	1.352	1.359	1.364	1.366	1.368	1.368	1.368	1.369	1.368	1.367	1.366
83	1.275	1.278	1.282	1.286	1.291	1.297	1.305	1.321	1.336	1.345	1.352	1.357	1.361	1.364	1.366	1.365	1.365	1.364	1.365	1.366
84	1.255	1.262	1.266	1.271	1.276	1.277	1.284	1.296	1.310	1.325	1.336	1.344	1.349	1.353	1.356	1.357	1.356	1.356	1.355	1.356
85	1.104	1.115	1.126	1.138	1.149	1.157	1.162	1.168	1.177	1.191	1.204	1.216	1.224	1.234	1.242	1.250	1.256	1.263	1.269	1.274
86	1.057	1.053	1.057	1.054	1.057	1.053	1.055	1.054	1.057	1.055	1.058	1.058	1.064	1.061	1.064	1.063	1.065	1.064	1.067	1.065
87	1.050	1.050	1.053	1.052	1.053	1.052	1.052	1.051	1.052	1.048	1.050	1.048	1.051	1.050	1.051	1.050	1.052	1.050	1.053	1.050
88	1.045	1.047	1.045	1.047	1.047	1.050	1.047	1.047	1.047	1.043	1.041	1.042	1.042	1.042	1.042	1.042	1.041	1.043	1.042	1.042
89	1.041	1.042	1.043	1.045	1.042	1.043	1.042	1.045	1.041	1.043	1.042	1.043	1.043	1.042	1.041	1.041	1.041	1.040	1.041	1.041
90	1.041	1.041	1.041	1.043	1.041	1.042	1.041	1.042	1.043	1.046	1.050	1.073	1.094	1.078	1.058	1.047	1.043	1.042	1.041	1.041
91	1.041	1.043	1.043	1.043	1.041	1.042	1.041	1.042	1.043	1.050	1.075	1.162	1.217	1.189	1.116	1.070	1.050	1.045	1.042	1.042
92	1.041	1.040	1.040	1.042	1.042	1.042	1.041	1.042	1.046	1.047	1.050	1.082	1.121	1.113	1.077	1.057	1.050	1.047	1.045	1.042
93	1.036	1.038	1.036	1.041	1.038	1.043	1.040	1.046	1.043	1.048	1.045	1.048	1.042	1.043	1.042	1.042	1.042	1.041	1.040	1.041
94	1.037	1.036	1.040	1.041	1.043	1.046	1.047	1.047	1.051	1.051	1.052	1.051	1.050	1.047	1.047	1.046	1.046	1.042	1.042	1.041
95	1.036	1.036	1.042	1.045	1.047	1.048	1.051	1.051	1.053	1.053	1.055	1.053	1.054	1.048	1.046	1.047	1.047	1.043	1.042	1.042
96	1.038	1.040	1.042	1.047	1.047	1.052	1.052	1.053	1.052	1.057	1.057	1.057	1.053	1.052	1.047	1.046	1.042	1.042	1.040	1.040
97	1.047	1.047	1.048	1.048	1.050	1.051	1.052	1.054	1.053	1.054	1.053	1.054	1.053	1.053	1.048	1.047	1.043	1.041	1.040	1.040
98	1.060	1.057	1.057	1.055	1.057	1.058	1.054	1.059	1.059	1.059	1.057	1.054	1.054	1.052	1.050	1.050	1.047	1.052	1.083	1.096

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 10.11 SEC
INITIAL TEMP 536.7 DEG. R

GROUP 114

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	1.536	1.549	1.562	1.566	1.569	1.571	1.566	1.559	1.541	1.505	1.444	1.363	1.288	1.239	1.202	1.143	1.088	1.059	1.046	1.036
65	1.330	1.361	1.404	1.444	1.482	1.511	1.534	1.550	1.557	1.557	1.553	1.537	1.492	1.417	1.330	1.252	1.182	1.113	1.070	1.048
66	1.279	1.269	1.267	1.272	1.282	1.295	1.319	1.353	1.395	1.440	1.480	1.510	1.529	1.530	1.502	1.439	1.357	1.266	1.174	1.097
67	1.413	1.372	1.334	1.306	1.292	1.286	1.283	1.283	1.283	1.286	1.293	1.311	1.345	1.389	1.436	1.470	1.463	1.405	1.321	1.224
68	1.503	1.496	1.481	1.449	1.404	1.353	1.313	1.290	1.281	1.278	1.279	1.279	1.278	1.275	1.277	1.286	1.305	1.334	1.349	1.332
69	1.521	1.522	1.519	1.513	1.506	1.494	1.470	1.432	1.383	1.335	1.301	1.280	1.272	1.270	1.268	1.269	1.270	1.268	1.267	1.266
70	1.522	1.528	1.533	1.536	1.536	1.532	1.526	1.519	1.505	1.488	1.465	1.425	1.378	1.334	1.298	1.280	1.273	1.272	1.272	1.272
71	1.459	1.466	1.476	1.482	1.492	1.502	1.507	1.512	1.518	1.522	1.524	1.520	1.511	1.494	1.464	1.424	1.377	1.331	1.296	1.274
72	1.374	1.368	1.364	1.364	1.367	1.369	1.375	1.387	1.399	1.409	1.420	1.435	1.453	1.471	1.482	1.485	1.486	1.479	1.456	1.413
73	1.399	1.386	1.371	1.351	1.333	1.315	1.301	1.289	1.282	1.276	1.274	1.275	1.279	1.283	1.289	1.298	1.314	1.333	1.351	1.362
74	1.400	1.400	1.399	1.394	1.383	1.369	1.352	1.331	1.311	1.295	1.279	1.261	1.246	1.233	1.224	1.219	1.215	1.214	1.215	1.216
75	1.348	1.342	1.340	1.341	1.341	1.339	1.335	1.330	1.324	1.315	1.308	1.296	1.281	1.265	1.250	1.236	1.224	1.212	1.204	1.197
76	1.421	1.404	1.380	1.352	1.323	1.298	1.281	1.270	1.265	1.260	1.258	1.256	1.256	1.249	1.244	1.240	1.236	1.229	1.222	1.212
77	1.358	1.365	1.374	1.384	1.390	1.391	1.384	1.368	1.344	1.307	1.267	1.234	1.214	1.202	1.194	1.195	1.199	1.200	1.202	1.203
78	1.250	1.250	1.249	1.246	1.244	1.244	1.243	1.244	1.247	1.250	1.249	1.242	1.231	1.209	1.184	1.177	1.180	1.184	1.186	1.186
79	1.261	1.256	1.252	1.249	1.245	1.240	1.236	1.231	1.226	1.220	1.215	1.210	1.204	1.196	1.190	1.187	1.189	1.191	1.193	1.193
80	1.292	1.285	1.279	1.273	1.266	1.260	1.252	1.247	1.240	1.236	1.229	1.224	1.218	1.213	1.208	1.206	1.202	1.202	1.200	1.199
81	1.329	1.325	1.319	1.313	1.306	1.298	1.288	1.279	1.269	1.260	1.250	1.244	1.236	1.229	1.224	1.220	1.217	1.214	1.211	1.208
82	1.365	1.364	1.362	1.359	1.353	1.346	1.339	1.331	1.320	1.309	1.297	1.284	1.272	1.261	1.251	1.244	1.236	1.231	1.225	1.220
83	1.367	1.369	1.371	1.373	1.373	1.373	1.373	1.370	1.367	1.362	1.356	1.347	1.337	1.326	1.315	1.303	1.291	1.280	1.268	1.258
84	1.355	1.356	1.357	1.359	1.359	1.359	1.358	1.356	1.353	1.351	1.348	1.346	1.342	1.338	1.336	1.332	1.330	1.327	1.324	1.319
85	1.280	1.286	1.290	1.297	1.303	1.308	1.309	1.307	1.301	1.299	1.296	1.293	1.290	1.288	1.286	1.284	1.283	1.282	1.282	1.283
86	1.069	1.068	1.067	1.069	1.072	1.072	1.075	1.075	1.075	1.073	1.075	1.075	1.076	1.075	1.076	1.076	1.078	1.075	1.077	1.079
87	1.053	1.051	1.054	1.050	1.052	1.050	1.052	1.050	1.051	1.048	1.048	1.046	1.047	1.042	1.045	1.041	1.038	1.038	1.038	1.037
88	1.042	1.045	1.043	1.046	1.045	1.045	1.042	1.042	1.040	1.040	1.038	1.036	1.036	1.036	1.034	1.030	1.029	1.029	1.025	1.027
89	1.041	1.041	1.041	1.042	1.041	1.040	1.040	1.038	1.038	1.036	1.037	1.034	1.033	1.032	1.030	1.029	1.026	1.026	1.026	1.025
90	1.042	1.042	1.041	1.041	1.042	1.043	1.041	1.040	1.038	1.037	1.038	1.041	1.041	1.038	1.034	1.032	1.027	1.026	1.025	1.023
91	1.041	1.041	1.041	1.041	1.041	1.041	1.041	1.041	1.041	1.043	1.073	1.138	1.157	1.119	1.071	1.045	1.032	1.029	1.027	1.026
92	1.043	1.042	1.042	1.042	1.041	1.042	1.041	1.040	1.040	1.040	1.057	1.109	1.138	1.112	1.069	1.043	1.033	1.029	1.026	1.026
93	1.041	1.042	1.041	1.042	1.041	1.043	1.041	1.042	1.040	1.038	1.037	1.038	1.037	1.037	1.034	1.033	1.032	1.029	1.029	1.027
94	1.042	1.038	1.041	1.040	1.042	1.041	1.042	1.041	1.042	1.038	1.038	1.037	1.038	1.037	1.036	1.033	1.032	1.029	1.029	1.026
95	1.041	1.040	1.041	1.041	1.042	1.042	1.045	1.043	1.043	1.041	1.040	1.038	1.037	1.036	1.036	1.032	1.032	1.027	1.029	1.026
96	1.038	1.041	1.041	1.038	1.041	1.041	1.041	1.043	1.042	1.042	1.040	1.038	1.040	1.036	1.034	1.033	1.032	1.032	1.029	1.027
97	1.038	1.037	1.036	1.037	1.038	1.038	1.038	1.041	1.041	1.038	1.038	1.036	1.036	1.033	1.032	1.030	1.029	1.029	1.029	1.029
98	1.081	1.062	1.050	1.038	1.036	1.037	1.038	1.037	1.038	1.040	1.042	1.041	1.038	1.036	1.033	1.029	1.027	1.027	1.027	1.026

NASA/RI UH90 TRANSITION TEST
V418-P4A
AKU, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 10.11. SEC
INITIAL TEMP 536.7 DEG. R

GROUP 114

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	1.037	1.036	1.036	1.040	1.036	1.026	1.020	1.016	1.014	1.011	1.012	1.009	1.012	1.011	1.011	1.007	1.011	1.007	1.011	1.007
65	1.038	1.036	1.034	1.034	1.034	1.036	1.029	1.019	1.012	1.009	1.011	1.007	1.007	1.006	1.006	1.004	1.006	1.004	1.006	1.004
66	1.061	1.042	1.036	1.033	1.032	1.033	1.034	1.029	1.017	1.007	1.004	1.001	1.002	1.001	1.001	0.999	1.001	0.999	0.999	0.999
67	1.130	1.073	1.047	1.034	1.033	1.026	1.030	1.030	1.029	1.012	1.004	0.993	0.995	0.992	0.995	0.990	0.993	0.990	0.993	0.993
68	1.276	1.192	1.119	1.068	1.042	1.033	1.030	1.029	1.029	1.030	1.020	1.002	0.997	0.992	0.988	0.986	0.990	0.986	0.986	0.986
69	1.271	1.263	1.201	1.117	1.067	1.042	1.032	1.029	1.027	1.027	1.029	1.023	1.007	0.993	0.988	0.986	0.984	0.986	0.982	0.982
70	1.271	1.267	1.256	1.213	1.136	1.075	1.045	1.032	1.029	1.027	1.026	1.026	1.025	1.014	0.997	0.988	0.986	0.980	0.980	0.977
71	1.262	1.254	1.245	1.235	1.205	1.144	1.082	1.050	1.032	1.027	1.025	1.023	1.022	1.023	1.016	1.001	0.990	0.982	0.984	0.980
72	1.362	1.309	1.270	1.246	1.231	1.210	1.161	1.096	1.055	1.036	1.027	1.025	1.025	1.023	1.023	1.014	1.004	0.988	0.984	0.982
73	1.366	1.355	1.332	1.301	1.270	1.241	1.212	1.168	1.107	1.063	1.042	1.027	1.025	1.022	1.023	1.023	1.019	1.006	0.993	0.986
74	1.216	1.217	1.223	1.226	1.231	1.231	1.229	1.213	1.188	1.138	1.082	1.041	1.030	1.020	1.023	1.019	1.025	1.023	1.014	0.997
75	1.192	1.188	1.186	1.184	1.184	1.183	1.181	1.178	1.173	1.158	1.121	1.071	1.042	1.030	1.027	1.025	1.023	1.020	1.020	1.014
76	1.203	1.195	1.189	1.183	1.179	1.176	1.175	1.171	1.170	1.166	1.162	1.136	1.092	1.052	1.033	1.026	1.023	1.019	1.020	1.019
77	1.202	1.203	1.202	1.200	1.200	1.197	1.192	1.186	1.182	1.176	1.173	1.166	1.153	1.116	1.070	1.040	1.026	1.020	1.019	1.017
78	1.186	1.186	1.186	1.190	1.192	1.192	1.193	1.195	1.197	1.195	1.194	1.193	1.190	1.182	1.155	1.105	1.058	1.032	1.022	1.016
79	1.192	1.192	1.192	1.189	1.186	1.185	1.185	1.186	1.185	1.184	1.184	1.184	1.187	1.188	1.187	1.170	1.130	1.078	1.042	1.023
80	1.196	1.197	1.195	1.195	1.196	1.197	1.196	1.195	1.195	1.194	1.192	1.190	1.189	1.187	1.186	1.182	1.170	1.136	1.084	1.042
81	1.204	1.202	1.201	1.201	1.201	1.200	1.197	1.196	1.197	1.198	1.196	1.196	1.195	1.195	1.193	1.194	1.195	1.187	1.157	1.105
82	1.216	1.212	1.210	1.207	1.204	1.202	1.200	1.197	1.197	1.198	1.200	1.201	1.201	1.200	1.199	1.199	1.201	1.200	1.192	1.170
83	1.247	1.237	1.229	1.222	1.217	1.211	1.208	1.206	1.204	1.204	1.203	1.204	1.206	1.207	1.208	1.210	1.210	1.210	1.208	1.202
84	1.312	1.303	1.294	1.284	1.274	1.265	1.254	1.245	1.236	1.229	1.222	1.219	1.215	1.215	1.217	1.220	1.223	1.223	1.220	1.218
85	1.284	1.285	1.287	1.290	1.293	1.297	1.299	1.300	1.300	1.298	1.296	1.294	1.288	1.279	1.272	1.264	1.254	1.244	1.237	1.232
86	1.081	1.081	1.083	1.084	1.089	1.097	1.104	1.112	1.122	1.128	1.140	1.151	1.157	1.152	1.155	1.155	1.151	1.145	1.140	1.136
87	1.036	1.034	1.036	1.034	1.036	1.036	1.036	1.036	1.034	1.033	1.032	1.034	1.038	1.042	1.041	1.038	1.037	1.036	1.034	1.034
88	1.023	1.026	1.023	1.025	1.022	1.025	1.022	1.025	1.022	1.025	1.022	1.025	1.020	1.026	1.025	1.025	1.025	1.026	1.026	1.023
89	1.023	1.023	1.023	1.022	1.020	1.022	1.022	1.020	1.020	1.020	1.017	1.017	1.016	1.016	1.017	1.020	1.020	1.022	1.017	1.019
90	1.023	1.023	1.023	1.023	1.022	1.020	1.022	1.020	1.019	1.020	1.020	1.019	1.017	1.016	1.020	1.026	1.023	1.022	1.020	1.020
91	1.025	1.023	1.023	1.023	1.023	1.022	1.023	1.023	1.026	1.048	1.076	1.072	1.043	1.025	1.017	1.019	1.017	1.019	1.019	1.017
92	1.025	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.026	1.047	1.081	1.082	1.055	1.032	1.020	1.017	1.016	1.017	1.016	1.016
93	1.026	1.026	1.026	1.025	1.023	1.023	1.023	1.023	1.022	1.023	1.022	1.023	1.020	1.019	1.016	1.017	1.016	1.017	1.016	1.017
94	1.027	1.026	1.026	1.025	1.026	1.023	1.025	1.023	1.023	1.023	1.022	1.022	1.022	1.019	1.017	1.017	1.019	1.017	1.020	1.017
95	1.026	1.023	1.026	1.023	1.023	1.023	1.023	1.020	1.023	1.019	1.022	1.022	1.020	1.019	1.020	1.019	1.022	1.022	1.022	1.022
96	1.026	1.025	1.025	1.025	1.023	1.023	1.023	1.023	1.023	1.022	1.020	1.020	1.016	1.017	1.017	1.020	1.020	1.025	1.023	1.025
97	1.026	1.026	1.025	1.025	1.023	1.023	1.023	1.023	1.023	1.023	1.022	1.023	1.020	1.020	1.023	1.027	1.032	1.034	1.030	1.032
98	1.025	1.023	1.026	1.025	1.027	1.025	1.026	1.022	1.023	1.026	1.023	1.022	1.022	1.026	1.027	1.038	1.042	1.041	1.038	1.038

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 114

IR SCAN TIME 10.11 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	1.009	1.007	1.009	1.006	1.007	1.006	1.007	1.002	1.004	1.002	1.004	1.001	1.001	1.001	1.001	1.001	1.001	0.997	0.997	0.997
65	1.004	1.002	1.004	1.002	1.002	1.001	1.001	1.001	0.999	0.999	0.997	0.995	0.997	0.995	0.995	0.995	0.995	0.995	0.993	0.990
66	0.999	0.997	0.997	0.997	0.997	0.995	0.995	0.995	0.993	0.993	0.993	0.990	0.993	0.990	0.992	0.990	0.988	0.986	0.986	0.986
67	0.992	0.992	0.992	0.990	0.990	0.988	0.988	0.986	0.986	0.986	0.986	0.984	0.975	0.982	0.982	0.982	0.982	0.980	0.980	0.977
68	0.986	0.982	0.984	0.980	0.984	0.977	0.980	0.977	0.977	0.975	0.977	0.975	0.977	0.973	0.975	0.975	0.975	0.975	0.973	0.973
69	0.982	0.982	0.982	0.980	0.980	0.980	0.980	0.977	0.977	0.973	0.975	0.975	0.973	0.971	0.973	0.971	0.973	0.971	0.971	0.961
70	0.975	0.977	0.977	0.975	0.977	0.977	0.977	0.975	0.973	0.973	0.973	0.971	0.971	0.969	0.969	0.971	0.969	0.966	0.966	0.966
71	0.982	0.977	0.977	0.975	0.982	0.975	0.980	0.975	0.973	0.975	0.975	0.973	0.971	0.971	0.971	0.971	0.969	0.969	0.966	0.966
72	0.977	0.977	0.977	0.977	0.977	0.977	0.975	0.975	0.975	0.973	0.973	0.971	0.971	0.971	0.971	0.969	0.971	0.966	0.969	0.966
73	0.980	0.980	0.977	0.975	0.975	0.975	0.975	0.973	0.973	0.973	0.973	0.971	0.971	0.971	0.971	0.966	0.971	0.966	0.966	0.964
74	0.988	0.980	0.977	0.975	0.975	0.975	0.975	0.973	0.975	0.973	0.971	0.971	0.971	0.971	0.969	0.969	0.971	0.969	0.966	0.966
75	1.006	0.990	0.986	0.973	0.975	0.971	0.975	0.971	0.973	0.969	0.973	0.966	0.971	0.966	0.971	0.966	0.971	0.969	0.969	0.966
76	1.019	1.016	1.006	0.993	0.986	0.977	0.975	0.975	0.973	0.973	0.973	0.971	0.973	0.969	0.971	0.969	0.971	0.961	0.969	0.964
77	1.017	1.016	1.019	1.014	1.007	0.993	0.986	0.977	0.973	0.971	0.973	0.969	0.971	0.969	0.969	0.966	0.969	0.966	0.966	0.966
78	1.014	1.016	1.014	1.014	1.014	1.014	1.006	0.997	0.986	0.977	0.973	0.969	0.966	0.966	0.966	0.966	0.964	0.964	0.964	0.964
79	1.017	1.012	1.016	1.014	1.014	1.012	1.014	1.012	1.011	1.006	1.002	0.993	0.990	0.980	0.977	0.971	0.971	0.971	0.971	0.971
80	1.023	1.016	1.012	1.014	1.014	1.014	1.011	1.011	1.011	1.012	1.011	1.011	1.006	1.002	0.997	0.993	0.986	0.982	0.977	0.973
81	1.057	1.027	1.017	1.016	1.014	1.016	1.014	1.014	1.014	1.014	1.012	1.012	1.012	1.011	1.011	1.011	1.007	1.006	1.004	0.999
82	1.122	1.070	1.032	1.019	1.012	1.014	1.011	1.012	1.011	1.011	1.009	1.011	1.011	1.014	1.011	1.011	1.011	1.012	1.009	1.007
83	1.185	1.145	1.089	1.045	1.023	1.014	1.012	1.011	1.009	1.012	1.009	1.009	1.011	1.011	1.009	1.012	1.004	1.009	1.004	1.009
84	1.211	1.198	1.166	1.113	1.062	1.029	1.016	1.012	1.011	1.009	1.007	1.009	1.007	1.011	1.009	1.009	1.009	1.009	1.007	1.009
85	1.226	1.217	1.202	1.174	1.122	1.067	1.029	1.017	1.007	1.007	1.009	1.009	1.007	1.009	1.007	1.009	1.007	1.007	1.009	1.009
86	1.133	1.127	1.120	1.110	1.088	1.058	1.030	1.020	1.017	1.017	1.017	1.012	1.011	1.007	1.007	1.007	1.007	1.007	1.007	1.009
87	1.032	1.030	1.027	1.023	1.023	1.019	1.017	1.017	1.022	1.023	1.020	1.011	1.007	1.006	1.006	1.004	1.006	1.004	1.007	1.006
88	1.022	1.020	1.017	1.017	1.014	1.014	1.011	1.011	1.011	1.009	1.007	1.007	1.004	1.006	1.004	1.004	1.004	1.006	1.006	1.006
89	1.017	1.020	1.014	1.014	1.009	1.012	1.007	1.007	1.004	1.006	1.004	1.006	1.004	1.004	1.004	1.006	1.004	1.006	1.006	1.006
90	1.025	1.026	1.017	1.014	1.009	1.009	1.011	1.007	1.004	1.004	1.002	1.004	1.004	1.004	1.001	1.006	1.002	1.006	1.002	1.006
91	1.017	1.016	1.012	1.011	1.009	1.009	1.009	1.006	1.006	1.006	1.006	1.004	1.004	1.004	1.004	1.004	1.006	1.004	1.004	1.004
92	1.017	1.014	1.012	1.009	1.007	1.007	1.006	1.006	1.004	1.004	1.004	1.002	1.004	1.006	1.004	1.004	1.004	1.006	1.004	1.006
93	1.014	1.016	1.012	1.011	1.007	1.007	1.007	1.007	1.006	1.007	1.006	1.007	1.004	1.006	1.004	1.006	1.006	1.006	1.004	1.007
94	1.020	1.017	1.017	1.011	1.012	1.007	1.011	1.007	1.011	1.006	1.007	1.006	1.007	1.006	1.007	1.006	1.007	1.006	1.007	1.002
95	1.023	1.020	1.022	1.014	1.014	1.009	1.011	1.011	1.011	1.009	1.011	1.011	1.007	1.009	1.007	1.007	1.007	1.007	1.007	1.007
96	1.023	1.025	1.020	1.017	1.014	1.012	1.009	1.011	1.007	1.011	1.009	1.011	1.009	1.009	1.007	1.009	1.009	1.009	1.007	1.007
97	1.030	1.032	1.027	1.022	1.016	1.014	1.011	1.011	1.009	1.011	1.009	1.009	1.006	1.011	1.006	1.009	1.006	1.007	1.004	1.007
98	1.040	1.041	1.032	1.025	1.020	1.014	1.016	1.014	1.016	1.014	1.014	1.012	1.014	1.009	1.009	1.007	1.009	1.007	1.007	1.007

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 114

IR SCAN TIME 10.11 SEC
INITIAL TEMP 536.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	1.001	0.997	0.997	0.993	0.997	0.997	0.997	0.993	0.995	0.993
65	0.992	0.990	0.993	0.990	0.990	0.988	0.990	0.990	0.990	0.988
66	0.986	0.986	0.986	0.984	0.986	0.982	0.984	0.982	0.982	0.980
67	0.977	0.977	0.977	0.975	0.977	0.973	0.977	0.973	0.973	0.973
68	0.975	0.973	0.971	0.971	0.971	0.971	0.971	0.969	0.966	0.969
69	0.971	0.961	0.971	0.961	0.966	0.961	0.966	0.959	0.966	0.959
70	0.966	0.966	0.964	0.966	0.961	0.966	0.966	0.964	0.961	0.964
71	0.966	0.966	0.966	0.966	0.964	0.966	0.964	0.964	0.964	0.964
72	0.966	0.966	0.966	0.964	0.966	0.966	0.966	0.964	0.964	0.961
73	0.966	0.961	0.966	0.961	0.964	0.964	0.966	0.964	0.964	0.961
74	0.966	0.964	0.966	0.964	0.966	0.964	0.964	0.961	0.964	0.961
75	0.966	0.966	0.966	0.964	0.966	0.964	0.966	0.961	0.961	0.961
76	0.966	0.961	0.966	0.961	0.966	0.959	0.966	0.959	0.964	0.959
77	0.966	0.964	0.966	0.961	0.964	0.961	0.964	0.961	0.964	0.961
78	0.964	0.964	0.961	0.964	0.961	0.964	0.961	0.961	0.961	0.961
79	0.971	0.969	0.971	0.969	0.969	0.969	0.966	0.966	0.966	0.966
80	0.973	0.966	0.964	0.964	0.961	0.964	0.961	0.961	0.959	0.961
81	0.993	0.990	0.986	0.982	0.977	0.973	0.971	0.969	0.966	0.964
82	1.007	1.007	1.004	1.002	1.001	0.995	0.993	0.990	0.986	0.982
83	1.004	1.009	1.004	1.009	1.004	1.007	1.001	1.004	0.999	1.001
84	1.009	1.009	1.006	1.007	1.007	1.007	1.007	1.006	1.007	1.006
85	1.007	1.009	1.009	1.007	1.007	1.009	1.006	1.007	1.006	1.007
86	1.011	1.007	1.009	1.006	1.009	1.007	1.004	1.004	1.007	1.006
87	1.006	1.004	1.007	1.006	1.007	1.007	1.009	1.007	1.011	1.007
88	1.006	1.006	1.007	1.007	1.006	1.007	1.007	1.009	1.007	1.009
89	1.006	1.006	1.006	1.006	1.006	1.007	1.007	1.009	1.007	1.007
90	1.004	1.007	1.006	1.006	1.004	1.006	1.004	1.007	1.006	1.009
91	1.004	1.006	1.006	1.006	1.006	1.006	1.006	1.006	1.006	1.006
92	1.004	1.006	1.006	1.006	1.006	1.007	1.006	1.007	1.007	1.006
93	1.006	1.007	1.007	1.007	1.006	1.006	1.006	1.006	1.006	1.007
94	1.007	1.007	1.009	1.007	1.009	1.007	1.009	1.006	1.009	1.007
95	1.007	1.007	1.009	1.007	1.009	1.007	1.011	1.009	1.012	1.009
96	1.004	1.007	1.006	1.007	1.007	1.009	1.009	1.011	1.011	1.012
97	1.004	1.006	1.004	1.007	1.006	1.009	1.006	1.012	1.012	1.012
98	1.009	1.007	1.009	1.009	1.011	1.009	1.012	1.012	1.014	1.014

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 10.11 SEC
HREF = 0.290E-01

GROUP 114

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	0.025	0.026	0.026	0.024	0.025	0.024	0.023	0.024	0.024	0.024	0.024	0.022	0.024	0.025	0.023	0.023	0.024	0.024	0.024	0.022
30	0.027	0.026	0.026	0.024	0.024	0.023	0.024	0.024	0.024	0.024	0.024	0.024	0.025	0.024	0.024	0.023	0.024	0.024	0.024	0.023
31	0.026	0.025	0.025	0.025	0.025	0.025	0.026	0.025	0.025	0.024	0.025	0.024	0.025	0.024	0.024	0.024	0.024	0.022	0.023	0.022
32	0.026	0.025	0.025	0.025	0.026	0.026	0.026	0.025	0.024	0.024	0.024	0.024	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.024
33	0.026	0.026	0.026	0.026	0.025	0.025	0.025	0.025	0.024	0.024	0.023	0.023	0.022	0.023	0.023	0.025	0.024	0.026	0.026	0.026
34	0.028	0.027	0.026	0.026	0.025	0.025	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.024	0.025	0.026	0.026	0.027	0.027	0.027
35	0.026	0.025	0.023	0.024	0.021	0.023	0.020	0.023	0.021	0.024	0.023	0.025	0.024	0.026	0.025	0.027	0.027	0.026	0.023	0.020
36	0.024	0.024	0.023	0.023	0.023	0.023	0.023	0.024	0.024	0.025	0.025	0.026	0.026	0.026	0.025	0.024	0.020	0.017	0.012	0.009
37	0.023	0.023	0.023	0.024	0.024	0.025	0.024	0.025	0.025	0.026	0.026	0.026	0.024	0.022	0.017	0.014	0.009	0.007	0.005	0.005
38	0.024	0.024	0.025	0.025	0.026	0.025	0.026	0.026	0.027	0.025	0.023	0.019	0.015	0.010	0.008	0.006	0.007	0.005	0.006	0.005
39	0.025	0.026	0.025	0.026	0.026	0.026	0.026	0.025	0.021	0.017	0.012	0.009	0.007	0.007	0.006	0.006	0.006	0.007	0.006	0.007
40	0.027	0.027	0.027	0.027	0.027	0.023	0.019	0.015	0.011	0.008	0.008	0.007	0.008	0.007	0.008	0.007	0.008	0.008	0.008	0.008
41	0.029	0.029	0.028	0.024	0.019	0.014	0.010	0.008	0.009	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.009	0.008	0.009	0.009
42	0.029	0.025	0.020	0.012	0.010	0.008	0.009	0.006	0.009	0.007	0.008	0.008	0.010	0.009	0.009	0.009	0.009	0.009	0.010	0.010
43	0.020	0.014	0.012	0.010	0.010	0.010	0.010	0.009	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.009	0.010	0.010	0.011	0.010
44	0.015	0.013	0.013	0.010	0.012	0.012	0.007	0.010	0.008	0.013	0.011	0.012	0.012	0.012	0.012	0.013	0.013	0.014	0.017	0.020
45	0.015	0.015	0.014	0.014	0.014	0.014	0.013	0.014	0.013	0.013	0.013	0.014	0.014	0.015	0.014	0.014	0.016	0.023	0.046	0.075
46	0.017	0.016	0.016	0.016	0.016	0.015	0.015	0.015	0.016	0.016	0.015	0.016	0.017	0.017	0.018	0.018	0.019	0.030	0.072	0.120
47	0.018	0.018	0.018	0.018	0.017	0.017	0.018	0.017	0.017	0.017	0.018	0.018	0.018	0.018	0.019	0.020	0.023	0.041	0.094	0.144
48	0.018	0.018	0.019	0.018	0.018	0.018	0.018	0.018	0.018	0.019	0.018	0.019	0.020	0.020	0.021	0.021	0.027	0.061	0.124	0.169
49	0.019	0.018	0.019	0.018	0.020	0.018	0.018	0.018	0.019	0.018	0.020	0.020	0.021	0.021	0.023	0.023	0.034	0.082	0.145	0.183
50	0.018	0.019	0.018	0.017	0.017	0.017	0.018	0.018	0.018	0.018	0.018	0.019	0.020	0.020	0.022	0.023	0.043	0.100	0.156	0.186
51	0.016	0.017	0.016	0.015	0.016	0.016	0.016	0.016	0.016	0.016	0.017	0.017	0.018	0.018	0.021	0.025	0.056	0.117	0.164	0.188
52	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.013	0.014	0.014	0.015	0.016	0.023	0.064	0.128	0.171	0.191
53	0.008	0.010	0.009	0.008	0.008	0.008	0.009	0.008	0.009	0.009	0.010	0.010	0.011	0.011	0.013	0.023	0.073	0.138	0.176	0.194
54	0.005	0.005	0.006	0.005	0.006	0.005	0.005	0.005	0.006	0.006	0.008	0.008	0.009	0.009	0.011	0.024	0.079	0.142	0.176	0.193
55	0.004	0.004	0.005	0.003	0.005	0.004	0.005	0.005	0.006	0.007	0.008	0.007	0.009	0.010	0.013	0.037	0.098	0.153	0.179	0.193
56	0.004	0.005	0.002	0.005	0.002	0.005	0.002	0.005	0.003	0.006	0.006	0.008	0.008	0.010	0.017	0.057	0.120	0.162	0.179	0.189
57	0.005	0.003	0.003	0.004	0.003	0.003	0.004	0.005	0.005	0.005	0.006	0.007	0.008	0.010	0.024	0.077	0.137	0.168	0.181	0.191
58	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.006	0.008	0.008	0.012	0.032	0.093	0.148	0.174	0.186	0.193
59	0.006	0.006	0.005	0.006	0.005	0.006	0.005	0.006	0.006	0.007	0.008	0.008	0.010	0.015	0.048	0.118	0.163	0.181	0.190	0.198
60	0.007	0.006	0.006	0.006	0.006	0.006	0.007	0.007	0.008	0.008	0.008	0.010	0.010	0.017	0.061	0.129	0.170	0.186	0.196	0.204
61	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.009	0.010	0.009	0.010	0.011	0.020	0.065	0.126	0.158	0.172	0.182	0.191
62	0.008	0.008	0.008	0.008	0.008	0.009	0.009	0.009	0.010	0.010	0.010	0.011	0.013	0.024	0.071	0.126	0.151	0.161	0.167	0.171
63	0.007	0.008	0.005	0.007	0.005	0.008	0.006	0.008	0.008	0.009	0.009	0.011	0.012	0.032	0.087	0.136	0.157	0.167	0.174	0.180

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 10.11 SEC
GROUP 114 HREF = 0.290E-01

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	0.023	0.022	0.023	0.021	0.023	0.020	0.022	0.021	0.022	0.021	0.023	0.023	0.023	0.023	0.024	0.025	0.025	0.025	0.025	0.025
30	0.023	0.021	0.023	0.021	0.023	0.023	0.023	0.022	0.025	0.025	0.026	0.026	0.027	0.026	0.027	0.026	0.026	0.023	0.023	0.020
31	0.023	0.022	0.024	0.024	0.026	0.026	0.027	0.026	0.027	0.027	0.029	0.027	0.027	0.024	0.023	0.020	0.017	0.015	0.013	0.010
32	0.024	0.026	0.026	0.026	0.027	0.028	0.027	0.026	0.025	0.024	0.021	0.019	0.016	0.012	0.010	0.007	0.003	0.003	0.002	0.002
33	0.027	0.027	0.027	0.027	0.025	0.023	0.020	0.017	0.014	0.012	0.008	0.004	0.003	0.001	0.001	0.001	0.001	0.001	0.000	0.001
34	0.026	0.024	0.021	0.017	0.014	0.011	0.007	0.004	0.003	0.003	0.002	0.002	0.002	0.002	0.001	0.002	0.002	0.002	0.001	0.002
35	0.016	0.012	0.009	0.005	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
36	0.004	0.004	0.003	0.004	0.003	0.004	0.003	0.003	0.003	0.004	0.003	0.003	0.003	0.005	0.003	0.005	0.004	0.004	0.004	0.004
37	0.005	0.005	0.005	0.005	0.005	0.004	0.004	0.005	0.004	0.004	0.004	0.005	0.004	0.005	0.004	0.005	0.003	0.005	0.003	0.005
38	0.007	0.006	0.006	0.005	0.006	0.005	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.005	0.006	0.005	0.007	0.006	0.006	0.005
39	0.007	0.007	0.007	0.007	0.007	0.007	0.006	0.008	0.007	0.007	0.007	0.008	0.007	0.008	0.007	0.007	0.006	0.007	0.007	0.007
40	0.009	0.008	0.008	0.008	0.009	0.008	0.010	0.008	0.009	0.008	0.009	0.009	0.009	0.008	0.009	0.008	0.009	0.009	0.009	0.008
41	0.010	0.009	0.010	0.009	0.010	0.009	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.009	0.010	0.009
42	0.010	0.010	0.010	0.010	0.011	0.010	0.012	0.011	0.012	0.012	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.010	0.010	0.010
43	0.011	0.010	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.014	0.013	0.013	0.012	0.012	0.012	0.012	0.012	0.012	0.012
44	0.023	0.025	0.023	0.023	0.022	0.022	0.019	0.018	0.017	0.017	0.016	0.017	0.015	0.016	0.015	0.015	0.015	0.015	0.014	0.014
45	0.093	0.103	0.108	0.109	0.108	0.102	0.094	0.084	0.074	0.065	0.053	0.039	0.028	0.023	0.020	0.019	0.018	0.018	0.018	0.017
46	0.151	0.170	0.186	0.200	0.213	0.227	0.238	0.240	0.242	0.251	0.230	0.165	0.106	0.060	0.037	0.027	0.024	0.022	0.022	0.021
47	0.172	0.189	0.202	0.214	0.224	0.235	0.249	0.263	0.274	0.290	0.322	0.312	0.230	0.144	0.084	0.050	0.036	0.029	0.026	0.025
48	0.193	0.209	0.225	0.239	0.250	0.258	0.263	0.269	0.274	0.279	0.286	0.312	0.324	0.256	0.159	0.091	0.052	0.036	0.032	0.031
49	0.204	0.220	0.238	0.255	0.272	0.285	0.295	0.302	0.303	0.299	0.293	0.288	0.294	0.300	0.247	0.158	0.091	0.051	0.035	0.029
50	0.205	0.222	0.240	0.262	0.286	0.306	0.320	0.332	0.339	0.338	0.331	0.320	0.307	0.296	0.287	0.243	0.161	0.091	0.052	0.034
51	0.204	0.220	0.236	0.255	0.277	0.299	0.316	0.338	0.358	0.369	0.370	0.365	0.355	0.338	0.319	0.295	0.248	0.173	0.106	0.061
52	0.205	0.217	0.232	0.249	0.269	0.286	0.301	0.319	0.344	0.370	0.390	0.401	0.402	0.395	0.380	0.360	0.338	0.301	0.227	0.140
53	0.205	0.216	0.230	0.245	0.263	0.279	0.291	0.304	0.322	0.344	0.362	0.379	0.395	0.408	0.412	0.408	0.396	0.379	0.351	0.284
54	0.206	0.218	0.231	0.246	0.264	0.279	0.289	0.299	0.313	0.329	0.345	0.358	0.366	0.370	0.376	0.386	0.399	0.410	0.410	0.398
55	0.203	0.216	0.230	0.245	0.262	0.274	0.287	0.301	0.316	0.333	0.348	0.359	0.368	0.372	0.371	0.360	0.343	0.337	0.352	0.379
56	0.197	0.208	0.221	0.236	0.248	0.259	0.273	0.291	0.313	0.333	0.349	0.362	0.370	0.371	0.373	0.374	0.372	0.357	0.324	0.289
57	0.199	0.209	0.224	0.238	0.248	0.259	0.271	0.287	0.307	0.326	0.349	0.365	0.378	0.387	0.390	0.390	0.391	0.394	0.395	0.381
58	0.200	0.211	0.225	0.238	0.249	0.260	0.270	0.284	0.300	0.317	0.333	0.347	0.359	0.371	0.381	0.391	0.399	0.405	0.410	0.411
59	0.205	0.215	0.228	0.240	0.252	0.263	0.272	0.284	0.299	0.315	0.330	0.345	0.358	0.363	0.368	0.370	0.370	0.372	0.383	0.401
60	0.210	0.220	0.232	0.246	0.260	0.272	0.282	0.294	0.308	0.322	0.337	0.350	0.356	0.365	0.376	0.380	0.378	0.373	0.361	0.345
61	0.200	0.212	0.225	0.241	0.258	0.275	0.287	0.299	0.314	0.327	0.339	0.351	0.359	0.368	0.372	0.372	0.374	0.376	0.377	0.379
62	0.176	0.181	0.188	0.199	0.214	0.233	0.251	0.268	0.292	0.318	0.339	0.358	0.374	0.383	0.390	0.392	0.391	0.387	0.386	0.391
63	0.184	0.188	0.191	0.196	0.201	0.205	0.206	0.209	0.220	0.235	0.256	0.283	0.310	0.337	0.362	0.380	0.391	0.403	0.414	0.419

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 10.11 SEC
GROUP 114 HREF = 0.290E-01

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	0.025	0.024	0.024	0.022	0.020	0.018	0.018	0.017	0.014	0.012	0.011	0.009	0.008	0.007	0.005	0.005	0.005	0.003	0.003	0.003
30	0.019	0.016	0.015	0.012	0.012	0.008	0.008	0.004	0.003	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	0.008	0.005	0.003	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.002	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.002	0.002	0.001	0.002	0.002	0.002	0.001	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000
36	0.003	0.005	0.003	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.001	0.001
37	0.003	0.005	0.003	0.005	0.003	0.005	0.003	0.005	0.002	0.004	0.002	0.005	0.004	0.004	0.003	0.004	0.003	0.003	0.002	0.003
38	0.007	0.006	0.006	0.005	0.006	0.005	0.006	0.005	0.006	0.005	0.005	0.004	0.005	0.003	0.005	0.003	0.005	0.003	0.004	0.003
39	0.007	0.008	0.007	0.007	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.003	0.004
40	0.009	0.008	0.008	0.008	0.008	0.007	0.008	0.007	0.008	0.007	0.007	0.006	0.007	0.006	0.007	0.005	0.006	0.005	0.005	0.005
41	0.009	0.009	0.009	0.008	0.009	0.009	0.008	0.008	0.010	0.006	0.008	0.007	0.008	0.007	0.008	0.006	0.007	0.006	0.006	0.005
42	0.011	0.010	0.010	0.010	0.010	0.010	0.010	0.009	0.009	0.009	0.008	0.009	0.008	0.007	0.007	0.007	0.008	0.006	0.006	0.006
43	0.012	0.012	0.011	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.009	0.009	0.009	0.009	0.008	0.009	0.008
44	0.014	0.014	0.014	0.013	0.014	0.014	0.012	0.012	0.012	0.011	0.012	0.011	0.012	0.012	0.010	0.011	0.012	0.014	0.010	0.010
45	0.017	0.016	0.015	0.016	0.015	0.015	0.015	0.015	0.014	0.014	0.014	0.014	0.012	0.014	0.013	0.013	0.012	0.013	0.012	0.012
46	0.021	0.021	0.020	0.019	0.019	0.018	0.017	0.017	0.018	0.017	0.016	0.016	0.016	0.015	0.015	0.015	0.015	0.015	0.015	0.014
47	0.023	0.024	0.022	0.023	0.021	0.021	0.019	0.019	0.018	0.018	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.016	0.016
48	0.030	0.028	0.026	0.024	0.024	0.022	0.021	0.021	0.020	0.019	0.019	0.018	0.018	0.018	0.018	0.018	0.018	0.017	0.018	0.017
49	0.029	0.030	0.031	0.029	0.027	0.024	0.024	0.021	0.021	0.021	0.021	0.020	0.019	0.019	0.019	0.018	0.018	0.018	0.018	0.018
50	0.028	0.025	0.026	0.026	0.029	0.029	0.027	0.024	0.023	0.021	0.022	0.021	0.021	0.020	0.019	0.019	0.020	0.018	0.018	0.018
51	0.038	0.027	0.026	0.024	0.025	0.025	0.029	0.027	0.025	0.021	0.020	0.019	0.018	0.018	0.018	0.017	0.018	0.017	0.018	0.017
52	0.080	0.045	0.032	0.026	0.025	0.024	0.025	0.025	0.026	0.020	0.017	0.015	0.014	0.012	0.013	0.012	0.013	0.012	0.013	0.013
53	0.186	0.106	0.059	0.036	0.027	0.024	0.025	0.024	0.026	0.025	0.021	0.014	0.012	0.010	0.010	0.009	0.009	0.009	0.010	0.011
54	0.354	0.258	0.154	0.084	0.047	0.031	0.025	0.024	0.025	0.024	0.025	0.021	0.015	0.011	0.008	0.008	0.008	0.009	0.010	0.012
55	0.402	0.389	0.309	0.194	0.107	0.058	0.035	0.026	0.023	0.022	0.023	0.024	0.024	0.017	0.013	0.009	0.010	0.009	0.012	0.012
56	0.283	0.316	0.350	0.319	0.214	0.119	0.064	0.037	0.026	0.023	0.021	0.023	0.022	0.024	0.018	0.012	0.010	0.010	0.010	0.012
57	0.340	0.280	0.233	0.237	0.254	0.210	0.131	0.076	0.043	0.029	0.023	0.022	0.020	0.023	0.024	0.020	0.013	0.010	0.010	0.011
58	0.407	0.395	0.357	0.291	0.223	0.166	0.155	0.099	0.054	0.035	0.026	0.023	0.020	0.020	0.020	0.023	0.020	0.015	0.011	0.010
59	0.413	0.417	0.415	0.409	0.380	0.314	0.232	0.157	0.097	0.056	0.034	0.026	0.020	0.019	0.017	0.018	0.021	0.020	0.014	0.011
60	0.335	0.344	0.368	0.393	0.410	0.414	0.391	0.330	0.243	0.155	0.089	0.050	0.031	0.023	0.018	0.017	0.017	0.018	0.019	0.016
61	0.369	0.345	0.307	0.272	0.266	0.293	0.337	0.369	0.366	0.318	0.240	0.151	0.081	0.044	0.027	0.021	0.017	0.017	0.017	0.018
62	0.394	0.394	0.390	0.373	0.333	0.277	0.225	0.202	0.220	0.263	0.285	0.250	0.169	0.095	0.053	0.032	0.024	0.018	0.016	0.016
63	0.419	0.409	0.403	0.407	0.405	0.398	0.369	0.313	0.245	0.169	0.161	0.166	0.176	0.158	0.114	0.065	0.036	0.024	0.018	0.017

IR HEAT TRANSFER COEFFICIENT - H(.9TU)/HREF
IR SCAN TIME 10.11 SEC
HREF = 0.290E-01

GROUP 114

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.002	0.002	0.002	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.002	0.000	0.001	0.001	0.001	0.001
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.002	0.003	0.003	0.002	0.002	0.002	0.001	0.001	0.001	0.002	0.000	0.002	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000
38	0.004	0.003	0.003	0.003	0.003	0.002	0.003	0.001	0.002	0.002	0.003	0.002	0.003	0.002	0.003	0.002	0.002	0.002	0.002	0.001
39	0.004	0.004	0.003	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.003	0.002	0.003	0.001	0.003	0.001	0.003	0.000	0.003
40	0.005	0.004	0.005	0.004	0.005	0.004	0.005	0.003	0.005	0.003	0.005	0.003	0.004	0.003	0.004	0.003	0.004	0.003	0.003	0.003
41	0.006	0.005	0.005	0.005	0.005	0.004	0.006	0.005	0.005	0.004	0.005	0.004	0.006	0.003	0.005	0.003	0.005	0.003	0.005	0.003
42	0.006	0.006	0.007	0.005	0.006	0.006	0.005	0.006	0.006	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.006	0.005
43	0.008	0.008	0.008	0.007	0.008	0.007	0.007	0.007	0.007	0.006	0.007	0.006	0.007	0.006	0.007	0.006	0.005	0.005	0.006	0.005
44	0.010	0.010	0.010	0.009	0.009	0.009	0.008	0.010	0.009	0.008	0.009	0.011	0.008	0.008	0.008	0.009	0.010	0.008	0.008	0.008
45	0.012	0.012	0.012	0.012	0.011	0.012	0.011	0.012	0.012	0.011	0.011	0.011	0.011	0.011	0.011	0.010	0.010	0.011	0.010	0.011
46	0.014	0.015	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.010	0.014	0.010	0.014	0.010	0.013	0.010	0.014	0.010	0.012	0.010
47	0.016	0.015	0.015	0.015	0.015	0.015	0.015	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
48	0.017	0.017	0.016	0.016	0.016	0.015	0.016	0.015	0.016	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.014	0.015	0.015
49	0.018	0.018	0.018	0.017	0.017	0.017	0.017	0.017	0.016	0.015	0.017	0.016	0.016	0.015	0.016	0.016	0.015	0.016	0.016	0.015
50	0.019	0.018	0.018	0.018	0.018	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.016	0.017	0.016	0.016	0.016
51	0.017	0.017	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.017	0.018	0.017	0.017	0.018	0.017
52	0.015	0.015	0.017	0.017	0.018	0.018	0.018	0.018	0.019	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.017	0.017	0.017	0.016
53	0.014	0.014	0.016	0.017	0.018	0.017	0.018	0.017	0.018	0.017	0.019	0.017	0.018	0.017	0.018	0.018	0.017	0.016	0.018	0.016
54	0.014	0.015	0.016	0.017	0.018	0.018	0.018	0.018	0.019	0.018	0.019	0.019	0.019	0.018	0.018	0.018	0.018	0.018	0.018	0.017
55	0.014	0.016	0.017	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.019	0.018	0.018	0.018	0.018	0.018	0.017	0.018	0.017	0.017
56	0.014	0.015	0.016	0.016	0.016	0.016	0.016	0.017	0.016	0.015	0.016	0.016	0.016	0.016	0.015	0.015	0.015	0.014	0.014	0.013
57	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.010	0.010	0.010
58	0.009	0.010	0.010	0.009	0.010	0.010	0.009	0.009	0.009	0.009	0.008	0.008	0.008	0.008	0.007	0.008	0.006	0.008	0.006	0.007
59	0.008	0.006	0.007	0.008	0.008	0.008	0.007	0.007	0.006	0.006	0.006	0.006	0.005	0.005	0.005	0.005	0.003	0.005	0.003	0.005
60	0.012	0.010	0.009	0.008	0.008	0.008	0.005	0.008	0.005	0.006	0.004	0.005	0.003	0.005	0.003	0.005	0.003	0.004	0.003	0.004
61	0.017	0.013	0.010	0.009	0.009	0.008	0.008	0.007	0.006	0.006	0.006	0.005	0.005	0.005	0.003	0.005	0.005	0.004	0.005	0.005
62	0.017	0.017	0.015	0.012	0.010	0.008	0.008	0.007	0.008	0.006	0.007	0.005	0.006	0.005	0.006	0.005	0.006	0.005	0.005	0.005
63	0.016	0.016	0.017	0.016	0.012	0.010	0.008	0.007	0.006	0.006	0.005	0.005	0.004	0.005	0.004	0.005	0.004	0.005	0.003	0.005

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 10.11 SEC
GROUP 114 HREF = 0.290E-01

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.002	0.001	0.002	0.001	0.003	0.001	0.002	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.002	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	0.000	0.002	0.001	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000
40	0.005	0.003	0.003	0.002	0.003	0.002	0.003	0.002	0.002	0.000	0.002	0.002	0.002	0.002	0.001	0.001	0.002	0.000	0.002	0.000
41	0.003	0.003	0.004	0.003	0.003	0.003	0.003	0.002	0.003	0.003	0.003	0.002	0.003	0.001	0.003	0.001	0.003	0.001	0.002	0.001
42	0.005	0.005	0.005	0.003	0.005	0.004	0.004	0.003	0.004	0.003	0.004	0.004	0.004	0.003	0.004	0.003	0.003	0.003	0.003	0.003
43	0.006	0.005	0.006	0.005	0.005	0.005	0.006	0.004	0.003	0.005	0.005	0.005	0.005	0.004	0.005	0.005	0.005	0.005	0.005	0.004
44	0.008	0.008	0.008	0.010	0.008	0.008	0.009	0.009	0.008	0.008	0.008	0.008	0.006	0.008	0.008	0.007	0.008	0.007	0.007	0.006
45	0.010	0.012	0.010	0.012	0.011	0.011	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
46	0.014	0.012	0.014	0.012	0.014	0.014	0.014	0.013	0.013	0.012	0.013	0.013	0.013	0.013	0.012	0.012	0.013	0.012	0.012	0.012
47	0.014	0.015	0.015	0.015	0.015	0.014	0.014	0.014	0.013	0.014	0.013	0.014	0.012	0.014	0.013	0.014	0.013	0.014	0.012	0.013
48	0.015	0.015	0.016	0.016	0.016	0.015	0.015	0.015	0.015	0.015	0.015	0.014	0.015	0.014	0.014	0.014	0.014	0.014	0.014	0.014
49	0.016	0.016	0.017	0.015	0.016	0.016	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.014	0.015	0.015	0.015	0.014
50	0.016	0.016	0.016	0.016	0.016	0.015	0.016	0.015	0.015	0.015	0.015	0.015	0.015	0.014	0.014	0.014	0.014	0.014	0.014	0.014
51	0.017	0.016	0.017	0.015	0.015	0.015	0.014	0.014	0.014	0.012	0.014	0.012	0.013	0.012	0.013	0.012	0.012	0.012	0.012	0.012
52	0.017	0.017	0.016	0.015	0.015	0.013	0.012	0.011	0.011	0.010	0.010	0.009	0.010	0.009	0.009	0.009	0.009	0.008	0.008	0.008
53	0.016	0.015	0.016	0.014	0.013	0.012	0.010	0.008	0.008	0.006	0.006	0.005	0.006	0.005	0.005	0.004	0.004	0.003	0.005	0.003
54	0.017	0.016	0.015	0.014	0.014	0.011	0.010	0.007	0.006	0.003	0.004	0.003	0.003	0.003	0.003	0.002	0.003	0.000	0.001	0.000
55	0.015	0.015	0.015	0.014	0.013	0.011	0.010	0.008	0.006	0.004	0.004	0.003	0.003	0.002	0.003	0.001	0.001	0.000	0.000	0.000
56	0.013	0.012	0.012	0.012	0.010	0.010	0.007	0.006	0.003	0.004	0.003	0.003	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000
57	0.010	0.010	0.009	0.009	0.008	0.008	0.006	0.005	0.004	0.003	0.003	0.003	0.003	0.002	0.003	0.003	0.002	0.002	0.003	0.002
58	0.006	0.006	0.005	0.005	0.005	0.005	0.004	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.001	0.002	0.001	0.000
59	0.004	0.004	0.005	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.001	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
60	0.003	0.005	0.005	0.004	0.003	0.004	0.003	0.003	0.002	0.003	0.002	0.003	0.002	0.003	0.001	0.001	0.000	0.002	0.001	0.001
61	0.003	0.005	0.003	0.004	0.003	0.003	0.002	0.003	0.001	0.003	0.002	0.003	0.000	0.002	0.001	0.002	0.000	0.001	0.000	0.002
62	0.006	0.004	0.005	0.004	0.005	0.003	0.004	0.003	0.004	0.003	0.003	0.003	0.003	0.001	0.003	0.001	0.002	0.000	0.002	0.000
63	0.003	0.004	0.004	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.000	0.001	0.001	0.000	0.000	0.000

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 10.11 SEC
HREF = 0.290E-01

GROUP 114

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.002	0.002	0.000	0.000	0.002	0.001	0.002	0.002	0.002	0.002
41	0.002	0.002	0.003	0.002	0.002	0.002	0.003	0.001	0.003	0.000
42	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.003
43	0.005	0.004	0.006	0.004	0.005	0.005	0.005	0.005	0.005	0.004
44	0.008	0.007	0.007	0.008	0.007	0.008	0.008	0.007	0.007	0.007
45	0.010	0.010	0.010	0.010	0.009	0.010	0.010	0.010	0.010	0.009
46	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
47	0.012	0.013	0.012	0.013	0.013	0.013	0.013	0.012	0.013	0.012
48	0.014	0.014	0.014	0.014	0.014	0.012	0.014	0.012	0.014	0.012
49	0.015	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.013	0.013
50	0.014	0.013	0.014	0.013	0.013	0.012	0.013	0.012	0.013	0.012
51	0.012	0.011	0.012	0.010	0.012	0.010	0.011	0.010	0.010	0.010
52	0.008	0.008	0.008	0.007	0.007	0.006	0.007	0.006	0.006	0.006
53	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.003	0.002
54	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
55	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57	0.002	0.001	0.001	0.002	0.000	0.000	0.000	0.001	0.000	0.000
58	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
61	0.000	0.002	0.001	0.001	0.001	0.001	0.000	0.001	0.001	0.000
62	0.002	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
63	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 10.11 SEC
HREF = 0.290E-01

GROUP 114

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.006	0.006	0.006	0.005	0.006	0.005	0.006	0.006	0.008	0.006	0.009	0.009	0.014	0.046	0.107	0.143	0.158	0.167	0.176	0.183
65	0.003	0.005	0.005	0.003	0.003	0.003	0.005	0.003	0.005	0.005	0.006	0.007	0.016	0.060	0.119	0.147	0.159	0.167	0.175	0.182
66	0.001	0.002	0.000	0.000	0.001	0.000	0.001	0.000	0.003	0.002	0.004	0.007	0.029	0.082	0.130	0.151	0.162	0.169	0.176	0.183
67	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.006	0.039	0.098	0.136	0.152	0.161	0.169	0.176	0.183
68	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.000	0.005	0.040	0.100	0.133	0.146	0.155	0.162	0.169	0.175
69	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.004	0.042	0.102	0.131	0.144	0.153	0.160	0.167	0.172
70	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.005	0.049	0.107	0.132	0.143	0.152	0.158	0.164	0.170
71	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.000	0.012	0.066	0.116	0.135	0.145	0.152	0.158	0.165	0.171
72	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.024	0.085	0.122	0.136	0.144	0.151	0.158	0.164	0.169
73	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.039	0.098	0.125	0.136	0.143	0.149	0.157	0.164	0.168
74	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.008	0.061	0.111	0.129	0.138	0.145	0.152	0.158	0.165	0.168
75	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.023	0.077	0.113	0.127	0.136	0.142	0.148	0.155	0.163	0.167
76	0.003	0.000	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.000	0.030	0.075	0.101	0.112	0.119	0.124	0.129	0.134	0.140	0.144
77	0.010	0.021	0.025	0.022	0.022	0.022	0.019	0.008	0.008	0.002	0.033	0.074	0.094	0.101	0.107	0.110	0.114	0.117	0.120	0.123
78	0.024	0.036	0.023	0.031	0.040	0.033	0.034	0.039	0.019	0.012	0.042	0.080	0.096	0.104	0.107	0.111	0.114	0.118	0.121	0.123
79	0.032	0.044	0.031	0.031	0.043	0.047	0.043	0.049	0.054	0.042	0.062	0.092	0.105	0.110	0.114	0.117	0.121	0.124	0.128	0.132
80	0.036	0.052	0.052	0.045	0.043	0.047	0.056	0.056	0.063	0.072	0.086	0.106	0.114	0.118	0.121	0.124	0.127	0.130	0.134	0.139
81	0.041	0.054	0.065	0.064	0.049	0.046	0.043	0.047	0.056	0.073	0.098	0.115	0.121	0.125	0.128	0.130	0.132	0.135	0.138	0.142
82	0.047	0.054	0.067	0.069	0.054	0.049	0.036	0.026	0.034	0.065	0.101	0.118	0.124	0.128	0.131	0.135	0.139	0.143	0.147	0.149
83	0.050	0.047	0.055	0.060	0.055	0.050	0.036	0.019	0.026	0.062	0.102	0.117	0.124	0.129	0.133	0.138	0.145	0.155	0.164	0.157
84	0.045	0.038	0.044	0.049	0.044	0.035	0.026	0.023	0.027	0.038	0.060	0.066	0.073	0.083	0.093	0.103	0.112	0.121	0.129	0.133
85	0.031	0.031	0.039	0.045	0.041	0.031	0.023	0.025	0.026	0.024	0.023	0.025	0.025	0.028	0.030	0.033	0.035	0.038	0.040	0.044
86	0.015	0.016	0.023	0.026	0.025	0.020	0.019	0.021	0.026	0.023	0.021	0.021	0.022	0.022	0.023	0.023	0.024	0.023	0.025	0.024
87	0.010	0.009	0.008	0.010	0.010	0.012	0.013	0.018	0.023	0.021	0.020	0.019	0.019	0.018	0.021	0.021	0.021	0.021	0.021	0.021
88	0.004	0.002	0.001	0.003	0.006	0.008	0.012	0.017	0.022	0.021	0.021	0.020	0.018	0.020	0.020	0.020	0.018	0.019	0.019	0.020
89	0.004	0.004	0.004	0.000	0.005	0.008	0.009	0.014	0.020	0.022	0.021	0.021	0.021	0.021	0.020	0.019	0.018	0.018	0.018	0.019
90	0.003	0.003	0.003	0.003	0.005	0.006	0.007	0.010	0.018	0.021	0.021	0.021	0.021	0.021	0.019	0.019	0.018	0.018	0.018	0.018
91	0.004	0.004	0.004	0.004	0.003	0.005	0.005	0.010	0.017	0.020	0.021	0.021	0.021	0.021	0.021	0.020	0.021	0.020	0.018	0.019
92	0.003	0.003	0.003	0.000	0.002	0.005	0.003	0.009	0.016	0.021	0.020	0.022	0.021	0.021	0.021	0.021	0.016	0.020	0.018	0.019
93	0.008	0.007	0.005	0.006	0.007	0.008	0.010	0.012	0.017	0.021	0.021	0.023	0.023	0.023	0.022	0.022	0.021	0.020	0.018	0.018
94	0.015	0.015	0.014	0.014	0.014	0.014	0.014	0.016	0.021	0.023	0.023	0.023	0.025	0.024	0.025	0.024	0.024	0.021	0.019	0.018
95	0.022	0.021	0.022	0.021	0.021	0.019	0.018	0.018	0.025	0.026	0.026	0.025	0.027	0.026	0.028	0.027	0.027	0.024	0.023	0.017
96	0.024	0.023	0.023	0.023	0.023	0.021	0.019	0.020	0.024	0.026	0.026	0.028	0.029	0.030	0.030	0.031	0.029	0.026	0.021	0.018
97	0.026	0.025	0.025	0.024	0.024	0.023	0.021	0.021	0.023	0.024	0.024	0.026	0.029	0.031	0.031	0.032	0.029	0.026	0.022	0.021
98	0.027	0.027	0.027	0.026	0.025	0.023	0.021	0.024	0.023	0.025	0.024	0.025	0.027	0.029	0.030	0.029	0.030	0.027	0.025	0.025

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 10.11 SEC
GROUP 114 HREF = 0.290E-01

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	0.189	0.196	0.205	0.217	0.227	0.232	0.232	0.228	0.223	0.216	0.208	0.200	0.199	0.204	0.214	0.233	0.259	0.291	0.327	0.360
65	0.189	0.198	0.208	0.222	0.234	0.245	0.255	0.263	0.272	0.278	0.279	0.266	0.249	0.225	0.199	0.175	0.163	0.158	0.163	0.172
66	0.190	0.199	0.211	0.223	0.235	0.245	0.256	0.267	0.278	0.288	0.300	0.313	0.321	0.320	0.309	0.287	0.259	0.226	0.193	0.167
67	0.192	0.204	0.217	0.230	0.240	0.247	0.256	0.268	0.281	0.290	0.299	0.310	0.320	0.324	0.325	0.327	0.328	0.326	0.312	0.287
68	0.185	0.198	0.212	0.229	0.239	0.239	0.241	0.255	0.281	0.299	0.309	0.317	0.328	0.337	0.342	0.345	0.347	0.348	0.346	0.348
69	0.181	0.194	0.205	0.216	0.228	0.241	0.255	0.266	0.282	0.298	0.316	0.330	0.338	0.346	0.351	0.356	0.362	0.365	0.364	0.364
70	0.178	0.189	0.199	0.207	0.217	0.228	0.239	0.250	0.261	0.274	0.286	0.301	0.313	0.322	0.328	0.333	0.339	0.346	0.353	0.361
71	0.177	0.188	0.198	0.204	0.211	0.221	0.230	0.237	0.245	0.252	0.259	0.266	0.271	0.274	0.273	0.276	0.281	0.284	0.288	0.293
72	0.176	0.187	0.197	0.204	0.212	0.221	0.232	0.241	0.250	0.257	0.263	0.268	0.269	0.268	0.262	0.253	0.247	0.241	0.236	0.229
73	0.174	0.182	0.190	0.196	0.203	0.211	0.223	0.233	0.243	0.251	0.257	0.263	0.270	0.274	0.276	0.276	0.272	0.268	0.262	0.254
74	0.173	0.180	0.188	0.196	0.203	0.209	0.219	0.230	0.236	0.240	0.240	0.242	0.246	0.247	0.246	0.244	0.242	0.243	0.244	0.245
75	0.172	0.178	0.186	0.196	0.207	0.214	0.222	0.234	0.243	0.251	0.258	0.261	0.265	0.266	0.263	0.254	0.244	0.233	0.221	0.210
76	0.150	0.156	0.162	0.172	0.182	0.191	0.199	0.209	0.221	0.231	0.241	0.251	0.260	0.266	0.273	0.276	0.276	0.276	0.276	0.271
77	0.126	0.128	0.132	0.136	0.142	0.147	0.152	0.157	0.162	0.166	0.169	0.172	0.175	0.177	0.184	0.187	0.187	0.191	0.197	0.203
78	0.127	0.130	0.131	0.134	0.138	0.142	0.145	0.148	0.151	0.153	0.153	0.152	0.150	0.146	0.146	0.144	0.140	0.137	0.135	0.134
79	0.136	0.139	0.143	0.145	0.149	0.153	0.157	0.160	0.163	0.165	0.167	0.166	0.166	0.163	0.161	0.158	0.154	0.149	0.146	0.142
80	0.143	0.148	0.152	0.157	0.161	0.166	0.171	0.175	0.179	0.182	0.184	0.184	0.183	0.182	0.181	0.178	0.175	0.173	0.169	0.165
81	0.146	0.151	0.156	0.162	0.168	0.174	0.181	0.187	0.193	0.198	0.202	0.204	0.205	0.205	0.204	0.203	0.201	0.198	0.195	0.192
82	0.150	0.154	0.158	0.163	0.170	0.176	0.185	0.193	0.199	0.206	0.211	0.215	0.217	0.218	0.218	0.219	0.219	0.219	0.218	0.217
83	0.150	0.151	0.154	0.157	0.161	0.165	0.170	0.182	0.193	0.200	0.206	0.210	0.212	0.215	0.217	0.216	0.216	0.215	0.216	0.216
84	0.136	0.141	0.143	0.146	0.150	0.151	0.155	0.164	0.174	0.185	0.194	0.199	0.203	0.206	0.209	0.209	0.209	0.209	0.208	0.209
85	0.049	0.055	0.061	0.067	0.073	0.077	0.080	0.084	0.088	0.097	0.104	0.112	0.117	0.123	0.128	0.133	0.137	0.141	0.146	0.149
86	0.026	0.024	0.026	0.025	0.026	0.024	0.025	0.025	0.026	0.025	0.026	0.026	0.030	0.028	0.030	0.029	0.030	0.030	0.031	0.030
87	0.023	0.023	0.024	0.024	0.024	0.024	0.024	0.023	0.024	0.022	0.023	0.022	0.023	0.023	0.023	0.023	0.024	0.023	0.024	0.023
88	0.020	0.021	0.020	0.021	0.021	0.023	0.021	0.021	0.021	0.020	0.018	0.019	0.019	0.019	0.019	0.019	0.018	0.020	0.019	0.019
89	0.018	0.019	0.020	0.020	0.019	0.020	0.019	0.020	0.018	0.020	0.019	0.020	0.020	0.019	0.018	0.018	0.018	0.018	0.018	0.018
90	0.018	0.018	0.018	0.020	0.018	0.019	0.018	0.019	0.020	0.021	0.023	0.034	0.044	0.036	0.026	0.021	0.020	0.019	0.018	0.018
91	0.018	0.020	0.020	0.020	0.018	0.019	0.018	0.019	0.020	0.023	0.035	0.080	0.112	0.095	0.056	0.032	0.023	0.020	0.019	0.019
92	0.018	0.018	0.018	0.019	0.019	0.019	0.018	0.019	0.021	0.021	0.023	0.038	0.058	0.054	0.036	0.026	0.023	0.021	0.020	0.019
93	0.016	0.017	0.016	0.018	0.017	0.020	0.018	0.021	0.020	0.022	0.020	0.022	0.019	0.020	0.019	0.019	0.019	0.018	0.018	0.018
94	0.017	0.016	0.018	0.018	0.020	0.021	0.021	0.021	0.023	0.023	0.024	0.023	0.023	0.021	0.021	0.021	0.021	0.019	0.019	0.018
95	0.016	0.016	0.019	0.020	0.021	0.022	0.023	0.023	0.024	0.024	0.025	0.024	0.025	0.022	0.022	0.021	0.021	0.020	0.019	0.019
96	0.017	0.018	0.019	0.021	0.021	0.024	0.024	0.024	0.024	0.026	0.026	0.026	0.024	0.024	0.021	0.021	0.019	0.019	0.018	0.018
97	0.021	0.021	0.022	0.022	0.023	0.023	0.024	0.025	0.024	0.025	0.024	0.025	0.024	0.024	0.022	0.021	0.020	0.018	0.018	0.018
98	0.027	0.026	0.026	0.025	0.026	0.026	0.025	0.027	0.027	0.027	0.026	0.025	0.025	0.024	0.023	0.023	0.021	0.024	0.038	0.045

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 10.11 SEC
GROUP 114 HREF = 0.290E-01

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	0.385	0.401	0.416	0.423	0.427	0.429	0.423	0.412	0.390	0.348	0.285	0.214	0.159	0.126	0.103	0.070	0.041	0.027	0.021	0.016
65	0.188	0.213	0.249	0.285	0.324	0.355	0.382	0.402	0.410	0.410	0.406	0.385	0.334	0.261	0.189	0.134	0.091	0.054	0.032	0.022
66	0.152	0.145	0.144	0.147	0.154	0.163	0.180	0.206	0.241	0.281	0.321	0.354	0.376	0.377	0.345	0.281	0.209	0.144	0.087	0.046
67	0.256	0.221	0.191	0.171	0.161	0.157	0.155	0.155	0.155	0.157	0.162	0.175	0.200	0.236	0.278	0.311	0.304	0.250	0.182	0.117
68	0.346	0.339	0.322	0.290	0.248	0.207	0.176	0.160	0.154	0.151	0.152	0.152	0.151	0.150	0.151	0.157	0.170	0.191	0.203	0.190
69	0.367	0.368	0.365	0.357	0.350	0.336	0.311	0.274	0.230	0.193	0.167	0.153	0.148	0.146	0.145	0.145	0.146	0.145	0.144	0.144
70	0.368	0.374	0.380	0.384	0.384	0.379	0.372	0.365	0.349	0.330	0.306	0.268	0.227	0.191	0.166	0.153	0.148	0.147	0.147	0.147
71	0.299	0.307	0.317	0.324	0.334	0.345	0.350	0.356	0.364	0.368	0.370	0.366	0.355	0.336	0.305	0.266	0.226	0.189	0.164	0.149
72	0.223	0.219	0.215	0.215	0.217	0.219	0.224	0.234	0.244	0.253	0.263	0.277	0.294	0.312	0.323	0.327	0.327	0.321	0.296	0.257
73	0.245	0.233	0.221	0.205	0.191	0.178	0.168	0.159	0.154	0.150	0.149	0.149	0.152	0.155	0.159	0.165	0.177	0.191	0.204	0.214
74	0.245	0.245	0.244	0.240	0.231	0.219	0.206	0.189	0.175	0.164	0.152	0.140	0.130	0.122	0.117	0.113	0.111	0.110	0.111	0.111
75	0.202	0.197	0.196	0.197	0.197	0.195	0.192	0.188	0.184	0.178	0.172	0.164	0.154	0.143	0.133	0.124	0.117	0.109	0.104	0.100
76	0.264	0.249	0.229	0.206	0.183	0.165	0.153	0.146	0.143	0.140	0.138	0.137	0.137	0.133	0.129	0.126	0.124	0.120	0.115	0.109
77	0.210	0.216	0.223	0.231	0.237	0.237	0.231	0.219	0.199	0.172	0.144	0.123	0.111	0.103	0.099	0.099	0.101	0.102	0.103	0.104
78	0.133	0.133	0.132	0.130	0.129	0.129	0.129	0.129	0.131	0.133	0.133	0.128	0.121	0.107	0.093	0.088	0.090	0.092	0.094	0.094
79	0.140	0.137	0.134	0.132	0.130	0.127	0.124	0.121	0.118	0.114	0.111	0.108	0.104	0.100	0.096	0.094	0.095	0.096	0.098	0.098
80	0.161	0.157	0.152	0.148	0.143	0.139	0.134	0.131	0.126	0.124	0.120	0.117	0.113	0.110	0.107	0.105	0.103	0.103	0.102	0.101
81	0.188	0.185	0.181	0.176	0.171	0.165	0.158	0.152	0.145	0.139	0.133	0.129	0.124	0.119	0.116	0.114	0.112	0.110	0.109	0.107
82	0.216	0.215	0.213	0.211	0.207	0.201	0.196	0.190	0.181	0.173	0.164	0.156	0.148	0.140	0.134	0.129	0.124	0.121	0.117	0.114
83	0.218	0.219	0.221	0.222	0.223	0.222	0.222	0.220	0.217	0.213	0.208	0.202	0.194	0.186	0.177	0.169	0.160	0.153	0.145	0.138
84	0.208	0.209	0.210	0.211	0.211	0.211	0.210	0.209	0.207	0.205	0.202	0.200	0.197	0.195	0.193	0.190	0.188	0.186	0.184	0.180
85	0.153	0.157	0.160	0.165	0.169	0.173	0.173	0.171	0.168	0.166	0.164	0.161	0.160	0.158	0.157	0.156	0.155	0.154	0.154	0.155
86	0.032	0.031	0.031	0.032	0.033	0.033	0.035	0.035	0.035	0.034	0.035	0.035	0.035	0.035	0.035	0.035	0.036	0.035	0.036	0.037
87	0.024	0.023	0.025	0.023	0.024	0.023	0.024	0.023	0.023	0.022	0.022	0.021	0.021	0.019	0.020	0.018	0.017	0.017	0.017	0.017
88	0.019	0.020	0.020	0.021	0.020	0.020	0.019	0.019	0.018	0.018	0.017	0.016	0.016	0.016	0.015	0.014	0.013	0.013	0.011	0.012
89	0.018	0.018	0.018	0.019	0.018	0.018	0.018	0.017	0.017	0.016	0.017	0.015	0.015	0.014	0.014	0.013	0.012	0.012	0.012	0.011
90	0.019	0.019	0.018	0.018	0.019	0.020	0.018	0.018	0.017	0.017	0.017	0.018	0.018	0.017	0.015	0.014	0.012	0.012	0.011	0.010
91	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.020	0.034	0.067	0.077	0.057	0.033	0.020	0.014	0.013	0.012	0.012
92	0.020	0.019	0.019	0.019	0.018	0.019	0.018	0.018	0.018	0.018	0.026	0.052	0.067	0.053	0.032	0.020	0.015	0.013	0.012	0.012
93	0.018	0.019	0.018	0.019	0.018	0.020	0.018	0.019	0.018	0.017	0.017	0.017	0.017	0.017	0.015	0.015	0.014	0.013	0.013	0.012
94	0.019	0.017	0.018	0.018	0.019	0.018	0.019	0.018	0.019	0.017	0.017	0.017	0.017	0.017	0.016	0.015	0.014	0.013	0.013	0.012
95	0.018	0.018	0.018	0.018	0.019	0.019	0.020	0.020	0.020	0.018	0.018	0.017	0.017	0.016	0.016	0.014	0.014	0.012	0.013	0.012
96	0.017	0.018	0.018	0.017	0.018	0.018	0.018	0.020	0.019	0.019	0.018	0.017	0.018	0.016	0.015	0.015	0.014	0.014	0.013	0.012
97	0.017	0.017	0.016	0.017	0.017	0.017	0.017	0.019	0.018	0.017	0.017	0.016	0.016	0.015	0.014	0.014	0.013	0.013	0.013	0.013
98	0.038	0.029	0.023	0.017	0.016	0.017	0.017	0.017	0.017	0.018	0.019	0.018	0.017	0.016	0.015	0.013	0.012	0.012	0.012	0.012

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 10.11 SEC
GROUP 114 HREF = 0.290E-01.

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.017	0.016	0.016	0.018	0.016	0.012	0.009	0.007	0.006	0.005	0.005	0.004	0.005	0.005	0.005	0.003	0.005	0.003	0.005	0.003
65	0.017	0.016	0.015	0.015	0.015	0.016	0.013	0.008	0.005	0.004	0.005	0.003	0.003	0.003	0.003	0.002	0.003	0.002	0.003	0.002
66	0.028	0.019	0.016	0.015	0.014	0.015	0.015	0.013	0.008	0.003	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
67	0.062	0.034	0.021	0.015	0.015	0.012	0.014	0.014	0.013	0.005	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
68	0.150	0.097	0.057	0.031	0.019	0.015	0.014	0.013	0.013	0.014	0.009	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
69	0.147	0.142	0.102	0.056	0.031	0.019	0.014	0.013	0.012	0.012	0.013	0.010	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
70	0.146	0.144	0.137	0.110	0.066	0.035	0.020	0.014	0.013	0.012	0.012	0.012	0.011	0.006	0.006	0.006	0.006	0.006	0.006	0.006
71	0.141	0.136	0.130	0.123	0.105	0.070	0.038	0.023	0.014	0.012	0.011	0.010	0.010	0.010	0.007	0.000	0.000	0.000	0.000	0.000
72	0.213	0.173	0.146	0.130	0.121	0.108	0.079	0.045	0.025	0.016	0.012	0.011	0.011	0.010	0.010	0.006	0.002	0.002	0.002	0.002
73	0.217	0.208	0.190	0.167	0.146	0.127	0.109	0.083	0.051	0.029	0.019	0.012	0.011	0.010	0.010	0.010	0.008	0.003	0.003	0.003
74	0.112	0.112	0.116	0.118	0.121	0.121	0.119	0.110	0.095	0.067	0.038	0.018	0.014	0.009	0.010	0.008	0.011	0.010	0.006	0.006
75	0.097	0.095	0.094	0.093	0.092	0.092	0.091	0.089	0.086	0.078	0.058	0.033	0.019	0.014	0.012	0.011	0.010	0.009	0.009	0.006
76	0.104	0.099	0.096	0.092	0.090	0.088	0.087	0.085	0.084	0.083	0.080	0.066	0.043	0.024	0.015	0.012	0.010	0.008	0.009	0.008
77	0.103	0.104	0.103	0.102	0.102	0.100	0.097	0.094	0.091	0.088	0.086	0.083	0.075	0.055	0.032	0.018	0.012	0.009	0.008	0.008
78	0.094	0.094	0.094	0.096	0.097	0.097	0.098	0.099	0.100	0.099	0.099	0.098	0.096	0.091	0.076	0.050	0.026	0.014	0.010	0.007
79	0.097	0.097	0.097	0.096	0.094	0.093	0.093	0.094	0.093	0.092	0.092	0.093	0.094	0.095	0.094	0.084	0.062	0.036	0.019	0.010
80	0.101	0.100	0.099	0.099	0.100	0.100	0.100	0.099	0.099	0.099	0.097	0.096	0.095	0.094	0.094	0.091	0.084	0.066	0.039	0.019
81	0.104	0.103	0.102	0.103	0.102	0.102	0.100	0.101	0.100	0.101	0.100	0.100	0.099	0.099	0.098	0.099	0.099	0.094	0.077	0.050
82	0.112	0.109	0.108	0.106	0.104	0.103	0.102	0.100	0.100	0.101	0.102	0.103	0.103	0.102	0.101	0.101	0.102	0.102	0.097	0.084
83	0.131	0.125	0.120	0.115	0.112	0.109	0.107	0.105	0.104	0.104	0.104	0.104	0.105	0.106	0.107	0.108	0.108	0.108	0.107	0.103
84	0.175	0.169	0.163	0.156	0.149	0.143	0.136	0.130	0.124	0.120	0.115	0.113	0.111	0.111	0.112	0.114	0.116	0.116	0.114	0.113
85	0.155	0.157	0.158	0.160	0.162	0.165	0.166	0.167	0.166	0.165	0.164	0.162	0.158	0.152	0.147	0.142	0.136	0.129	0.124	0.121
86	0.038	0.038	0.038	0.039	0.042	0.046	0.049	0.053	0.058	0.062	0.068	0.074	0.077	0.075	0.076	0.076	0.074	0.071	0.068	0.066
87	0.016	0.015	0.016	0.015	0.016	0.016	0.016	0.016	0.015	0.015	0.014	0.015	0.017	0.019	0.018	0.017	0.017	0.016	0.015	0.015
88	0.010	0.012	0.010	0.011	0.010	0.011	0.010	0.011	0.010	0.011	0.010	0.011	0.009	0.012	0.011	0.011	0.011	0.012	0.012	0.010
89	0.010	0.010	0.010	0.010	0.009	0.010	0.010	0.009	0.009	0.009	0.008	0.008	0.007	0.007	0.008	0.009	0.009	0.010	0.008	0.008
90	0.010	0.010	0.010	0.010	0.010	0.009	0.010	0.009	0.008	0.009	0.009	0.008	0.008	0.007	0.009	0.012	0.010	0.010	0.009	0.009
91	0.011	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.012	0.022	0.035	0.033	0.020	0.011	0.008	0.008	0.008	0.008	0.008	0.008
92	0.011	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.012	0.021	0.038	0.038	0.025	0.014	0.009	0.008	0.007	0.008	0.007	0.007
93	0.012	0.012	0.012	0.011	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.009	0.008	0.007	0.008	0.007	0.008	0.007	0.008
94	0.012	0.012	0.012	0.011	0.012	0.010	0.011	0.010	0.010	0.010	0.010	0.010	0.010	0.008	0.008	0.008	0.008	0.008	0.009	0.008
95	0.012	0.010	0.012	0.010	0.010	0.010	0.010	0.009	0.010	0.008	0.010	0.010	0.009	0.008	0.009	0.008	0.010	0.010	0.010	0.010
96	0.012	0.011	0.011	0.011	0.010	0.010	0.010	0.010	0.010	0.010	0.009	0.009	0.007	0.008	0.008	0.009	0.009	0.011	0.010	0.011
97	0.012	0.012	0.011	0.011	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.009	0.009	0.010	0.012	0.014	0.015	0.014	0.014
98	0.011	0.010	0.012	0.011	0.012	0.011	0.012	0.010	0.010	0.012	0.010	0.010	0.010	0.012	0.012	0.017	0.019	0.018	0.017	0.017

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 10.11 SEC
GROUP 114 HREF = 0.290E-01

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.004	0.003	0.004	0.003	0.003	0.003	0.003	0.001	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65	0.002	0.001	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
66	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
67	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
68	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
69	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
70	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
71	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
73	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
74	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
75	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
76	0.008	0.007	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
77	0.008	0.007	0.008	0.006	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
78	0.006	0.007	0.006	0.006	0.006	0.006	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
79	0.008	0.005	0.007	0.006	0.006	0.005	0.006	0.005	0.005	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
80	0.010	0.007	0.005	0.006	0.006	0.006	0.005	0.005	0.005	0.005	0.005	0.005	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001
81	0.026	0.012	0.008	0.007	0.006	0.007	0.006	0.006	0.006	0.006	0.005	0.005	0.005	0.005	0.005	0.005	0.003	0.003	0.002	0.002
82	0.058	0.032	0.014	0.008	0.005	0.006	0.005	0.005	0.005	0.005	0.004	0.005	0.005	0.006	0.005	0.005	0.005	0.005	0.004	0.003
83	0.093	0.071	0.042	0.020	0.010	0.006	0.005	0.005	0.004	0.005	0.004	0.004	0.005	0.005	0.004	0.005	0.002	0.004	0.002	0.004
84	0.109	0.101	0.083	0.054	0.029	0.013	0.007	0.005	0.005	0.004	0.003	0.004	0.003	0.005	0.004	0.004	0.004	0.004	0.003	0.004
85	0.118	0.112	0.103	0.087	0.059	0.031	0.013	0.008	0.003	0.003	0.004	0.004	0.003	0.004	0.003	0.004	0.003	0.003	0.004	0.004
86	0.064	0.061	0.058	0.052	0.041	0.026	0.014	0.009	0.008	0.008	0.008	0.005	0.005	0.003	0.003	0.003	0.003	0.003	0.003	0.004
87	0.014	0.014	0.012	0.010	0.010	0.008	0.008	0.008	0.010	0.010	0.009	0.005	0.003	0.003	0.003	0.002	0.003	0.002	0.003	0.003
88	0.010	0.009	0.008	0.008	0.005	0.006	0.005	0.005	0.005	0.004	0.003	0.003	0.002	0.003	0.002	0.002	0.002	0.003	0.003	0.003
89	0.008	0.009	0.006	0.006	0.004	0.005	0.003	0.003	0.002	0.003	0.002	0.003	0.002	0.002	0.002	0.003	0.002	0.003	0.003	0.003
90	0.011	0.012	0.008	0.006	0.004	0.004	0.005	0.003	0.002	0.002	0.001	0.002	0.002	0.002	0.000	0.003	0.001	0.003	0.001	0.003
91	0.008	0.007	0.005	0.005	0.004	0.004	0.004	0.003	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.003	0.002	0.002	0.002
92	0.008	0.006	0.005	0.004	0.003	0.003	0.003	0.003	0.002	0.002	0.002	0.001	0.002	0.003	0.002	0.002	0.002	0.003	0.002	0.003
93	0.006	0.007	0.005	0.005	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.003	0.002	0.003	0.003	0.003	0.002	0.003
94	0.009	0.008	0.006	0.005	0.005	0.003	0.005	0.003	0.005	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.001
95	0.010	0.009	0.010	0.006	0.006	0.004	0.005	0.005	0.005	0.004	0.005	0.005	0.003	0.004	0.003	0.003	0.003	0.003	0.003	0.003
96	0.010	0.011	0.009	0.008	0.006	0.005	0.004	0.005	0.003	0.005	0.004	0.005	0.004	0.004	0.003	0.004	0.004	0.004	0.003	0.003
97	0.014	0.014	0.012	0.010	0.007	0.006	0.005	0.005	0.004	0.005	0.004	0.004	0.003	0.005	0.003	0.004	0.003	0.003	0.002	0.003
98	0.018	0.018	0.014	0.011	0.009	0.006	0.007	0.006	0.007	0.006	0.006	0.005	0.006	0.004	0.004	0.003	0.004	0.003	0.003	0.003

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 10.11 SEC
HREF = 0.290E-01

GROUP 114

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
66	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
67	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
68	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
69	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
70	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
71	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
73	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
74	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
75	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
76	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
77	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
78	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
79	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
80	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
81	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
82	0.003	0.003	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000
83	0.002	0.004	0.002	0.004	0.002	0.003	0.000	0.002	0.002	0.000
84	0.004	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
85	0.003	0.004	0.004	0.003	0.003	0.004	0.003	0.003	0.003	0.003
86	0.005	0.003	0.004	0.003	0.004	0.003	0.002	0.002	0.003	0.003
87	0.003	0.002	0.003	0.003	0.003	0.003	0.004	0.003	0.005	0.003
88	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.003	0.004
89	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.003	0.003
90	0.002	0.003	0.003	0.003	0.002	0.003	0.002	0.003	0.003	0.004
91	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
92	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
93	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
94	0.003	0.003	0.004	0.003	0.004	0.003	0.004	0.003	0.004	0.003
95	0.003	0.003	0.004	0.003	0.004	0.003	0.005	0.004	0.005	0.004
96	0.002	0.003	0.003	0.003	0.003	0.004	0.004	0.005	0.005	0.005
97	0.002	0.003	0.002	0.003	0.003	0.004	0.003	0.005	0.005	0.005
98	0.004	0.003	0.004	0.004	0.005	0.004	0.005	0.005	0.006	0.006

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

GROUP	* * * * TITLE TYPE	MODEL DESCRIPTION * * * * GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
116	RSI AFT	0.02	0.010	0.02	29.98	0.053	5	34	55

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/F FT-1	HRFR BTU/FT2-SEC-R	INITIAL TEMP DEG R
7.99	556.26	1331.67	96.72	0.0574	3852.	0.498E-04	0.779E-07	0.246E+07	0.332E-01	544.7

IR CAMERA INFORMATION

MOUNTING LOCATION	260
F STOP	1.8
LENS-DEG	15
SENSITIVITY	1000.
BLACK LEVEL VOLTAGE	2.4542
LINE SCAN PHI	90
MODEL EMISSIVITY	0.96
REF EMISSIVITY	0.94
WINDOW FACTOR	0.660

TIME RECORDS

LIFT OFF	0.00
CENTER LINE	1.99
IR SCAN TIME	6.68
DELTA TIME,SEC	5.56
PHOTO 1 TIME	535
PHOTO 2 TIME	0
PHOTO 3 TIME	0
PHOTO 4 TIME	0

REFERENCE TARGET INFORMATION

TCR5	502.11
TCR6	-228.49

DIGITAL DATA AREA PRINTOUT LOCATION

LINE 29 THROUGH 98
POINT 1 THROUGH 110

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 116

IR SCAN TIME 5.56 SEC
INITIAL TEMP 544.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	1.061	1.062	1.064	1.063	1.060	1.059	1.057	1.059	1.060	1.060	1.059	1.057	1.060	1.062	1.060	1.060	1.061	1.061	1.062	1.059
30	1.065	1.065	1.064	1.061	1.060	1.059	1.060	1.061	1.061	1.062	1.063	1.062	1.063	1.065	1.064	1.063	1.061	1.060	1.059	1.058
31	1.064	1.062	1.061	1.061	1.063	1.064	1.065	1.064	1.064	1.063	1.064	1.064	1.063	1.063	1.062	1.060	1.061	1.059	1.056	1.053
32	1.065	1.065	1.065	1.065	1.067	1.067	1.067	1.064	1.064	1.064	1.064	1.062	1.061	1.059	1.058	1.056	1.055	1.055	1.057	1.057
33	1.067	1.068	1.068	1.067	1.064	1.065	1.064	1.063	1.061	1.059	1.058	1.056	1.053	1.052	1.054	1.058	1.059	1.061	1.061	1.063
34	1.070	1.069	1.067	1.065	1.064	1.061	1.058	1.057	1.055	1.053	1.053	1.054	1.056	1.057	1.058	1.061	1.062	1.064	1.065	1.065
35	1.066	1.064	1.058	1.059	1.053	1.054	1.050	1.053	1.052	1.056	1.055	1.058	1.058	1.061	1.059	1.064	1.064	1.062	1.055	1.049
36	1.060	1.058	1.055	1.053	1.053	1.055	1.056	1.057	1.057	1.059	1.059	1.061	1.062	1.063	1.061	1.055	1.047	1.039	1.024	1.015
37	1.054	1.055	1.054	1.056	1.057	1.058	1.058	1.060	1.061	1.061	1.062	1.060	1.057	1.050	1.039	1.028	1.015	1.011	1.008	1.008
38	1.056	1.057	1.058	1.059	1.059	1.060	1.061	1.062	1.062	1.059	1.052	1.042	1.029	1.022	1.012	1.012	1.011	1.011	1.011	1.008
39	1.059	1.059	1.061	1.061	1.062	1.062	1.061	1.056	1.049	1.037	1.027	1.015	1.014	1.011	1.011	1.011	1.012	1.011	1.012	1.012
40	1.063	1.063	1.064	1.064	1.061	1.055	1.044	1.032	1.020	1.014	1.014	1.014	1.011	1.014	1.012	1.009	1.012	1.012	1.011	1.014
41	1.067	1.069	1.066	1.055	1.044	1.029	1.019	1.015	1.014	1.014	1.014	1.014	1.015	1.015	1.015	1.015	1.015	1.015	1.015	1.015
42	1.069	1.068	1.046	1.027	1.020	1.015	1.016	1.012	1.015	1.014	1.016	1.015	1.016	1.015	1.018	1.016	1.016	1.016	1.018	1.019
43	1.048	1.034	1.026	1.023	1.022	1.019	1.019	1.018	1.018	1.018	1.018	1.019	1.019	1.018	1.020	1.020	1.022	1.020	1.023	1.019
44	1.031	1.028	1.027	1.028	1.024	1.028	1.023	1.027	1.024	1.026	1.024	1.026	1.027	1.029	1.027	1.027	1.028	1.028	1.034	1.041
45	1.033	1.032	1.033	1.029	1.029	1.028	1.031	1.028	1.031	1.028	1.031	1.031	1.032	1.031	1.033	1.032	1.035	1.047	1.088	1.136
46	1.037	1.037	1.037	1.034	1.034	1.034	1.034	1.033	1.035	1.034	1.037	1.034	1.038	1.037	1.039	1.039	1.042	1.069	1.148	1.228
47	1.041	1.040	1.040	1.039	1.040	1.040	1.038	1.038	1.038	1.039	1.039	1.040	1.039	1.041	1.041	1.044	1.048	1.084	1.179	1.263
48	1.042	1.043	1.042	1.041	1.042	1.041	1.042	1.040	1.041	1.040	1.041	1.042	1.043	1.043	1.046	1.047	1.055	1.109	1.217	1.295
49	1.043	1.044	1.040	1.043	1.041	1.043	1.041	1.043	1.041	1.042	1.041	1.044	1.044	1.047	1.048	1.051	1.065	1.147	1.255	1.317
50	1.041	1.042	1.041	1.042	1.040	1.041	1.040	1.041	1.041	1.042	1.042	1.044	1.044	1.047	1.047	1.052	1.079	1.182	1.278	1.327
51	1.038	1.037	1.035	1.037	1.034	1.037	1.037	1.037	1.037	1.039	1.039	1.041	1.041	1.042	1.043	1.055	1.109	1.219	1.295	1.331
52	1.028	1.027	1.024	1.027	1.024	1.027	1.026	1.027	1.026	1.029	1.028	1.031	1.029	1.034	1.035	1.054	1.137	1.248	1.311	1.338
53	1.018	1.019	1.015	1.015	1.015	1.016	1.016	1.016	1.018	1.018	1.019	1.020	1.023	1.024	1.027	1.056	1.161	1.269	1.319	1.342
54	1.012	1.012	1.011	1.011	1.009	1.009	1.011	1.009	1.011	1.012	1.012	1.015	1.016	1.019	1.024	1.066	1.182	1.281	1.322	1.342
55	1.008	1.007	1.008	1.007	1.007	1.007	1.008	1.009	1.008	1.012	1.014	1.015	1.015	1.018	1.029	1.079	1.199	1.288	1.325	1.342
56	1.008	1.002	1.008	1.002	1.008	1.005	1.008	1.002	1.011	1.011	1.012	1.012	1.015	1.019	1.034	1.104	1.223	1.295	1.322	1.336
57	1.007	1.007	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.008	1.011	1.011	1.012	1.019	1.043	1.147	1.256	1.308	1.327	1.339
58	1.007	1.005	1.004	1.005	1.004	1.004	1.004	1.005	1.005	1.008	1.008	1.009	1.012	1.018	1.060	1.179	1.275	1.315	1.332	1.341
59	1.007	1.007	1.005	1.005	1.005	1.004	1.005	1.007	1.007	1.008	1.008	1.011	1.012	1.024	1.088	1.215	1.293	1.321	1.333	1.343
60	1.008	1.007	1.005	1.007	1.005	1.005	1.005	1.009	1.007	1.009	1.011	1.012	1.016	1.034	1.122	1.245	1.305	1.328	1.340	1.349
61	1.009	1.009	1.008	1.008	1.007	1.008	1.008	1.008	1.011	1.009	1.011	1.015	1.018	1.044	1.148	1.260	1.308	1.328	1.340	1.351
62	1.011	1.011	1.008	1.008	1.009	1.008	1.011	1.009	1.011	1.012	1.012	1.015	1.022	1.056	1.165	1.260	1.298	1.315	1.327	1.339
63	1.009	1.009	1.007	1.004	1.007	1.004	1.006	1.008	1.009	1.011	1.012	1.015	1.020	1.063	1.176	1.262	1.293	1.309	1.321	1.331

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 116

IR SCAN TIME 5.56 SEC
INITIAL TEMP 544.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	1.059	1.057	1.058	1.055	1.056	1.052	1.053	1.051	1.053	1.054	1.056	1.055	1.058	1.057	1.059	1.062	1.063	1.064	1.062	1.062
30	1.058	1.056	1.055	1.055	1.056	1.056	1.058	1.057	1.060	1.063	1.065	1.066	1.066	1.066	1.066	1.065	1.064	1.055	1.055	1.048
31	1.052	1.054	1.056	1.060	1.061	1.064	1.063	1.064	1.065	1.067	1.067	1.067	1.064	1.057	1.054	1.048	1.041	1.035	1.027	1.020
32	1.059	1.061	1.064	1.064	1.067	1.067	1.067	1.064	1.061	1.057	1.052	1.047	1.041	1.029	1.020	1.011	1.005	1.002	1.001	0.999
33	1.064	1.066	1.066	1.065	1.061	1.056	1.048	1.041	1.033	1.024	1.012	1.005	1.001	0.999	0.999	0.999	0.999	0.999	0.999	0.999
34	1.063	1.056	1.050	1.042	1.032	1.024	1.012	1.004	1.001	1.001	0.999	0.999	0.999	0.999	0.999	0.999	0.999	1.001	1.001	1.001
35	1.039	1.028	1.016	1.009	1.005	1.002	1.002	1.002	1.001	1.001	1.002	1.001	1.001	1.001	1.002	1.001	1.002	1.001	1.002	1.002
36	1.007	1.007	1.004	1.005	1.002	1.004	1.002	1.004	1.002	1.004	1.002	1.004	1.002	1.005	1.005	1.005	1.004	1.007	1.005	1.005
37	1.008	1.008	1.007	1.007	1.007	1.007	1.007	1.005	1.005	1.007	1.007	1.007	1.007	1.007	1.007	1.009	1.004	1.009	1.004	1.008
38	1.009	1.009	1.009	1.009	1.011	1.011	1.009	1.009	1.009	1.009	1.009	1.008	1.009	1.011	1.009	1.009	1.009	1.009	1.009	1.009
39	1.012	1.011	1.012	1.012	1.014	1.012	1.012	1.012	1.014	1.012	1.012	1.012	1.014	1.012	1.011	1.012	1.014	1.012	1.012	1.012
40	1.012	1.012	1.012	1.014	1.015	1.015	1.015	1.015	1.015	1.015	1.015	1.016	1.015	1.015	1.015	1.015	1.015	1.015	1.015	1.015
41	1.016	1.015	1.015	1.018	1.018	1.018	1.018	1.018	1.016	1.018	1.019	1.018	1.018	1.018	1.015	1.016	1.018	1.018	1.016	1.018
42	1.019	1.019	1.022	1.019	1.020	1.022	1.023	1.022	1.023	1.023	1.024	1.023	1.023	1.022	1.022	1.022	1.020	1.019	1.019	1.019
43	1.024	1.023	1.026	1.024	1.026	1.024	1.027	1.024	1.027	1.024	1.027	1.026	1.028	1.026	1.027	1.027	1.026	1.026	1.024	1.026
44	1.047	1.047	1.047	1.044	1.043	1.041	1.040	1.038	1.037	1.034	1.034	1.034	1.035	1.031	1.032	1.028	1.033	1.028	1.028	1.027
45	1.165	1.179	1.185	1.184	1.178	1.166	1.155	1.138	1.120	1.100	1.079	1.061	1.051	1.044	1.042	1.040	1.041	1.040	1.041	1.038
46	1.273	1.298	1.319	1.336	1.350	1.362	1.369	1.365	1.351	1.328	1.275	1.197	1.129	1.081	1.061	1.053	1.049	1.047	1.047	1.046
47	1.304	1.327	1.343	1.356	1.369	1.382	1.399	1.415	1.424	1.428	1.421	1.367	1.273	1.185	1.119	1.082	1.065	1.058	1.055	1.054
48	1.332	1.353	1.371	1.386	1.397	1.404	1.410	1.417	1.425	1.430	1.434	1.442	1.431	1.356	1.246	1.154	1.096	1.074	1.067	1.064
49	1.347	1.367	1.387	1.406	1.423	1.435	1.443	1.448	1.449	1.445	1.438	1.434	1.441	1.444	1.380	1.265	1.165	1.098	1.069	1.061
50	1.351	1.371	1.391	1.413	1.436	1.455	1.468	1.479	1.486	1.484	1.476	1.464	1.450	1.441	1.436	1.387	1.279	1.174	1.103	1.069
51	1.352	1.370	1.388	1.408	1.430	1.450	1.466	1.484	1.501	1.509	1.510	1.506	1.495	1.479	1.460	1.438	1.386	1.288	1.188	1.118
52	1.354	1.370	1.386	1.406	1.426	1.443	1.456	1.471	1.491	1.511	1.525	1.534	1.535	1.529	1.517	1.499	1.478	1.440	1.356	1.241
53	1.355	1.368	1.384	1.402	1.421	1.436	1.447	1.459	1.475	1.493	1.507	1.520	1.532	1.542	1.546	1.543	1.534	1.518	1.490	1.421
54	1.357	1.372	1.387	1.404	1.422	1.436	1.445	1.455	1.468	1.483	1.496	1.507	1.514	1.522	1.532	1.543	1.552	1.556	1.552	1.537
55	1.354	1.367	1.382	1.398	1.414	1.426	1.438	1.451	1.466	1.482	1.495	1.505	1.512	1.516	1.519	1.522	1.526	1.533	1.543	1.553
56	1.346	1.357	1.372	1.389	1.402	1.411	1.423	1.438	1.456	1.474	1.488	1.500	1.509	1.513	1.514	1.516	1.520	1.522	1.522	1.514
57	1.348	1.360	1.377	1.393	1.405	1.416	1.427	1.441	1.458	1.475	1.491	1.502	1.511	1.519	1.524	1.527	1.529	1.533	1.537	1.539
58	1.350	1.362	1.377	1.392	1.405	1.416	1.426	1.439	1.454	1.469	1.483	1.493	1.502	1.510	1.516	1.523	1.529	1.536	1.542	1.546
59	1.351	1.363	1.378	1.393	1.406	1.418	1.427	1.438	1.452	1.467	1.480	1.495	1.505	1.510	1.514	1.518	1.521	1.526	1.535	1.545
60	1.356	1.367	1.380	1.396	1.411	1.425	1.436	1.447	1.461	1.474	1.487	1.498	1.505	1.514	1.522	1.526	1.525	1.525	1.528	1.535
61	1.360	1.370	1.381	1.395	1.411	1.426	1.436	1.446	1.460	1.472	1.484	1.495	1.503	1.511	1.514	1.516	1.520	1.521	1.523	1.527
62	1.350	1.361	1.374	1.389	1.407	1.427	1.438	1.449	1.465	1.481	1.493	1.505	1.515	1.521	1.527	1.529	1.529	1.528	1.529	1.533
63	1.340	1.350	1.362	1.379	1.398	1.416	1.429	1.441	1.458	1.476	1.492	1.509	1.522	1.530	1.536	1.537	1.537	1.540	1.545	1.547

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 116

IR SCAN TIME 5.56 SEC
INITIAL TEMP 544.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	1.063	1.060	1.057	1.053	1.049	1.046	1.042	1.039	1.034	1.027	1.024	1.019	1.016	1.012	1.011	1.008	1.005	1.004	0.999	1.001
30	1.046	1.040	1.037	1.027	1.024	1.015	1.014	1.005	1.004	0.998	0.999	0.996	0.998	0.996	0.998	0.996	0.996	0.998	0.998	0.996
31	1.012	1.008	1.002	0.998	0.999	0.999	0.998	0.999	0.998	0.996	0.996	0.996	0.994	0.993	0.993	0.994	0.991	0.994	0.993	0.994
32	1.001	0.999	1.001	0.999	0.999	0.998	0.999	0.998	0.998	0.993	0.996	0.994	0.996	0.993	0.996	0.994	0.994	0.994	0.994	0.993
33	0.999	0.999	0.999	0.999	0.998	0.998	0.998	0.998	0.998	0.998	0.996	0.998	0.994	0.994	0.993	0.994	0.993	0.994	0.994	0.994
34	0.999	0.999	0.999	1.001	1.001	0.999	0.999	0.999	0.999	0.999	0.998	0.999	0.998	0.998	0.996	0.996	0.994	0.996	0.994	0.994
35	1.002	1.001	1.002	1.002	1.002	1.002	1.001	1.001	0.999	1.001	0.999	1.001	0.999	0.999	0.999	0.998	0.999	0.999	0.998	0.998
36	1.005	1.005	1.005	1.005	1.004	1.005	1.004	1.002	1.004	1.004	1.002	1.002	1.002	1.001	1.001	0.999	1.002	1.001	0.999	0.999
37	1.002	1.008	1.002	1.008	1.002	1.008	1.004	1.007	1.004	1.005	1.002	1.005	1.005	1.004	1.004	1.004	1.002	1.002	1.002	1.002
38	1.009	1.009	1.009	1.009	1.008	1.009	1.008	1.008	1.007	1.007	1.007	1.007	1.005	1.007	1.002	1.005	1.004	1.005	1.002	1.004
39	1.012	1.011	1.012	1.012	1.014	1.011	1.011	1.011	1.011	1.009	1.009	1.008	1.008	1.008	1.008	1.008	1.008	1.007	1.008	1.007
40	1.015	1.015	1.012	1.015	1.015	1.015	1.012	1.012	1.011	1.011	1.012	1.011	1.011	1.011	1.009	1.008	1.009	1.009	1.011	1.008
41	1.016	1.018	1.016	1.016	1.018	1.016	1.016	1.015	1.014	1.015	1.015	1.014	1.012	1.012	1.012	1.012	1.012	1.008	1.011	1.011
42	1.020	1.018	1.020	1.018	1.019	1.018	1.016	1.018	1.018	1.016	1.016	1.015	1.015	1.014	1.014	1.015	1.012	1.014	1.012	1.011
43	1.024	1.012	1.024	1.024	1.024	1.022	1.022	1.022	1.022	1.019	1.019	1.018	1.016	1.018	1.016	1.015	1.015	1.016	1.012	1.015
44	1.029	1.026	1.029	1.026	1.028	1.024	1.027	1.024	1.027	1.024	1.026	1.023	1.024	1.024	1.024	1.023	1.023	1.019	1.022	1.019
45	1.039	1.037	1.038	1.034	1.035	1.034	1.034	1.031	1.034	1.031	1.033	1.029	1.031	1.028	1.031	1.026	1.029	1.024	1.028	1.024
46	1.047	1.044	1.044	1.042	1.043	1.041	1.041	1.039	1.040	1.037	1.038	1.035	1.037	1.035	1.034	1.033	1.035	1.033	1.034	1.033
47	1.051	1.052	1.051	1.050	1.047	1.046	1.043	1.043	1.041	1.042	1.040	1.041	1.038	1.039	1.038	1.039	1.037	1.038	1.037	1.037
48	1.062	1.059	1.057	1.054	1.053	1.049	1.049	1.047	1.047	1.043	1.043	1.042	1.043	1.041	1.042	1.040	1.041	1.040	1.040	1.039
49	1.062	1.065	1.065	1.061	1.057	1.055	1.051	1.050	1.048	1.048	1.046	1.046	1.044	1.044	1.043	1.043	1.042	1.042	1.041	1.042
50	1.057	1.055	1.055	1.060	1.064	1.064	1.059	1.055	1.051	1.051	1.049	1.049	1.047	1.047	1.046	1.046	1.044	1.044	1.043	1.043
51	1.075	1.058	1.051	1.051	1.050	1.057	1.059	1.059	1.053	1.049	1.047	1.044	1.043	1.043	1.042	1.041	1.040	1.041	1.040	1.041
52	1.147	1.089	1.065	1.055	1.051	1.051	1.052	1.056	1.055	1.047	1.037	1.035	1.029	1.031	1.028	1.029	1.027	1.029	1.028	1.032
53	1.305	1.191	1.113	1.073	1.058	1.054	1.052	1.052	1.053	1.054	1.041	1.032	1.024	1.022	1.019	1.018	1.018	1.019	1.023	1.029
54	1.493	1.393	1.261	1.156	1.094	1.067	1.057	1.055	1.053	1.054	1.056	1.048	1.034	1.026	1.019	1.018	1.019	1.020	1.024	1.029
55	1.559	1.547	1.483	1.358	1.229	1.137	1.088	1.066	1.059	1.055	1.055	1.057	1.055	1.042	1.031	1.024	1.020	1.023	1.028	1.031
56	1.506	1.513	1.530	1.520	1.431	1.288	1.174	1.106	1.074	1.059	1.054	1.052	1.055	1.057	1.048	1.031	1.026	1.023	1.027	1.029
57	1.534	1.510	1.466	1.439	1.451	1.421	1.321	1.209	1.123	1.078	1.059	1.053	1.049	1.051	1.056	1.051	1.034	1.026	1.024	1.026
58	1.546	1.545	1.539	1.514	1.457	1.388	1.332	1.237	1.143	1.091	1.067	1.056	1.050	1.048	1.047	1.052	1.048	1.037	1.024	1.019
59	1.552	1.555	1.553	1.552	1.549	1.531	1.475	1.379	1.265	1.166	1.102	1.072	1.056	1.051	1.046	1.046	1.046	1.048	1.035	1.024
60	1.545	1.554	1.560	1.564	1.565	1.565	1.561	1.545	1.491	1.390	1.263	1.159	1.096	1.068	1.055	1.049	1.043	1.046	1.046	1.039
61	1.529	1.534	1.537	1.537	1.536	1.543	1.551	1.558	1.558	1.543	1.481	1.356	1.214	1.123	1.078	1.058	1.049	1.043	1.043	1.044
62	1.536	1.537	1.538	1.538	1.528	1.511	1.486	1.471	1.473	1.488	1.492	1.451	1.341	1.216	1.134	1.085	1.061	1.051	1.043	1.042
63	1.547	1.541	1.538	1.542	1.544	1.546	1.540	1.519	1.476	1.416	1.368	1.345	1.346	1.322	1.254	1.157	1.095	1.065	1.051	1.044

NASA/RI OH90 TRANSITION TEST
V418-P4A
AKO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 116

IR SCAN TIME 5.56 SEC
INITIAL TEMP 544.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	1.001	0.999	0.999	0.999	0.999	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.999	0.998	1.002	0.998	0.999	0.999	1.001	0.999
30	0.998	0.996	0.996	0.996	0.998	0.994	0.998	0.993	0.994	0.994	0.994	0.994	0.996	0.994	0.996	0.996	0.996	0.996	0.994	0.996
31	0.991	0.993	0.989	0.994	0.989	0.993	0.989	0.991	0.988	0.993	0.989	0.993	0.991	0.993	0.993	0.993	0.993	0.993	0.993	0.993
32	0.994	0.993	0.996	0.991	0.993	0.991	0.993	0.991	0.991	0.989	0.991	0.989	0.991	0.984	0.991	0.986	0.991	0.986	0.991	0.986
33	0.993	0.993	0.993	0.991	0.991	0.993	0.993	0.991	0.991	0.991	0.989	0.989	0.989	0.989	0.988	0.989	0.989	0.991	0.988	0.988
34	0.994	0.994	0.994	0.993	0.993	0.993	0.993	0.993	0.991	0.993	0.991	0.993	0.991	0.991	0.989	0.989	0.988	0.988	0.988	0.989
35	0.998	0.996	0.996	0.996	0.996	0.996	0.994	0.996	0.994	0.996	0.994	0.994	0.993	0.993	0.991	0.993	0.991	0.991	0.991	0.991
36	0.999	0.999	0.999	0.999	0.999	0.998	0.998	0.998	0.996	0.998	0.998	0.998	0.996	0.996	0.996	0.996	0.994	0.994	0.993	0.993
37	1.001	1.002	1.001	1.001	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.998	0.998	0.996	0.996
38	0.999	1.002	1.001	1.002	0.999	1.002	0.999	1.002	0.998	1.002	1.002	1.001	0.999	1.001	1.001	0.999	0.999	0.999	0.999	0.999
39	1.007	1.005	1.005	1.005	1.005	1.004	1.005	1.004	1.002	1.002	1.004	1.001	1.004	0.999	1.002	0.999	1.004	0.998	1.001	0.999
40	1.007	1.008	1.005	1.008	1.005	1.007	1.007	1.005	1.004	1.004	1.005	1.004	1.004	1.004	1.004	1.004	1.002	1.004	1.002	1.002
41	1.011	1.007	1.008	1.008	1.009	1.008	1.008	1.007	1.008	1.007	1.007	1.007	1.007	1.005	1.008	1.007	1.005	1.002	1.005	1.004
42	1.012	1.011	1.012	1.011	1.011	1.009	1.011	1.009	1.009	1.008	1.009	1.008	1.008	1.008	1.009	1.007	1.008	1.007	1.007	1.007
43	1.014	1.014	1.016	1.014	1.014	1.015	1.018	1.009	1.012	1.012	1.009	1.009	1.011	1.012	1.012	1.009	1.012	1.011	1.009	1.009
44	1.020	1.019	1.019	1.018	1.019	1.019	1.018	1.018	1.018	1.018	1.016	1.016	1.016	1.018	1.016	1.018	1.016	1.016	1.018	1.015
45	1.027	1.024	1.027	1.024	1.024	1.023	1.026	1.024	1.026	1.024	1.026	1.024	1.024	1.024	1.026	1.023	1.023	1.023	1.024	1.024
46	1.034	1.032	1.032	1.029	1.032	1.028	1.031	1.028	1.031	1.022	1.031	1.023	1.029	1.023	1.029	1.023	1.029	1.020	1.028	1.022
47	1.035	1.037	1.034	1.035	1.033	1.034	1.034	1.033	1.032	1.033	1.032	1.033	1.032	1.032	1.029	1.032	1.029	1.031	1.032	1.032
48	1.040	1.038	1.039	1.037	1.038	1.035	1.037	1.035	1.037	1.034	1.035	1.033	1.035	1.034	1.034	1.033	1.035	1.033	1.034	1.034
49	1.041	1.041	1.040	1.041	1.039	1.039	1.038	1.040	1.037	1.038	1.035	1.037	1.035	1.037	1.035	1.037	1.034	1.037	1.034	1.037
50	1.042	1.042	1.041	1.042	1.041	1.042	1.041	1.040	1.039	1.040	1.039	1.039	1.039	1.039	1.038	1.038	1.037	1.038	1.037	1.038
51	1.041	1.042	1.041	1.043	1.042	1.042	1.042	1.043	1.041	1.042	1.042	1.042	1.041	1.041	1.041	1.041	1.040	1.040	1.039	1.040
52	1.033	1.038	1.037	1.041	1.041	1.043	1.043	1.044	1.043	1.043	1.043	1.044	1.043	1.044	1.043	1.043	1.041	1.042	1.041	1.041
53	1.031	1.035	1.040	1.042	1.042	1.044	1.044	1.047	1.044	1.047	1.046	1.048	1.044	1.046	1.044	1.047	1.042	1.042	1.041	1.041
54	1.033	1.039	1.041	1.043	1.044	1.047	1.047	1.049	1.049	1.049	1.050	1.049	1.049	1.049	1.048	1.048	1.047	1.047	1.044	1.042
55	1.035	1.037	1.043	1.042	1.046	1.047	1.046	1.048	1.048	1.048	1.049	1.047	1.048	1.046	1.047	1.044	1.044	1.043	1.043	1.040
56	1.033	1.034	1.037	1.038	1.040	1.039	1.040	1.039	1.040	1.039	1.039	1.039	1.039	1.038	1.038	1.035	1.035	1.033	1.034	1.031
57	1.024	1.027	1.026	1.027	1.026	1.028	1.026	1.027	1.027	1.027	1.026	1.027	1.024	1.026	1.024	1.026	1.024	1.026	1.023	1.024
58	1.016	1.016	1.016	1.015	1.015	1.015	1.015	1.012	1.014	1.014	1.011	1.011	1.011	1.009	1.008	1.008	1.008	1.008	1.007	1.007
59	1.015	1.015	1.011	1.012	1.011	1.011	1.011	1.008	1.008	1.008	1.007	1.005	1.005	1.005	1.004	1.004	1.002	1.002	1.002	1.002
60	1.027	1.018	1.015	1.012	1.012	1.012	1.008	1.011	1.008	1.008	1.005	1.005	1.002	1.005	1.002	1.005	1.002	1.002	1.001	1.002
61	1.041	1.029	1.022	1.016	1.015	1.012	1.012	1.011	1.009	1.008	1.008	1.007	1.007	1.004	1.005	1.004	1.004	1.004	1.004	1.002
62	1.042	1.042	1.032	1.024	1.015	1.014	1.012	1.012	1.011	1.009	1.007	1.007	1.005	1.007	1.005	1.005	1.005	1.004	1.004	1.004
63	1.042	1.041	1.042	1.037	1.027	1.018	1.012	1.012	1.011	1.009	1.008	1.007	1.007	1.005	1.007	1.004	1.005	1.002	1.007	1.002

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 116

IR SCAN TIME 5.56 SEC
INITIAL TEMP 544.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	1.001	0.999	1.001	0.999	1.001	1.002	1.001	0.999	1.001	0.998	0.998	0.998	0.998	0.994	0.994	0.993	0.996	0.993	0.996	0.991
30	0.996	0.996	0.998	0.998	0.998	0.998	0.999	0.996	0.996	0.996	0.996	0.994	0.996	0.991	0.994	0.991	0.991	0.991	0.991	0.988
31	0.993	0.993	0.993	0.993	0.993	0.991	0.998	0.994	0.991	0.994	0.993	0.993	0.991	0.993	0.991	0.989	0.989	0.989	0.986	0.986
32	0.989	0.986	0.991	0.986	0.989	0.988	0.993	0.988	0.991	0.991	0.991	0.989	0.989	0.988	0.989	0.986	0.989	0.988	0.988	0.986
33	0.986	0.989	0.989	0.988	0.989	0.988	0.988	0.988	0.986	0.988	0.986	0.986	0.982	0.988	0.982	0.986	0.981	0.984	0.981	0.984
34	0.988	0.988	0.988	0.988	0.986	0.988	0.986	0.988	0.986	0.986	0.986	0.986	0.986	0.986	0.984	0.986	0.984	0.984	0.982	0.986
35	0.989	0.989	0.989	0.989	0.988	0.989	0.986	0.989	0.988	0.988	0.989	0.989	0.986	0.986	0.986	0.986	0.986	0.988	0.986	0.986
36	0.993	0.993	0.991	0.993	0.991	0.993	0.991	0.991	0.989	0.991	0.991	0.991	0.989	0.989	0.988	0.989	0.989	0.989	0.989	0.991
37	0.996	0.994	0.996	0.996	0.994	0.994	0.994	0.994	0.993	0.994	0.991	0.993	0.993	0.994	0.993	0.993	0.993	0.993	0.993	0.993
38	0.999	0.999	0.998	0.998	0.998	0.998	0.998	0.998	0.996	0.996	0.996	0.996	0.996	0.996	0.994	0.994	0.994	0.996	0.994	0.994
39	1.002	0.998	1.001	0.998	1.001	0.998	1.001	1.001	0.999	0.999	0.999	0.998	0.999	0.998	0.999	0.998	0.998	0.996	0.998	0.998
40	1.002	1.002	0.999	1.001	1.001	1.001	0.999	0.999	0.999	0.999	0.994	0.999	0.998	0.999	0.996	0.999	0.996	0.999	0.996	0.999
41	1.005	1.002	1.004	1.002	1.002	1.002	1.002	1.002	1.002	1.001	1.001	1.001	1.002	0.999	1.001	0.999	1.002	0.999	1.002	0.999
42	1.008	1.007	1.007	1.005	1.005	1.005	1.004	1.004	1.004	1.004	1.005	1.004	1.004	1.002	1.004	1.002	1.001	1.002	1.004	1.002
43	1.008	1.011	1.008	1.011	1.008	1.008	1.008	1.008	1.007	1.007	1.007	1.007	1.008	1.007	1.008	1.005	1.012	1.008	1.007	1.009
44	1.016	1.015	1.015	1.015	1.016	1.015	1.015	1.015	1.015	1.015	1.014	1.015	1.015	1.012	1.012	1.012	1.014	1.014	1.012	1.012
45	1.024	1.024	1.026	1.024	1.024	1.024	1.024	1.024	1.023	1.022	1.024	1.022	1.020	1.019	1.022	1.019	1.019	1.020	1.020	1.019
46	1.031	1.026	1.031	1.026	1.032	1.029	1.029	1.028	1.029	1.027	1.029	1.028	1.028	1.027	1.027	1.024	1.027	1.026	1.027	1.026
47	1.032	1.034	1.033	1.034	1.033	1.033	1.032	1.031	1.028	1.031	1.028	1.031	1.026	1.029	1.028	1.029	1.028	1.029	1.027	1.029
48	1.037	1.035	1.037	1.035	1.038	1.034	1.035	1.033	1.033	1.032	1.033	1.033	1.033	1.032	1.032	1.031	1.033	1.031	1.033	1.029
49	1.034	1.038	1.037	1.037	1.035	1.037	1.035	1.035	1.034	1.034	1.033	1.035	1.034	1.034	1.033	1.034	1.032	1.034	1.032	1.033
50	1.038	1.038	1.037	1.038	1.037	1.037	1.034	1.035	1.034	1.035	1.034	1.034	1.033	1.034	1.033	1.032	1.031	1.033	1.031	1.032
51	1.038	1.039	1.037	1.038	1.035	1.034	1.032	1.032	1.029	1.029	1.028	1.029	1.028	1.028	1.027	1.027	1.027	1.026	1.024	1.026
52	1.038	1.039	1.037	1.035	1.032	1.029	1.026	1.024	1.022	1.020	1.018	1.019	1.018	1.016	1.016	1.016	1.015	1.015	1.012	1.015
53	1.038	1.039	1.034	1.034	1.029	1.027	1.022	1.018	1.014	1.014	1.011	1.011	1.009	1.008	1.008	1.008	1.007	1.005	1.005	1.005
54	1.041	1.041	1.037	1.035	1.029	1.026	1.018	1.015	1.009	1.008	1.005	1.005	1.004	1.002	1.002	1.002	0.999	1.001	0.999	0.996
55	1.040	1.037	1.037	1.032	1.029	1.024	1.020	1.015	1.011	1.007	1.007	1.004	1.002	1.002	1.002	0.999	1.001	0.999	0.999	0.996
56	1.032	1.031	1.028	1.024	1.024	1.019	1.014	1.012	1.009	1.007	1.004	1.002	1.002	1.001	1.001	0.999	0.999	0.999	0.999	0.996
57	1.024	1.023	1.022	1.020	1.016	1.018	1.015	1.015	1.012	1.011	1.011	1.009	1.007	1.007	1.007	1.007	1.007	1.007	1.005	1.007
58	1.007	1.005	1.004	1.004	1.004	1.002	0.999	1.001	0.999	0.998	0.998	0.999	0.996	0.998	0.996	0.996	0.996	0.996	0.994	0.994
59	1.001	1.002	0.999	1.001	0.999	1.001	0.999	0.999	0.998	0.996	0.996	0.994	0.994	0.994	0.996	0.994	0.993	0.993	0.991	0.993
60	0.999	1.002	1.002	1.001	1.001	1.001	0.999	0.999	0.998	0.999	0.998	0.998	0.996	0.996	0.994	0.996	0.994	0.994	0.994	0.993
61	1.002	1.002	1.002	1.002	0.999	1.001	0.998	0.999	0.998	0.998	0.996	0.999	0.996	0.996	0.993	0.996	0.991	0.994	0.991	0.994
62	1.004	1.004	1.002	1.002	1.002	1.001	0.999	0.999	0.999	0.999	0.999	0.999	0.998	0.998	0.996	0.996	0.993	0.994	0.993	0.993
63	1.002	1.002	1.002	1.002	1.002	0.999	1.001	0.999	1.001	0.999	0.999	0.996	0.996	0.994	0.996	0.993	0.994	0.993	0.993	0.991

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 116

IR SCAN TIME 5.56 SEC
INITIAL TEMP 544.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.991	0.989	0.991	0.988	0.989	0.988	0.988	0.988	0.988	0.986
30	0.989	0.986	0.986	0.986	0.981	0.986	0.986	0.986	0.986	0.984
31	0.986	0.986	0.984	0.986	0.982	0.982	0.984	0.984	0.982	0.984
32	0.986	0.984	0.986	0.982	0.984	0.984	0.982	0.982	0.982	0.982
33	0.981	0.984	0.981	0.982	0.979	0.982	0.979	0.982	0.982	0.982
34	0.984	0.982	0.982	0.982	0.981	0.982	0.982	0.982	0.981	0.982
35	0.984	0.986	0.986	0.986	0.984	0.984	0.984	0.984	0.984	0.982
36	0.989	0.989	0.989	0.989	0.988	0.989	0.989	0.988	0.988	0.988
37	0.993	0.993	0.993	0.993	0.991	0.991	0.991	0.991	0.989	0.991
38	0.994	0.994	0.994	0.996	0.993	0.994	0.993	0.994	0.993	0.994
39	0.998	0.996	0.998	0.998	0.998	0.996	0.998	0.996	0.999	0.998
40	0.996	0.998	0.996	0.998	0.996	0.999	0.999	0.999	0.999	0.999
41	1.001	0.999	1.001	0.999	1.002	1.001	1.001	0.998	1.002	0.998
42	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.004	1.004
43	1.007	1.005	1.007	1.005	1.004	1.005	1.011	1.009	1.008	1.008
44	1.014	1.012	1.014	1.012	1.012	1.012	1.012	1.012	1.012	1.012
45	1.019	1.018	1.019	1.016	1.018	1.018	1.019	1.018	1.018	1.018
46	1.027	1.026	1.027	1.026	1.026	1.024	1.026	1.024	1.026	1.024
47	1.027	1.029	1.027	1.028	1.028	1.028	1.027	1.028	1.027	1.027
48	1.032	1.029	1.031	1.029	1.031	1.027	1.029	1.027	1.029	1.027
49	1.032	1.033	1.032	1.033	1.031	1.031	1.029	1.031	1.028	1.031
50	1.029	1.031	1.029	1.031	1.028	1.029	1.028	1.028	1.027	1.028
51	1.024	1.026	1.024	1.026	1.024	1.023	1.022	1.022	1.020	1.020
52	1.015	1.012	1.012	1.012	1.012	1.011	1.012	1.011	1.009	1.009
53	1.005	1.005	1.005	1.002	1.001	1.002	1.001	1.002	1.001	1.001
54	0.998	0.998	0.998	0.998	0.996	0.996	0.993	0.993	0.989	0.993
55	0.996	0.994	0.996	0.988	0.993	0.986	0.991	0.982	0.989	0.981
56	0.996	0.996	0.996	0.993	0.994	0.993	0.993	0.991	0.991	0.989
57	1.002	1.005	1.004	1.005	1.002	1.002	1.002	1.002	1.002	1.001
58	0.996	0.993	0.993	0.991	0.991	0.991	0.993	0.991	0.991	0.991
59	0.989	0.991	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.988
60	0.993	0.994	0.989	0.991	0.993	0.991	0.989	0.989	0.989	0.989
61	0.993	0.993	0.993	0.993	0.991	0.993	0.991	0.989	0.989	0.991
62	0.993	0.993	0.989	0.991	0.989	0.989	0.986	0.989	0.986	0.989
63	0.991	0.989	0.989	0.989	0.991	0.986	0.989	0.986	0.986	0.984

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 116

IR SCAN TIME 5.56 SEC
INITIAL TEMP 544.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	1.007	1.005	1.005	1.004	1.004	1.004	1.004	1.004	1.004	1.007	1.007	1.011	1.018	1.079	1.197	1.267	1.291	1.306	1.317	1.327
65	1.001	1.001	1.002	0.999	0.999	0.999	1.001	1.001	1.002	1.002	1.007	1.008	1.028	1.114	1.226	1.275	1.294	1.306	1.316	1.324
66	0.994	0.998	0.993	0.993	0.994	0.993	0.994	0.996	0.996	0.998	1.001	1.005	1.047	1.150	1.242	1.278	1.296	1.306	1.316	1.324
67	0.991	0.991	0.989	0.989	0.989	0.988	0.991	0.989	0.991	0.993	0.999	1.002	1.063	1.179	1.252	1.277	1.292	1.302	1.312	1.320
68	0.988	0.986	0.986	0.984	0.986	0.982	0.988	0.989	0.989	0.991	0.994	1.005	1.083	1.198	1.252	1.273	1.285	1.294	1.303	1.309
69	0.986	0.982	0.986	0.984	0.984	0.986	0.986	0.986	0.986	0.989	0.994	1.007	1.093	1.205	1.250	1.269	1.281	1.291	1.299	1.305
70	0.986	0.986	0.982	0.981	0.986	0.986	0.986	0.986	0.989	0.989	0.994	1.012	1.114	1.215	1.253	1.269	1.281	1.290	1.298	1.306
71	0.986	0.982	0.988	0.986	0.988	0.984	0.986	0.982	0.988	0.989	0.993	1.014	1.125	1.220	1.255	1.270	1.280	1.289	1.298	1.305
72	0.988	0.986	0.986	0.984	0.986	0.986	0.986	0.988	0.988	0.989	0.994	1.037	1.158	1.233	1.258	1.271	1.281	1.292	1.300	1.307
73	0.988	0.986	0.986	0.984	0.984	0.984	0.986	0.988	0.989	0.989	0.999	1.071	1.190	1.243	1.261	1.272	1.282	1.294	1.303	1.309
74	0.986	0.986	0.986	0.982	0.984	0.984	0.984	0.984	0.988	0.989	1.005	1.102	1.206	1.244	1.260	1.270	1.280	1.290	1.300	1.305
75	0.988	0.988	0.986	0.982	0.984	0.984	0.984	0.982	0.986	0.989	1.019	1.132	1.214	1.239	1.253	1.263	1.271	1.280	1.289	1.295
76	0.991	0.999	1.001	0.994	0.996	0.994	0.991	0.988	0.988	0.993	1.049	1.161	1.218	1.238	1.250	1.258	1.265	1.271	1.278	1.283
77	1.016	1.041	1.044	1.041	1.042	1.040	1.039	1.016	0.998	0.996	1.069	1.176	1.223	1.239	1.251	1.259	1.267	1.273	1.278	1.285
78	1.048	1.067	1.041	1.054	1.074	1.062	1.063	1.069	1.041	1.012	1.091	1.189	1.229	1.243	1.252	1.260	1.269	1.276	1.282	1.288
79	1.059	1.086	1.065	1.060	1.078	1.085	1.081	1.080	1.088	1.063	1.118	1.203	1.233	1.245	1.253	1.260	1.267	1.274	1.282	1.289
80	1.068	1.096	1.103	1.095	1.084	1.084	1.096	1.092	1.092	1.105	1.160	1.220	1.242	1.251	1.258	1.263	1.268	1.273	1.280	1.287
81	1.079	1.098	1.124	1.129	1.093	1.084	1.071	1.069	1.081	1.118	1.188	1.232	1.247	1.257	1.264	1.268	1.272	1.276	1.280	1.286
82	1.096	1.098	1.122	1.135	1.104	1.090	1.067	1.042	1.053	1.113	1.194	1.232	1.246	1.254	1.260	1.267	1.275	1.285	1.296	1.299
83	1.105	1.086	1.099	1.111	1.098	1.084	1.057	1.029	1.042	1.114	1.194	1.223	1.237	1.248	1.256	1.266	1.278	1.296	1.316	1.308
84	1.088	1.069	1.077	1.085	1.078	1.058	1.042	1.044	1.055	1.071	1.105	1.116	1.129	1.144	1.163	1.182	1.199	1.218	1.236	1.248
85	1.059	1.053	1.063	1.071	1.070	1.053	1.042	1.046	1.054	1.050	1.050	1.051	1.054	1.053	1.057	1.057	1.064	1.067	1.074	1.080
86	1.027	1.024	1.034	1.039	1.039	1.033	1.034	1.039	1.052	1.048	1.047	1.047	1.048	1.049	1.052	1.049	1.049	1.049	1.051	1.053
87	1.014	1.012	1.008	1.009	1.012	1.015	1.022	1.035	1.048	1.046	1.041	1.042	1.041	1.041	1.041	1.042	1.042	1.042	1.042	1.043
88	1.001	0.999	0.999	0.999	1.007	1.012	1.019	1.029	1.044	1.044	1.043	1.041	1.041	1.039	1.040	1.037	1.037	1.033	1.037	1.035
89	0.989	0.988	0.986	0.994	1.002	1.007	1.012	1.023	1.038	1.044	1.043	1.044	1.042	1.040	1.037	1.035	1.034	1.035	1.034	1.035
90	0.984	0.982	0.986	0.993	1.002	1.005	1.008	1.016	1.035	1.042	1.046	1.044	1.044	1.041	1.040	1.035	1.037	1.034	1.034	1.034
91	0.981	0.984	0.986	0.991	1.002	1.002	1.005	1.012	1.035	1.041	1.042	1.042	1.043	1.041	1.041	1.040	1.039	1.037	1.035	1.034
92	0.993	0.986	0.989	0.993	1.001	1.002	1.007	1.012	1.037	1.042	1.043	1.042	1.042	1.041	1.042	1.041	1.041	1.038	1.037	1.034
93	1.019	1.015	1.012	1.012	1.014	1.015	1.018	1.024	1.039	1.042	1.043	1.047	1.049	1.048	1.047	1.046	1.046	1.041	1.039	1.029
94	1.034	1.031	1.032	1.029	1.032	1.028	1.029	1.033	1.046	1.049	1.049	1.049	1.053	1.054	1.057	1.053	1.053	1.047	1.042	1.034
95	1.049	1.047	1.046	1.043	1.044	1.041	1.039	1.037	1.050	1.055	1.055	1.055	1.059	1.059	1.061	1.061	1.059	1.055	1.046	1.037
96	1.052	1.050	1.048	1.048	1.047	1.044	1.039	1.040	1.048	1.054	1.053	1.058	1.062	1.065	1.067	1.066	1.064	1.057	1.048	1.040
97	1.056	1.057	1.054	1.053	1.051	1.046	1.041	1.041	1.049	1.048	1.048	1.052	1.060	1.065	1.068	1.066	1.063	1.056	1.050	1.049
98	1.057	1.057	1.058	1.056	1.051	1.048	1.043	1.043	1.053	1.055	1.053	1.054	1.056	1.059	1.059	1.059	1.058	1.054	1.053	1.049

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 116

IR SCAN TIME 5.56 SEC
INITIAL TEMP 544.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	1.335	1.344	1.355	1.371	1.388	1.401	1.412	1.423	1.436	1.453	1.468	1.478	1.488	1.496	1.500	1.508	1.519	1.532	1.543	1.550
65	1.333	1.343	1.356	1.372	1.387	1.398	1.409	1.419	1.432	1.446	1.462	1.470	1.479	1.482	1.476	1.462	1.449	1.438	1.437	1.446
66	1.333	1.345	1.357	1.371	1.384	1.395	1.406	1.418	1.429	1.439	1.451	1.465	1.477	1.484	1.489	1.491	1.491	1.484	1.462	1.428
67	1.332	1.346	1.362	1.377	1.388	1.394	1.402	1.415	1.428	1.438	1.447	1.459	1.469	1.474	1.476	1.479	1.483	1.489	1.491	1.489
68	1.321	1.336	1.351	1.368	1.379	1.382	1.387	1.404	1.427	1.444	1.454	1.463	1.473	1.482	1.488	1.491	1.494	1.495	1.494	1.497
69	1.316	1.331	1.342	1.353	1.367	1.380	1.394	1.405	1.419	1.435	1.453	1.467	1.476	1.484	1.490	1.495	1.501	1.504	1.504	1.505
70	1.316	1.331	1.342	1.351	1.363	1.375	1.387	1.397	1.407	1.419	1.430	1.443	1.454	1.462	1.468	1.475	1.483	1.490	1.498	1.505
71	1.313	1.327	1.340	1.349	1.357	1.369	1.380	1.390	1.400	1.410	1.421	1.430	1.439	1.445	1.447	1.452	1.458	1.463	1.467	1.474
72	1.315	1.328	1.339	1.348	1.357	1.368	1.380	1.391	1.401	1.410	1.419	1.427	1.433	1.439	1.441	1.440	1.442	1.448	1.454	1.457
73	1.317	1.326	1.339	1.347	1.356	1.366	1.381	1.393	1.404	1.414	1.422	1.428	1.435	1.441	1.445	1.448	1.449	1.450	1.451	1.453
74	1.312	1.321	1.331	1.342	1.352	1.361	1.374	1.389	1.400	1.408	1.414	1.422	1.432	1.440	1.446	1.448	1.449	1.451	1.455	1.458
75	1.300	1.307	1.315	1.327	1.340	1.349	1.357	1.370	1.382	1.391	1.400	1.406	1.414	1.421	1.427	1.428	1.430	1.435	1.438	1.440
76	1.289	1.295	1.302	1.312	1.322	1.331	1.337	1.345	1.355	1.362	1.369	1.375	1.379	1.382	1.386	1.386	1.385	1.385	1.387	1.388
77	1.291	1.295	1.301	1.309	1.318	1.326	1.335	1.343	1.350	1.354	1.357	1.359	1.358	1.356	1.359	1.357	1.350	1.345	1.344	1.342
78	1.297	1.303	1.309	1.315	1.324	1.334	1.342	1.351	1.360	1.366	1.370	1.372	1.371	1.368	1.368	1.367	1.360	1.353	1.350	1.345
79	1.297	1.305	1.313	1.320	1.327	1.336	1.345	1.355	1.363	1.371	1.378	1.383	1.386	1.388	1.389	1.390	1.387	1.382	1.377	1.373
80	1.296	1.303	1.312	1.320	1.328	1.337	1.347	1.356	1.366	1.374	1.381	1.387	1.391	1.395	1.398	1.400	1.402	1.405	1.404	1.402
81	1.292	1.298	1.306	1.314	1.323	1.335	1.345	1.356	1.366	1.376	1.384	1.391	1.396	1.400	1.404	1.408	1.411	1.412	1.413	1.415
82	1.298	1.300	1.305	1.311	1.320	1.332	1.342	1.354	1.364	1.374	1.383	1.391	1.396	1.400	1.403	1.406	1.409	1.412	1.415	1.417
83	1.296	1.297	1.302	1.306	1.309	1.312	1.316	1.335	1.354	1.367	1.377	1.384	1.390	1.396	1.400	1.402	1.403	1.405	1.408	1.411
84	1.260	1.272	1.279	1.285	1.292	1.294	1.300	1.311	1.325	1.342	1.358	1.368	1.376	1.384	1.391	1.395	1.398	1.400	1.403	1.406
85	1.089	1.099	1.110	1.121	1.133	1.141	1.144	1.148	1.155	1.169	1.182	1.196	1.207	1.217	1.228	1.237	1.246	1.257	1.267	1.276
86	1.055	1.054	1.056	1.054	1.057	1.056	1.058	1.057	1.059	1.059	1.063	1.063	1.067	1.067	1.070	1.069	1.072	1.072	1.074	1.075
87	1.044	1.047	1.048	1.050	1.051	1.053	1.053	1.054	1.053	1.052	1.050	1.052	1.053	1.054	1.055	1.057	1.057	1.057	1.059	1.059
88	1.038	1.038	1.041	1.041	1.043	1.044	1.046	1.044	1.044	1.042	1.043	1.043	1.044	1.044	1.046	1.046	1.047	1.047	1.048	1.049
89	1.034	1.037	1.037	1.041	1.039	1.041	1.039	1.041	1.041	1.041	1.041	1.042	1.042	1.042	1.041	1.042	1.042	1.043	1.044	1.047
90	1.034	1.034	1.039	1.038	1.039	1.038	1.040	1.039	1.041	1.042	1.052	1.095	1.136	1.116	1.073	1.052	1.044	1.042	1.044	1.043
91	1.035	1.034	1.035	1.035	1.037	1.037	1.039	1.039	1.041	1.042	1.070	1.169	1.236	1.212	1.133	1.074	1.052	1.042	1.042	1.042
92	1.034	1.031	1.034	1.034	1.037	1.034	1.039	1.038	1.041	1.041	1.044	1.056	1.079	1.077	1.059	1.047	1.043	1.041	1.041	1.041
93	1.033	1.027	1.034	1.031	1.039	1.035	1.041	1.039	1.044	1.042	1.046	1.041	1.042	1.039	1.042	1.041	1.042	1.040	1.040	1.040
94	1.033	1.033	1.037	1.038	1.041	1.041	1.044	1.044	1.048	1.049	1.050	1.047	1.047	1.042	1.043	1.041	1.042	1.040	1.040	1.037
95	1.034	1.032	1.039	1.039	1.043	1.043	1.047	1.047	1.051	1.051	1.051	1.051	1.050	1.046	1.042	1.039	1.040	1.038	1.039	1.038
96	1.037	1.039	1.040	1.043	1.044	1.048	1.048	1.051	1.051	1.053	1.053	1.053	1.052	1.051	1.044	1.042	1.039	1.039	1.037	1.037
97	1.049	1.051	1.047	1.048	1.049	1.052	1.052	1.051	1.053	1.051	1.048	1.051	1.051	1.050	1.052	1.046	1.041	1.041	1.042	1.041
98	1.053	1.053	1.054	1.054	1.055	1.054	1.055	1.057	1.059	1.056	1.054	1.053	1.053	1.050	1.049	1.047	1.050	1.081	1.146	1.176

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 116

IR SCAN TIME 5.56 SEC
INITIAL TEMP 544.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	1.552	1.550	1.553	1.552	1.552	1.555	1.552	1.549	1.543	1.533	1.506	1.449	1.367	1.290	1.234	1.173	1.110	1.075	1.057	1.049
65	1.465	1.487	1.515	1.535	1.546	1.548	1.549	1.551	1.549	1.546	1.545	1.545	1.535	1.497	1.425	1.330	1.237	1.153	1.095	1.064
66	1.392	1.360	1.344	1.350	1.374	1.405	1.439	1.472	1.500	1.522	1.536	1.541	1.544	1.546	1.544	1.524	1.469	1.378	1.265	1.161
67	1.486	1.473	1.446	1.405	1.363	1.329	1.309	1.306	1.317	1.345	1.386	1.432	1.474	1.509	1.532	1.542	1.541	1.514	1.447	1.337
68	1.499	1.502	1.505	1.501	1.484	1.452	1.409	1.363	1.324	1.300	1.290	1.286	1.289	1.301	1.332	1.375	1.417	1.447	1.452	1.416
69	1.509	1.511	1.509	1.505	1.504	1.502	1.498	1.486	1.462	1.426	1.383	1.337	1.304	1.285	1.276	1.274	1.275	1.276	1.280	1.284
70	1.512	1.518	1.523	1.525	1.524	1.520	1.517	1.513	1.505	1.500	1.495	1.480	1.456	1.419	1.372	1.330	1.301	1.285	1.277	1.274
71	1.480	1.489	1.498	1.503	1.511	1.518	1.518	1.520	1.523	1.523	1.522	1.519	1.514	1.506	1.493	1.477	1.453	1.417	1.373	1.328
72	1.458	1.460	1.460	1.461	1.463	1.461	1.460	1.464	1.468	1.470	1.474	1.482	1.494	1.503	1.507	1.506	1.507	1.511	1.509	1.496
73	1.456	1.460	1.463	1.463	1.462	1.460	1.456	1.447	1.434	1.421	1.404	1.385	1.368	1.357	1.351	1.355	1.368	1.385	1.403	1.420
74	1.463	1.467	1.471	1.475	1.476	1.475	1.474	1.469	1.466	1.467	1.465	1.454	1.437	1.415	1.387	1.353	1.318	1.287	1.265	1.250
75	1.444	1.448	1.453	1.460	1.467	1.472	1.474	1.475	1.478	1.478	1.479	1.480	1.477	1.476	1.470	1.462	1.448	1.425	1.397	1.362
76	1.391	1.391	1.393	1.395	1.399	1.404	1.408	1.410	1.412	1.414	1.416	1.421	1.430	1.434	1.439	1.442	1.445	1.447	1.446	1.441
77	1.340	1.337	1.334	1.332	1.329	1.326	1.322	1.319	1.317	1.313	1.311	1.308	1.305	1.301	1.299	1.304	1.308	1.311	1.317	1.323
78	1.343	1.341	1.337	1.332	1.327	1.320	1.313	1.305	1.297	1.290	1.283	1.276	1.270	1.257	1.238	1.240	1.247	1.247	1.245	1.242
79	1.368	1.364	1.360	1.355	1.350	1.345	1.338	1.330	1.322	1.313	1.304	1.295	1.285	1.276	1.267	1.261	1.256	1.252	1.250	1.247
80	1.401	1.399	1.395	1.390	1.384	1.376	1.368	1.359	1.351	1.342	1.334	1.325	1.316	1.305	1.295	1.287	1.278	1.271	1.264	1.257
81	1.416	1.418	1.419	1.420	1.419	1.416	1.411	1.404	1.395	1.384	1.373	1.361	1.349	1.337	1.326	1.316	1.308	1.299	1.291	1.283
82	1.421	1.425	1.428	1.432	1.434	1.434	1.435	1.436	1.433	1.428	1.421	1.413	1.402	1.389	1.375	1.362	1.349	1.337	1.325	1.314
83	1.414	1.419	1.423	1.427	1.431	1.434	1.438	1.441	1.442	1.444	1.444	1.443	1.440	1.437	1.430	1.424	1.414	1.404	1.392	1.378
84	1.409	1.413	1.417	1.422	1.426	1.430	1.432	1.434	1.434	1.434	1.434	1.433	1.432	1.430	1.429	1.427	1.426	1.427	1.427	1.427
85	1.287	1.296	1.305	1.316	1.329	1.339	1.348	1.350	1.351	1.355	1.357	1.358	1.359	1.360	1.363	1.366	1.367	1.369	1.371	1.374
86	1.076	1.077	1.078	1.079	1.082	1.083	1.086	1.087	1.088	1.088	1.092	1.091	1.092	1.092	1.093	1.093	1.095	1.096	1.098	1.099
87	1.058	1.061	1.061	1.062	1.061	1.063	1.062	1.062	1.063	1.063	1.063	1.064	1.063	1.062	1.059	1.060	1.059	1.058	1.056	1.057
88	1.050	1.050	1.053	1.052	1.051	1.051	1.052	1.051	1.051	1.049	1.050	1.048	1.048	1.047	1.047	1.044	1.044	1.041	1.043	1.038
89	1.047	1.049	1.049	1.050	1.051	1.051	1.050	1.049	1.047	1.047	1.047	1.047	1.047	1.044	1.042	1.041	1.039	1.038	1.035	1.035
90	1.044	1.046	1.047	1.047	1.048	1.049	1.049	1.047	1.048	1.047	1.053	1.064	1.069	1.057	1.049	1.041	1.039	1.037	1.037	1.034
91	1.044	1.043	1.046	1.044	1.046	1.046	1.047	1.047	1.047	1.050	1.101	1.201	1.234	1.183	1.112	1.067	1.051	1.042	1.039	1.035
92	1.043	1.043	1.044	1.044	1.046	1.047	1.047	1.044	1.044	1.042	1.055	1.096	1.124	1.103	1.070	1.050	1.043	1.037	1.037	1.033
93	1.042	1.041	1.043	1.043	1.046	1.044	1.047	1.044	1.044	1.042	1.043	1.042	1.042	1.040	1.041	1.041	1.040	1.035	1.035	1.033
94	1.039	1.035	1.039	1.039	1.042	1.043	1.046	1.043	1.046	1.042	1.042	1.041	1.042	1.041	1.043	1.040	1.039	1.033	1.033	1.032
95	1.041	1.039	1.041	1.041	1.042	1.042	1.044	1.044	1.047	1.044	1.042	1.041	1.041	1.039	1.041	1.038	1.038	1.033	1.034	1.029
96	1.037	1.039	1.039	1.039	1.041	1.043	1.042	1.046	1.046	1.047	1.044	1.042	1.041	1.041	1.039	1.039	1.035	1.037	1.034	1.033
97	1.039	1.041	1.037	1.037	1.039	1.041	1.042	1.043	1.044	1.046	1.043	1.041	1.042	1.039	1.040	1.037	1.039	1.038	1.034	1.034
98	1.152	1.102	1.066	1.048	1.044	1.041	1.043	1.042	1.044	1.042	1.042	1.041	1.041	1.039	1.038	1.035	1.035	1.032	1.033	1.031

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 116

IR SCAN TIME 5.56 SEC
INITIAL TEMP 544.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	1.042	1.041	1.039	1.041	1.039	1.029	1.018	1.012	1.008	1.007	1.005	1.004	1.004	1.004	1.002	1.002	1.002	1.002	1.002	1.001
65	1.050	1.044	1.041	1.039	1.040	1.040	1.033	1.018	1.009	1.005	1.004	1.002	1.002	1.001	1.001	1.001	0.999	0.999	0.999	0.999
66	1.093	1.059	1.047	1.040	1.039	1.037	1.040	1.033	1.019	1.007	1.001	0.999	0.998	0.996	0.996	0.994	0.996	0.994	0.994	0.993
67	1.207	1.114	1.069	1.046	1.041	1.034	1.035	1.033	1.033	1.016	1.004	0.994	0.994	0.989	0.991	0.988	0.989	0.986	0.988	0.988
68	1.335	1.230	1.142	1.081	1.053	1.041	1.037	1.033	1.035	1.032	1.020	1.002	0.996	0.989	0.988	0.986	0.984	0.982	0.982	0.982
69	1.288	1.272	1.204	1.123	1.073	1.049	1.040	1.035	1.034	1.031	1.032	1.023	1.005	0.993	0.988	0.984	0.984	0.981	0.982	0.981
70	1.271	1.269	1.263	1.222	1.144	1.082	1.052	1.041	1.034	1.035	1.032	1.031	1.028	1.011	0.991	0.988	0.982	0.975	0.984	0.981
71	1.291	1.267	1.252	1.240	1.214	1.156	1.092	1.056	1.041	1.035	1.032	1.031	1.028	1.027	1.015	0.999	0.988	0.984	0.981	0.981
72	1.471	1.430	1.376	1.324	1.277	1.237	1.182	1.112	1.067	1.046	1.037	1.032	1.028	1.028	1.026	1.019	1.004	0.991	0.984	0.982
73	1.438	1.452	1.461	1.461	1.442	1.394	1.324	1.240	1.152	1.088	1.055	1.039	1.033	1.027	1.028	1.027	1.022	1.008	0.996	0.984
74	1.243	1.240	1.247	1.256	1.272	1.285	1.291	1.270	1.229	1.170	1.105	1.055	1.039	1.027	1.028	1.023	1.026	1.022	1.015	1.001
75	1.323	1.284	1.249	1.224	1.208	1.198	1.191	1.185	1.178	1.166	1.132	1.084	1.053	1.037	1.031	1.027	1.026	1.024	1.023	1.018
76	1.432	1.418	1.397	1.368	1.333	1.293	1.253	1.219	1.196	1.181	1.170	1.145	1.101	1.059	1.041	1.031	1.028	1.024	1.024	1.022
77	1.331	1.339	1.346	1.351	1.356	1.357	1.347	1.327	1.301	1.269	1.237	1.206	1.178	1.136	1.085	1.052	1.037	1.027	1.024	1.020
78	1.238	1.236	1.234	1.235	1.235	1.235	1.237	1.240	1.241	1.239	1.237	1.233	1.225	1.210	1.181	1.125	1.071	1.042	1.028	1.020
79	1.243	1.240	1.236	1.230	1.224	1.219	1.217	1.212	1.209	1.204	1.200	1.199	1.197	1.197	1.195	1.183	1.145	1.092	1.050	1.029
80	1.252	1.248	1.243	1.239	1.237	1.235	1.231	1.226	1.224	1.219	1.214	1.208	1.204	1.199	1.194	1.189	1.179	1.151	1.101	1.055
81	1.273	1.264	1.257	1.253	1.248	1.242	1.236	1.233	1.229	1.226	1.222	1.219	1.215	1.212	1.207	1.204	1.202	1.197	1.173	1.123
82	1.305	1.296	1.287	1.278	1.269	1.261	1.252	1.244	1.238	1.234	1.232	1.230	1.227	1.223	1.219	1.216	1.214	1.212	1.205	1.188
83	1.362	1.345	1.328	1.314	1.301	1.290	1.280	1.272	1.265	1.258	1.251	1.247	1.242	1.239	1.235	1.232	1.230	1.227	1.223	1.217
84	1.424	1.419	1.412	1.402	1.389	1.373	1.354	1.335	1.316	1.300	1.286	1.274	1.265	1.260	1.257	1.256	1.254	1.249	1.243	1.237
85	1.377	1.378	1.379	1.379	1.380	1.383	1.383	1.382	1.381	1.378	1.374	1.370	1.361	1.344	1.330	1.315	1.297	1.279	1.267	1.257
86	1.100	1.102	1.105	1.106	1.110	1.116	1.122	1.127	1.132	1.138	1.145	1.159	1.170	1.170	1.174	1.175	1.165	1.153	1.143	1.137
87	1.054	1.054	1.053	1.053	1.051	1.051	1.051	1.051	1.048	1.046	1.043	1.044	1.047	1.050	1.049	1.046	1.041	1.041	1.038	1.037
88	1.041	1.039	1.042	1.037	1.041	1.035	1.039	1.034	1.037	1.032	1.034	1.031	1.032	1.029	1.032	1.029	1.031	1.028	1.029	1.024
89	1.034	1.034	1.032	1.032	1.028	1.029	1.027	1.027	1.026	1.024	1.024	1.020	1.018	1.018	1.022	1.028	1.024	1.024	1.020	1.020
90	1.035	1.032	1.032	1.029	1.031	1.027	1.028	1.026	1.027	1.028	1.032	1.028	1.026	1.022	1.024	1.028	1.029	1.024	1.024	1.022
91	1.035	1.031	1.032	1.028	1.031	1.028	1.029	1.028	1.041	1.095	1.145	1.135	1.089	1.049	1.029	1.022	1.020	1.018	1.018	1.018
92	1.033	1.031	1.031	1.029	1.029	1.028	1.028	1.027	1.032	1.055	1.093	1.093	1.064	1.039	1.027	1.019	1.019	1.018	1.016	1.016
93	1.033	1.029	1.032	1.028	1.029	1.026	1.028	1.024	1.027	1.024	1.026	1.024	1.024	1.019	1.019	1.018	1.018	1.016	1.018	1.016
94	1.033	1.028	1.031	1.028	1.029	1.028	1.028	1.024	1.027	1.024	1.024	1.024	1.022	1.019	1.019	1.018	1.019	1.019	1.019	1.019
95	1.032	1.028	1.029	1.027	1.029	1.026	1.028	1.027	1.026	1.023	1.023	1.023	1.023	1.019	1.020	1.020	1.023	1.023	1.024	1.023
96	1.029	1.029	1.028	1.028	1.027	1.028	1.026	1.026	1.024	1.023	1.023	1.020	1.018	1.019	1.018	1.022	1.022	1.024	1.024	1.024
97	1.039	1.033	1.031	1.029	1.031	1.029	1.026	1.028	1.027	1.026	1.026	1.024	1.022	1.023	1.027	1.041	1.044	1.037	1.037	1.035
98	1.033	1.028	1.029	1.028	1.031	1.027	1.028	1.026	1.027	1.024	1.024	1.022	1.024	1.023	1.029	1.039	1.044	1.043	1.042	1.041

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 5.56 SEC
GROUP 116 INITIAL TEMP 544.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	1.001	1.001	1.001	0.999	0.999	0.999	0.999	0.996	0.996	0.996	0.993	0.994	0.993	0.993	0.993	0.991	0.989	0.989	0.986	0.988
65	0.999	0.999	0.998	0.998	0.996	0.994	0.994	0.993	0.993	0.989	0.991	0.989	0.989	0.988	0.988	0.986	0.986	0.986	0.986	0.982
66	0.993	0.991	0.993	0.991	0.991	0.989	0.989	0.988	0.988	0.986	0.984	0.984	0.984	0.981	0.984	0.981	0.981	0.977	0.979	0.975
67	0.988	0.986	0.986	0.986	0.984	0.984	0.984	0.981	0.982	0.979	0.979	0.979	0.979	0.975	0.977	0.975	0.973	0.973	0.973	0.971
68	0.982	0.981	0.981	0.977	0.981	0.975	0.977	0.973	0.975	0.971	0.971	0.971	0.971	0.967	0.969	0.967	0.969	0.971	0.969	0.965
69	0.981	0.979	0.981	0.977	0.975	0.975	0.975	0.971	0.971	0.971	0.971	0.971	0.971	0.967	0.969	0.969	0.967	0.965	0.965	0.957
70	0.977	0.975	0.973	0.979	0.977	0.975	0.965	0.973	0.967	0.973	0.969	0.967	0.967	0.963	0.961	0.963	0.969	0.961	0.967	0.961
71	0.979	0.979	0.977	0.977	0.975	0.975	0.975	0.973	0.973	0.971	0.969	0.971	0.967	0.967	0.967	0.965	0.963	0.965	0.963	0.961
72	0.981	0.979	0.979	0.977	0.975	0.977	0.975	0.973	0.971	0.973	0.971	0.971	0.971	0.969	0.967	0.967	0.967	0.963	0.963	0.963
73	0.982	0.981	0.979	0.979	0.979	0.975	0.975	0.975	0.975	0.971	0.971	0.971	0.971	0.967	0.969	0.967	0.967	0.963	0.963	0.963
74	0.989	0.982	0.979	0.975	0.977	0.975	0.975	0.973	0.971	0.971	0.971	0.969	0.971	0.971	0.969	0.967	0.967	0.963	0.965	0.963
75	1.011	0.993	0.986	0.977	0.979	0.971	0.975	0.973	0.973	0.971	0.971	0.967	0.969	0.967	0.969	0.967	0.967	0.967	0.963	0.963
76	1.022	1.018	1.005	0.993	0.984	0.977	0.975	0.973	0.973	0.971	0.973	0.971	0.969	0.971	0.969	0.967	0.965	0.963	0.965	0.961
77	1.020	1.018	1.018	1.015	1.009	0.996	0.984	0.977	0.971	0.971	0.971	0.967	0.967	0.967	0.967	0.963	0.965	0.963	0.963	0.961
78	1.018	1.018	1.015	1.016	1.016	1.015	1.009	0.998	0.988	0.979	0.973	0.971	0.967	0.965	0.967	0.963	0.963	0.959	0.961	0.959
79	1.019	1.016	1.015	1.015	1.015	1.015	1.015	1.014	1.012	1.008	1.002	0.993	0.984	0.982	0.975	0.971	0.971	0.971	0.971	0.969
80	1.032	1.022	1.016	1.016	1.016	1.015	1.015	1.012	1.012	1.012	1.012	1.009	1.008	1.002	0.999	0.993	0.989	0.982	0.979	0.971
81	1.070	1.038	1.024	1.016	1.016	1.018	1.015	1.015	1.012	1.012	1.011	1.012	1.011	1.011	1.009	1.008	1.008	1.005	1.005	0.999
82	1.147	1.091	1.046	1.024	1.015	1.014	1.012	1.012	1.009	1.011	1.008	1.009	1.011	1.011	1.011	1.008	1.011	1.009	1.007	1.008
83	1.203	1.167	1.110	1.059	1.029	1.016	1.016	1.012	1.011	1.009	1.008	1.008	1.008	1.009	1.008	1.011	1.004	1.008	1.004	1.008
84	1.230	1.216	1.185	1.131	1.074	1.039	1.019	1.012	1.011	1.009	1.009	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.005
85	1.248	1.237	1.222	1.193	1.141	1.080	1.040	1.018	1.011	1.008	1.008	1.009	1.009	1.008	1.008	1.008	1.008	1.007	1.008	1.008
86	1.132	1.126	1.118	1.106	1.088	1.058	1.034	1.020	1.015	1.016	1.015	1.011	1.007	1.005	1.005	1.004	1.005	1.004	1.005	1.005
87	1.033	1.031	1.027	1.024	1.018	1.015	1.015	1.016	1.016	1.016	1.012	1.008	1.005	1.002	1.002	1.002	1.002	1.002	1.002	1.002
88	1.026	1.022	1.019	1.015	1.015	1.011	1.012	1.008	1.008	1.008	1.007	1.004	1.002	1.002	1.002	1.002	1.002	1.002	1.001	1.002
89	1.023	1.024	1.015	1.014	1.009	1.009	1.007	1.007	1.004	1.004	1.002	1.004	1.002	1.002	1.002	1.002	1.002	1.001	1.001	1.002
90	1.029	1.027	1.019	1.012	1.011	1.009	1.009	1.007	1.005	1.004	1.004	1.002	1.002	1.001	1.002	0.999	1.001	0.999	1.002	0.999
91	1.018	1.015	1.012	1.011	1.009	1.008	1.007	1.005	1.005	1.004	1.004	1.002	1.002	1.002	1.002	1.001	1.002	1.001	1.002	1.002
92	1.015	1.012	1.012	1.009	1.008	1.007	1.007	1.004	1.004	1.004	1.004	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.001
93	1.016	1.012	1.012	1.009	1.009	1.007	1.007	1.007	1.005	1.004	1.004	1.002	1.004	1.002	1.002	1.002	1.001	1.004	1.002	
94	1.019	1.016	1.015	1.011	1.009	1.008	1.008	1.005	1.005	1.004	1.005	1.004	1.002	1.002	1.004	1.001	1.002	1.001	1.002	1.001
95	1.023	1.020	1.018	1.012	1.011	1.008	1.007	1.008	1.007	1.005	1.005	1.004	1.004	1.004	1.002	1.002	1.001	1.002	1.002	1.001
96	1.022	1.023	1.016	1.014	1.009	1.008	1.007	1.004	1.004	1.004	1.005	1.004	1.002	1.002	1.002	1.002	1.002	1.001	1.002	1.001
97	1.035	1.039	1.033	1.022	1.011	1.007	1.009	1.011	1.009	1.008	1.005	1.002	1.004	1.002	1.007	1.007	1.004	1.001	1.002	0.998
98	1.041	1.039	1.033	1.023	1.018	1.015	1.011	1.009	1.011	1.009	1.011	1.008	1.008	1.007	1.007	1.005	1.005	1.004	1.005	1.002

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 116

IR SCAN TIME 5.56 SEC
INITIAL TEMP 544.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.986	0.988	0.984	0.986	0.984	0.986	0.982	0.984	0.982	0.982
65	0.982	0.981	0.981	0.981	0.981	0.977	0.982	0.981	0.979	0.977
66	0.979	0.975	0.975	0.975	0.975	0.973	0.971	0.971	0.971	0.971
67	0.971	0.971	0.971	0.969	0.967	0.967	0.967	0.965	0.965	0.965
68	0.967	0.965	0.965	0.963	0.965	0.963	0.961	0.961	0.961	0.959
69	0.963	0.954	0.961	0.954	0.959	0.952	0.959	0.947	0.957	0.950
70	0.963	0.959	0.963	0.961	0.959	0.957	0.959	0.957	0.957	0.954
71	0.961	0.959	0.959	0.959	0.957	0.957	0.957	0.954	0.954	0.954
72	0.963	0.961	0.961	0.961	0.959	0.959	0.957	0.954	0.954	0.954
73	0.963	0.961	0.961	0.959	0.959	0.957	0.959	0.957	0.954	0.952
74	0.963	0.961	0.961	0.959	0.959	0.957	0.957	0.954	0.957	0.952
75	0.963	0.963	0.961	0.959	0.961	0.959	0.959	0.954	0.957	0.954
76	0.961	0.957	0.961	0.954	0.959	0.954	0.957	0.952	0.954	0.950
77	0.961	0.959	0.959	0.959	0.959	0.954	0.954	0.954	0.957	0.952
78	0.959	0.959	0.959	0.957	0.957	0.954	0.954	0.954	0.954	0.954
79	0.969	0.969	0.969	0.967	0.967	0.967	0.967	0.965	0.963	0.965
80	0.967	0.967	0.961	0.959	0.959	0.954	0.954	0.952	0.952	0.952
81	0.998	0.991	0.986	0.981	0.977	0.971	0.967	0.967	0.961	0.959
82	1.007	1.004	1.004	1.002	0.999	0.998	0.993	0.989	0.984	0.982
83	1.004	1.007	1.004	1.008	1.002	1.005	1.002	1.001	0.999	0.999
84	1.007	1.005	1.005	1.005	1.005	1.004	1.002	1.004	1.002	1.004
85	1.008	1.005	1.005	1.005	1.005	1.004	1.005	1.002	1.004	1.002
86	1.005	1.004	1.005	1.002	1.004	1.002	1.002	1.002	1.002	1.002
87	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002
88	1.002	1.002	1.002	1.002	1.004	1.002	1.001	1.002	1.002	1.002
89	0.999	1.001	1.002	1.001	1.001	1.001	1.002	1.002	1.001	1.002
90	1.001	0.999	1.002	0.999	1.002	0.999	1.002	0.999	1.002	1.001
91	1.002	1.001	1.002	1.002	1.002	1.001	1.002	0.999	1.002	1.002
92	1.002	1.002	1.002	1.002	1.002	1.002	1.004	1.002	1.002	1.002
93	1.004	1.002	1.002	1.002	1.002	1.001	1.002	1.002	1.002	1.001
94	1.002	1.004	1.002	1.001	1.002	1.001	1.002	1.001	1.002	1.001
95	1.002	1.002	1.002	1.001	1.002	1.001	1.002	0.999	1.002	1.002
96	1.001	1.001	1.001	1.002	1.002	1.004	1.004	1.002	1.005	1.005
97	1.008	1.001	1.004	1.002	1.004	1.004	1.005	1.008	1.008	1.007
98	1.005	1.004	1.005	1.007	1.007	1.007	1.007	1.007	1.006	1.008

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 5.56 SEC
GROUP 116 HREF = 0.332E-01

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	0.032	0.032	0.033	0.033	0.031	0.031	0.030	0.031	0.031	0.031	0.031	0.030	0.031	0.032	0.031	0.031	0.032	0.032	0.032	0.031
30	0.034	0.034	0.033	0.032	0.031	0.031	0.031	0.032	0.032	0.032	0.033	0.032	0.033	0.034	0.033	0.033	0.032	0.031	0.031	0.030
31	0.033	0.032	0.032	0.032	0.033	0.033	0.034	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.032	0.031	0.032	0.031	0.029	0.027
32	0.034	0.034	0.034	0.034	0.035	0.035	0.035	0.033	0.033	0.033	0.033	0.032	0.032	0.031	0.030	0.029	0.029	0.029	0.030	0.030
33	0.035	0.035	0.035	0.035	0.033	0.034	0.033	0.033	0.032	0.031	0.030	0.029	0.027	0.027	0.028	0.030	0.031	0.032	0.032	0.033
34	0.037	0.036	0.035	0.034	0.033	0.032	0.030	0.030	0.029	0.027	0.027	0.028	0.029	0.030	0.030	0.032	0.032	0.033	0.034	0.034
35	0.034	0.033	0.030	0.031	0.027	0.028	0.026	0.027	0.027	0.029	0.029	0.030	0.030	0.032	0.031	0.033	0.033	0.032	0.029	0.025
36	0.031	0.030	0.029	0.027	0.027	0.029	0.029	0.030	0.030	0.031	0.031	0.032	0.032	0.033	0.032	0.029	0.024	0.020	0.012	0.008
37	0.028	0.029	0.028	0.029	0.030	0.030	0.030	0.031	0.032	0.032	0.032	0.031	0.030	0.026	0.020	0.014	0.008	0.005	0.004	0.004
38	0.029	0.030	0.030	0.031	0.031	0.031	0.032	0.032	0.032	0.031	0.027	0.022	0.015	0.011	0.006	0.006	0.005	0.005	0.005	0.004
39	0.031	0.031	0.032	0.032	0.032	0.032	0.032	0.029	0.025	0.019	0.014	0.008	0.007	0.005	0.005	0.005	0.006	0.005	0.006	0.006
40	0.033	0.033	0.033	0.033	0.032	0.029	0.023	0.016	0.010	0.007	0.007	0.007	0.005	0.007	0.006	0.005	0.006	0.006	0.005	0.007
41	0.035	0.036	0.034	0.029	0.023	0.015	0.010	0.008	0.007	0.007	0.007	0.007	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
42	0.036	0.030	0.024	0.014	0.010	0.008	0.008	0.006	0.008	0.007	0.008	0.008	0.008	0.008	0.009	0.008	0.008	0.008	0.009	0.010
43	0.025	0.018	0.013	0.012	0.011	0.010	0.010	0.009	0.009	0.009	0.009	0.010	0.010	0.009	0.010	0.010	0.011	0.010	0.012	0.010
44	0.016	0.014	0.014	0.014	0.012	0.014	0.012	0.014	0.012	0.013	0.012	0.013	0.014	0.015	0.014	0.014	0.014	0.014	0.018	0.021
45	0.017	0.016	0.017	0.015	0.015	0.014	0.016	0.014	0.016	0.014	0.016	0.016	0.016	0.016	0.017	0.016	0.018	0.024	0.047	0.075
46	0.019	0.019	0.019	0.018	0.018	0.018	0.018	0.017	0.018	0.018	0.019	0.018	0.019	0.019	0.020	0.020	0.022	0.036	0.082	0.135
47	0.021	0.021	0.021	0.020	0.021	0.021	0.019	0.019	0.019	0.020	0.020	0.021	0.020	0.021	0.021	0.023	0.025	0.044	0.102	0.160
48	0.022	0.022	0.022	0.021	0.022	0.021	0.022	0.021	0.021	0.021	0.021	0.022	0.022	0.022	0.024	0.024	0.029	0.059	0.128	0.184
49	0.022	0.023	0.021	0.022	0.021	0.022	0.021	0.022	0.021	0.022	0.021	0.023	0.023	0.024	0.025	0.026	0.034	0.081	0.154	0.202
50	0.021	0.022	0.021	0.022	0.021	0.021	0.021	0.021	0.021	0.022	0.022	0.023	0.023	0.024	0.024	0.027	0.042	0.104	0.172	0.210
51	0.019	0.019	0.018	0.019	0.018	0.019	0.019	0.019	0.019	0.020	0.020	0.021	0.021	0.022	0.022	0.029	0.059	0.129	0.184	0.214
52	0.014	0.014	0.012	0.014	0.012	0.014	0.013	0.014	0.013	0.015	0.014	0.016	0.015	0.018	0.018	0.028	0.075	0.149	0.197	0.220
53	0.009	0.010	0.008	0.008	0.008	0.008	0.008	0.008	0.009	0.009	0.010	0.010	0.012	0.012	0.014	0.029	0.090	0.164	0.204	0.223
54	0.006	0.006	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.006	0.006	0.008	0.008	0.010	0.012	0.034	0.104	0.174	0.207	0.223
55	0.004	0.003	0.004	0.003	0.003	0.003	0.004	0.005	0.004	0.006	0.007	0.008	0.008	0.009	0.015	0.042	0.115	0.179	0.209	0.223
56	0.004	0.001	0.004	0.001	0.004	0.003	0.004	0.001	0.005	0.005	0.006	0.006	0.008	0.010	0.018	0.056	0.131	0.185	0.207	0.218
57	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.005	0.005	0.006	0.010	0.022	0.081	0.155	0.195	0.211	0.220
58	0.003	0.003	0.002	0.003	0.002	0.002	0.002	0.003	0.003	0.004	0.004	0.005	0.006	0.009	0.031	0.102	0.169	0.200	0.214	0.223
59	0.003	0.003	0.003	0.003	0.003	0.002	0.003	0.003	0.003	0.004	0.004	0.005	0.006	0.012	0.047	0.126	0.183	0.205	0.216	0.225
60	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.005	0.003	0.005	0.005	0.006	0.008	0.018	0.067	0.147	0.193	0.211	0.222	0.229
61	0.005	0.005	0.004	0.004	0.003	0.004	0.004	0.004	0.005	0.005	0.005	0.008	0.009	0.023	0.082	0.158	0.195	0.211	0.222	0.231
62	0.005	0.005	0.004	0.004	0.005	0.004	0.005	0.005	0.005	0.006	0.006	0.008	0.011	0.029	0.093	0.158	0.187	0.201	0.211	0.220
63	0.005	0.005	0.003	0.002	0.003	0.002	0.004	0.004	0.005	0.005	0.006	0.008	0.010	0.033	0.100	0.159	0.183	0.196	0.205	0.214

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 5.56 SEC
GROUP 116 HREF = 0.332E-01

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	0.031	0.030	0.030	0.029	0.029	0.027	0.027	0.026	0.027	0.028	0.029	0.029	0.030	0.030	0.031	0.032	0.033	0.033	0.032	0.032
30	0.030	0.029	0.029	0.029	0.029	0.029	0.030	0.030	0.031	0.033	0.034	0.034	0.034	0.034	0.034	0.034	0.033	0.029	0.029	0.025
31	0.027	0.028	0.029	0.031	0.032	0.033	0.033	0.033	0.034	0.035	0.035	0.035	0.033	0.030	0.028	0.025	0.021	0.018	0.014	0.010
32	0.031	0.032	0.033	0.033	0.035	0.035	0.035	0.033	0.032	0.030	0.027	0.024	0.021	0.015	0.010	0.005	0.003	0.001	0.000	0.000
33	0.033	0.034	0.034	0.034	0.032	0.029	0.025	0.021	0.017	0.012	0.006	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.033	0.030	0.026	0.022	0.016	0.012	0.006	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.020	0.014	0.008	0.005	0.003	0.001	0.001	0.001	0.000	0.000	0.001	0.000	0.000	0.000	0.001	0.000	0.001	0.000	0.001	0.001
36	0.003	0.003	0.002	0.003	0.001	0.002	0.001	0.002	0.001	0.002	0.001	0.002	0.001	0.003	0.003	0.003	0.002	0.003	0.003	0.003
37	0.004	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.005	0.002	0.005	0.002	0.004
38	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.004	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
39	0.006	0.005	0.006	0.006	0.007	0.006	0.006	0.006	0.007	0.006	0.006	0.006	0.007	0.006	0.005	0.006	0.007	0.006	0.006	0.006
40	0.006	0.006	0.006	0.007	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
41	0.008	0.008	0.008	0.009	0.009	0.009	0.009	0.009	0.008	0.009	0.010	0.009	0.009	0.008	0.009	0.009	0.009	0.009	0.008	0.009
42	0.010	0.010	0.011	0.010	0.010	0.011	0.012	0.011	0.012	0.012	0.012	0.012	0.012	0.011	0.011	0.011	0.010	0.010	0.010	0.010
43	0.012	0.012	0.013	0.012	0.013	0.012	0.014	0.012	0.014	0.012	0.014	0.013	0.014	0.013	0.014	0.014	0.013	0.013	0.012	0.013
44	0.024	0.024	0.024	0.023	0.022	0.021	0.021	0.019	0.019	0.018	0.018	0.018	0.018	0.016	0.016	0.014	0.017	0.014	0.014	0.014
45	0.093	0.102	0.106	0.105	0.101	0.095	0.087	0.076	0.065	0.054	0.042	0.032	0.026	0.023	0.022	0.021	0.021	0.021	0.021	0.019
46	0.167	0.187	0.204	0.218	0.230	0.241	0.247	0.243	0.232	0.212	0.169	0.114	0.071	0.043	0.032	0.027	0.025	0.024	0.024	0.024
47	0.192	0.210	0.224	0.235	0.247	0.259	0.275	0.291	0.300	0.304	0.296	0.245	0.167	0.106	0.065	0.043	0.034	0.030	0.029	0.028
48	0.214	0.233	0.249	0.263	0.273	0.280	0.286	0.293	0.300	0.306	0.310	0.318	0.307	0.235	0.148	0.086	0.051	0.039	0.035	0.033
49	0.227	0.245	0.263	0.282	0.298	0.311	0.320	0.325	0.326	0.321	0.314	0.310	0.317	0.320	0.257	0.162	0.093	0.052	0.036	0.032
50	0.231	0.249	0.267	0.289	0.312	0.332	0.347	0.360	0.367	0.365	0.356	0.342	0.327	0.317	0.312	0.264	0.172	0.099	0.055	0.036
51	0.232	0.248	0.265	0.284	0.306	0.327	0.345	0.365	0.385	0.396	0.396	0.391	0.378	0.359	0.337	0.315	0.262	0.179	0.108	0.064
52	0.234	0.248	0.263	0.282	0.302	0.320	0.333	0.350	0.373	0.397	0.415	0.427	0.428	0.420	0.405	0.383	0.358	0.316	0.235	0.144
53	0.235	0.246	0.261	0.278	0.297	0.312	0.324	0.337	0.355	0.375	0.392	0.408	0.425	0.438	0.443	0.438	0.426	0.407	0.372	0.297
54	0.236	0.250	0.264	0.280	0.298	0.312	0.322	0.333	0.347	0.363	0.379	0.392	0.402	0.411	0.424	0.439	0.451	0.457	0.451	0.431
55	0.233	0.245	0.259	0.275	0.290	0.302	0.315	0.326	0.345	0.363	0.378	0.390	0.399	0.404	0.408	0.411	0.416	0.425	0.438	0.452
56	0.227	0.237	0.250	0.266	0.278	0.287	0.299	0.314	0.334	0.353	0.370	0.384	0.395	0.399	0.402	0.404	0.408	0.411	0.411	0.401
57	0.229	0.239	0.255	0.269	0.281	0.292	0.303	0.318	0.335	0.354	0.373	0.387	0.398	0.407	0.414	0.418	0.420	0.425	0.431	0.434
58	0.230	0.241	0.255	0.268	0.281	0.292	0.302	0.315	0.331	0.348	0.363	0.376	0.386	0.396	0.404	0.412	0.420	0.429	0.438	0.443
59	0.231	0.242	0.255	0.269	0.282	0.293	0.303	0.315	0.329	0.345	0.361	0.378	0.390	0.396	0.401	0.406	0.409	0.416	0.428	0.442
60	0.236	0.245	0.258	0.272	0.287	0.301	0.312	0.324	0.338	0.353	0.369	0.382	0.390	0.401	0.412	0.416	0.415	0.415	0.419	0.428
61	0.239	0.248	0.258	0.271	0.286	0.302	0.312	0.323	0.338	0.351	0.365	0.377	0.388	0.398	0.402	0.404	0.409	0.411	0.412	0.418
62	0.230	0.240	0.252	0.266	0.283	0.302	0.315	0.326	0.343	0.361	0.376	0.390	0.403	0.410	0.418	0.421	0.420	0.419	0.420	0.426
63	0.222	0.230	0.241	0.256	0.274	0.291	0.305	0.318	0.336	0.356	0.375	0.396	0.411	0.421	0.429	0.431	0.430	0.434	0.442	0.444

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HRFR
IR SCAN TIME 5.56 SEC
HRFR = 0.332E-01

GROUP 116

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	0.033	0.031	0.030	0.027	0.025	0.024	0.022	0.020	0.018	0.014	0.012	0.010	0.008	0.006	0.005	0.004	0.003	0.002	0.002	0.000
30	0.024	0.021	0.019	0.014	0.012	0.008	0.007	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
31	0.006	0.004	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.001	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.003	0.003	0.003	0.003	0.002	0.003	0.002	0.001	0.002	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.001	0.000	0.000	0.000
37	0.001	0.004	0.001	0.004	0.001	0.004	0.002	0.003	0.002	0.003	0.001	0.003	0.003	0.002	0.002	0.002	0.001	0.001	0.001	0.001
38	0.005	0.005	0.005	0.005	0.004	0.005	0.004	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.001	0.003	0.002	0.003	0.001	0.002
39	0.006	0.005	0.006	0.006	0.007	0.005	0.005	0.005	0.005	0.005	0.005	0.004	0.004	0.004	0.004	0.004	0.004	0.003	0.004	0.003
40	0.008	0.008	0.006	0.008	0.008	0.008	0.006	0.006	0.005	0.005	0.006	0.005	0.005	0.005	0.004	0.005	0.005	0.005	0.005	0.004
41	0.008	0.009	0.008	0.008	0.009	0.008	0.008	0.008	0.007	0.008	0.008	0.007	0.006	0.006	0.006	0.006	0.006	0.004	0.005	0.005
42	0.010	0.009	0.010	0.009	0.010	0.009	0.009	0.009	0.009	0.008	0.008	0.008	0.008	0.007	0.007	0.008	0.006	0.007	0.006	0.005
43	0.012	0.006	0.012	0.012	0.012	0.011	0.011	0.011	0.011	0.010	0.010	0.009	0.008	0.009	0.008	0.008	0.008	0.008	0.006	0.008
44	0.015	0.013	0.015	0.013	0.014	0.012	0.014	0.012	0.014	0.012	0.013	0.012	0.012	0.012	0.012	0.012	0.012	0.010	0.011	0.010
45	0.020	0.019	0.019	0.018	0.018	0.018	0.018	0.016	0.018	0.016	0.017	0.015	0.016	0.014	0.016	0.013	0.015	0.012	0.014	0.012
46	0.024	0.023	0.023	0.022	0.022	0.021	0.021	0.020	0.021	0.019	0.019	0.018	0.019	0.018	0.018	0.017	0.018	0.017	0.018	0.017
47	0.026	0.027	0.026	0.026	0.024	0.024	0.022	0.022	0.021	0.022	0.021	0.021	0.019	0.020	0.019	0.020	0.019	0.019	0.019	0.019
48	0.032	0.031	0.030	0.028	0.027	0.025	0.025	0.024	0.024	0.022	0.022	0.022	0.022	0.021	0.022	0.021	0.021	0.021	0.021	0.020
49	0.032	0.034	0.034	0.032	0.030	0.029	0.026	0.026	0.025	0.025	0.024	0.024	0.023	0.023	0.022	0.022	0.022	0.022	0.021	0.022
50	0.030	0.029	0.029	0.031	0.033	0.033	0.031	0.029	0.026	0.026	0.025	0.025	0.024	0.024	0.024	0.024	0.023	0.023	0.022	0.022
51	0.039	0.030	0.026	0.026	0.026	0.030	0.031	0.031	0.027	0.025	0.024	0.023	0.022	0.022	0.022	0.021	0.021	0.021	0.021	0.021
52	0.061	0.048	0.034	0.029	0.026	0.026	0.027	0.029	0.029	0.024	0.019	0.018	0.015	0.016	0.014	0.015	0.014	0.015	0.014	0.016
53	0.192	0.110	0.061	0.038	0.030	0.028	0.027	0.027	0.027	0.028	0.021	0.016	0.012	0.011	0.010	0.009	0.009	0.010	0.012	0.015
54	0.376	0.270	0.159	0.087	0.050	0.035	0.030	0.029	0.027	0.028	0.029	0.025	0.018	0.013	0.010	0.009	0.010	0.010	0.012	0.015
55	0.461	0.444	0.364	0.238	0.135	0.075	0.047	0.034	0.031	0.029	0.029	0.030	0.029	0.022	0.016	0.012	0.010	0.012	0.014	0.016
56	0.391	0.400	0.422	0.409	0.307	0.179	0.099	0.057	0.039	0.031	0.028	0.027	0.029	0.030	0.025	0.016	0.013	0.012	0.014	0.015
57	0.427	0.396	0.345	0.316	0.328	0.297	0.205	0.121	0.067	0.041	0.031	0.027	0.025	0.026	0.029	0.026	0.018	0.013	0.012	0.013
58	0.442	0.441	0.433	0.401	0.334	0.265	0.215	0.141	0.079	0.048	0.035	0.029	0.026	0.025	0.024	0.027	0.025	0.019	0.012	0.010
59	0.452	0.455	0.452	0.451	0.447	0.422	0.354	0.257	0.161	0.093	0.055	0.038	0.029	0.026	0.024	0.024	0.024	0.025	0.018	0.012
60	0.441	0.453	0.463	0.468	0.470	0.469	0.463	0.441	0.374	0.267	0.160	0.089	0.051	0.035	0.029	0.025	0.022	0.024	0.024	0.020
61	0.421	0.426	0.431	0.431	0.432	0.439	0.450	0.459	0.460	0.438	0.361	0.235	0.125	0.067	0.041	0.030	0.025	0.022	0.022	0.023
62	0.430	0.430	0.433	0.432	0.419	0.398	0.370	0.351	0.353	0.369	0.375	0.328	0.223	0.126	0.073	0.045	0.032	0.026	0.022	0.022
63	0.444	0.436	0.431	0.437	0.440	0.443	0.435	0.407	0.356	0.293	0.246	0.226	0.227	0.206	0.153	0.088	0.051	0.034	0.026	0.023

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 5.56 SEC
GROUP 116 HREF = 0.332E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000
30	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
31	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.002	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	0.003	0.003	0.003	0.003	0.003	0.002	0.003	0.002	0.001	0.001	0.002	0.000	0.002	0.002	0.001	0.001	0.002	0.002	0.000	0.000
40	0.003	0.004	0.003	0.004	0.003	0.003	0.003	0.003	0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.001	0.002	0.001	0.001
41	0.005	0.003	0.004	0.004	0.005	0.004	0.004	0.003	0.004	0.003	0.003	0.003	0.003	0.003	0.004	0.003	0.003	0.001	0.003	0.002
42	0.006	0.005	0.006	0.005	0.005	0.005	0.005	0.005	0.005	0.004	0.005	0.004	0.004	0.004	0.005	0.003	0.004	0.003	0.003	0.003
43	0.007	0.007	0.008	0.007	0.007	0.008	0.009	0.005	0.006	0.006	0.005	0.005	0.005	0.006	0.006	0.005	0.006	0.005	0.005	0.005
44	0.010	0.010	0.010	0.009	0.010	0.010	0.009	0.009	0.009	0.009	0.008	0.008	0.008	0.009	0.008	0.009	0.008	0.008	0.009	0.008
45	0.014	0.012	0.014	0.012	0.012	0.012	0.013	0.012	0.013	0.012	0.013	0.012	0.012	0.012	0.013	0.012	0.012	0.012	0.012	0.012
46	0.018	0.016	0.016	0.015	0.016	0.014	0.016	0.014	0.016	0.011	0.016	0.012	0.015	0.012	0.015	0.012	0.015	0.010	0.014	0.011
47	0.018	0.019	0.018	0.018	0.017	0.018	0.018	0.017	0.016	0.017	0.016	0.017	0.016	0.016	0.015	0.016	0.015	0.016	0.016	0.016
48	0.021	0.019	0.020	0.019	0.019	0.018	0.019	0.018	0.019	0.018	0.018	0.017	0.018	0.018	0.018	0.017	0.018	0.017	0.018	0.018
49	0.021	0.021	0.021	0.021	0.020	0.020	0.019	0.021	0.019	0.019	0.018	0.019	0.018	0.019	0.018	0.019	0.018	0.019	0.018	0.019
50	0.022	0.022	0.021	0.022	0.021	0.022	0.021	0.021	0.020	0.021	0.020	0.020	0.020	0.020	0.019	0.019	0.019	0.019	0.019	0.019
51	0.021	0.022	0.021	0.022	0.022	0.022	0.022	0.022	0.021	0.022	0.022	0.022	0.021	0.021	0.021	0.021	0.021	0.021	0.020	0.021
52	0.017	0.019	0.019	0.021	0.021	0.022	0.022	0.023	0.022	0.022	0.022	0.023	0.022	0.023	0.022	0.022	0.021	0.022	0.021	0.021
53	0.016	0.018	0.021	0.022	0.022	0.023	0.023	0.024	0.023	0.024	0.024	0.025	0.023	0.024	0.023	0.024	0.022	0.022	0.021	0.021
54	0.017	0.020	0.021	0.022	0.023	0.024	0.024	0.025	0.025	0.025	0.026	0.025	0.025	0.025	0.025	0.025	0.024	0.024	0.023	0.022
55	0.018	0.019	0.022	0.022	0.024	0.024	0.025	0.025	0.025	0.025	0.025	0.024	0.025	0.024	0.024	0.023	0.023	0.022	0.022	0.021
56	0.017	0.018	0.019	0.019	0.021	0.020	0.021	0.020	0.021	0.020	0.020	0.020	0.020	0.019	0.019	0.018	0.018	0.017	0.018	0.016
57	0.012	0.014	0.013	0.014	0.013	0.014	0.013	0.014	0.014	0.014	0.013	0.014	0.012	0.013	0.012	0.013	0.012	0.013	0.012	0.012
58	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.006	0.007	0.007	0.005	0.005	0.005	0.004	0.004	0.004	0.004	0.004	0.003	0.003
59	0.008	0.008	0.005	0.006	0.005	0.005	0.005	0.004	0.004	0.004	0.003	0.003	0.003	0.003	0.002	0.002	0.001	0.001	0.001	0.001
60	0.014	0.009	0.008	0.006	0.006	0.006	0.004	0.005	0.004	0.004	0.003	0.003	0.001	0.003	0.001	0.003	0.001	0.001	0.000	0.001
61	0.021	0.015	0.011	0.008	0.008	0.006	0.006	0.005	0.005	0.004	0.004	0.003	0.003	0.002	0.003	0.002	0.002	0.002	0.002	0.001
62	0.022	0.022	0.016	0.012	0.008	0.007	0.006	0.006	0.005	0.005	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.002
63	0.022	0.021	0.022	0.019	0.014	0.009	0.006	0.006	0.005	0.005	0.004	0.003	0.003	0.003	0.003	0.002	0.003	0.001	0.003	0.001

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 5.56 SEC
GROUP 116 HREF = 0.332E-01

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
31	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.003	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.001	0.001	0.001	0.001
42	0.004	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.003	0.002	0.002	0.001	0.002	0.001	0.000	0.001	0.002	0.001
43	0.004	0.005	0.004	0.005	0.004	0.004	0.004	0.004	0.003	0.003	0.003	0.003	0.004	0.003	0.004	0.003	0.006	0.004	0.003	0.005
44	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.007	0.008	0.008	0.006	0.006	0.006	0.007	0.007	0.006	0.006
45	0.012	0.012	0.013	0.012	0.012	0.012	0.012	0.012	0.012	0.011	0.012	0.011	0.010	0.010	0.011	0.010	0.010	0.010	0.010	0.010
46	0.016	0.013	0.016	0.013	0.016	0.015	0.015	0.014	0.015	0.014	0.015	0.014	0.014	0.014	0.014	0.012	0.014	0.013	0.014	0.013
47	0.016	0.018	0.017	0.018	0.017	0.017	0.016	0.016	0.014	0.016	0.014	0.016	0.013	0.015	0.014	0.015	0.014	0.015	0.014	0.015
48	0.019	0.018	0.019	0.018	0.019	0.018	0.018	0.017	0.017	0.016	0.017	0.017	0.017	0.016	0.016	0.016	0.017	0.016	0.017	0.015
49	0.018	0.019	0.019	0.019	0.018	0.019	0.018	0.018	0.018	0.018	0.017	0.018	0.018	0.018	0.017	0.018	0.016	0.018	0.016	0.017
50	0.019	0.019	0.019	0.019	0.019	0.019	0.018	0.018	0.018	0.018	0.018	0.018	0.017	0.018	0.017	0.016	0.016	0.017	0.016	0.016
51	0.019	0.020	0.019	0.019	0.018	0.018	0.016	0.016	0.015	0.015	0.014	0.015	0.014	0.014	0.014	0.014	0.014	0.013	0.012	0.013
52	0.019	0.020	0.019	0.018	0.016	0.015	0.013	0.012	0.011	0.010	0.009	0.010	0.009	0.008	0.008	0.008	0.008	0.008	0.006	0.008
53	0.019	0.020	0.018	0.018	0.015	0.014	0.011	0.009	0.007	0.007	0.005	0.005	0.005	0.004	0.004	0.004	0.003	0.003	0.003	0.003
54	0.021	0.021	0.019	0.018	0.015	0.013	0.009	0.008	0.005	0.004	0.003	0.003	0.001	0.002	0.001	0.001	0.001	0.000	0.000	0.000
55	0.021	0.019	0.019	0.016	0.015	0.012	0.010	0.008	0.005	0.003	0.003	0.002	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000
56	0.016	0.016	0.014	0.012	0.012	0.010	0.007	0.006	0.005	0.003	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57	0.012	0.012	0.011	0.010	0.009	0.009	0.008	0.008	0.006	0.005	0.005	0.005	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
58	0.003	0.003	0.002	0.002	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
61	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
62	0.002	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
63	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 5.56 SEC
HREF = 0.332E-01

GROUP 116

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
31	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.001	0.001
42	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002
43	0.003	0.003	0.003	0.003	0.002	0.003	0.005	0.005	0.004	0.004
44	0.007	0.006	0.007	0.006	0.006	0.006	0.006	0.006	0.006	0.006
45	0.010	0.009	0.010	0.008	0.009	0.009	0.010	0.009	0.009	0.009
46	0.014	0.013	0.014	0.013	0.013	0.012	0.013	0.012	0.013	0.012
47	0.014	0.015	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
48	0.016	0.015	0.016	0.015	0.016	0.014	0.015	0.014	0.015	0.014
49	0.016	0.017	0.016	0.017	0.016	0.016	0.015	0.016	0.014	0.016
50	0.015	0.016	0.015	0.016	0.014	0.015	0.014	0.014	0.014	0.014
51	0.012	0.013	0.012	0.013	0.012	0.012	0.011	0.011	0.010	0.010
52	0.008	0.006	0.006	0.006	0.006	0.005	0.006	0.005	0.005	0.005
53	0.003	0.003	0.003	0.001	0.000	0.001	0.000	0.001	0.000	0.000
54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
55	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57	0.001	0.003	0.002	0.003	0.001	0.001	0.001	0.001	0.001	0.000
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
61	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
62	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
63	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 5.56 SEC
GROUP 116 HREF = 0.332E-01

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.005	0.009	0.042	0.114	0.163	0.182	0.193	0.203	0.211
65	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.001	0.001	0.003	0.004	0.014	0.062	0.133	0.169	0.184	0.193	0.202	0.208
66	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.024	0.084	0.145	0.172	0.185	0.193	0.201	0.208
67	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.033	0.102	0.152	0.171	0.182	0.190	0.198	0.205
68	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.044	0.114	0.152	0.167	0.177	0.184	0.191	0.196
69	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.050	0.119	0.151	0.164	0.173	0.181	0.188	0.193
70	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.006	0.062	0.126	0.152	0.165	0.174	0.181	0.187	0.193
71	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.007	0.068	0.129	0.154	0.165	0.173	0.180	0.187	0.193
72	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.019	0.088	0.139	0.157	0.166	0.174	0.182	0.189	0.194
73	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.037	0.109	0.145	0.159	0.167	0.175	0.184	0.191	0.196
74	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.003	0.055	0.120	0.146	0.158	0.166	0.173	0.181	0.189	0.193
75	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.010	0.073	0.125	0.143	0.152	0.160	0.166	0.173	0.180	0.184
76	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.025	0.090	0.128	0.142	0.151	0.156	0.161	0.166	0.171	0.175
77	0.008	0.021	0.023	0.021	0.022	0.021	0.020	0.008	0.008	0.008	0.036	0.100	0.132	0.143	0.151	0.157	0.163	0.168	0.172	0.177
78	0.025	0.035	0.021	0.028	0.039	0.032	0.033	0.036	0.021	0.006	0.048	0.109	0.136	0.145	0.152	0.158	0.165	0.170	0.175	0.179
79	0.031	0.046	0.034	0.031	0.041	0.045	0.043	0.042	0.047	0.033	0.064	0.118	0.138	0.147	0.153	0.158	0.163	0.168	0.174	0.180
80	0.035	0.052	0.055	0.051	0.045	0.045	0.052	0.049	0.049	0.057	0.090	0.129	0.145	0.152	0.157	0.160	0.164	0.168	0.173	0.179
81	0.042	0.052	0.068	0.071	0.050	0.045	0.037	0.036	0.043	0.064	0.108	0.138	0.149	0.155	0.160	0.164	0.167	0.170	0.173	0.177
82	0.051	0.052	0.066	0.074	0.056	0.048	0.035	0.022	0.027	0.061	0.112	0.138	0.148	0.153	0.158	0.163	0.169	0.177	0.185	0.188
83	0.056	0.046	0.053	0.060	0.052	0.044	0.030	0.015	0.022	0.062	0.112	0.131	0.141	0.149	0.155	0.163	0.172	0.186	0.201	0.195
84	0.047	0.036	0.040	0.045	0.041	0.030	0.022	0.023	0.029	0.037	0.057	0.063	0.071	0.080	0.092	0.104	0.115	0.128	0.140	0.149
85	0.031	0.027	0.033	0.037	0.037	0.027	0.022	0.024	0.028	0.026	0.026	0.026	0.028	0.027	0.030	0.030	0.033	0.035	0.039	0.042
86	0.014	0.012	0.018	0.020	0.020	0.017	0.018	0.020	0.027	0.025	0.024	0.024	0.025	0.025	0.027	0.025	0.025	0.025	0.026	0.027
87	0.007	0.006	0.004	0.005	0.006	0.008	0.011	0.018	0.025	0.024	0.021	0.022	0.021	0.021	0.021	0.022	0.022	0.022	0.022	0.022
88	0.000	0.000	0.000	0.000	0.003	0.006	0.010	0.015	0.023	0.023	0.022	0.021	0.021	0.020	0.021	0.019	0.019	0.017	0.019	0.018
89	0.001	0.001	0.001	0.001	0.001	0.003	0.006	0.012	0.019	0.023	0.022	0.023	0.022	0.021	0.019	0.018	0.018	0.018	0.018	0.018
90	0.001	0.001	0.001	0.001	0.001	0.003	0.004	0.008	0.018	0.022	0.024	0.023	0.023	0.021	0.021	0.018	0.019	0.018	0.018	0.018
91	0.000	0.000	0.000	0.000	0.001	0.001	0.003	0.006	0.018	0.021	0.022	0.022	0.022	0.021	0.021	0.021	0.020	0.019	0.018	0.018
92	0.001	0.001	0.001	0.001	0.000	0.001	0.003	0.006	0.019	0.022	0.022	0.022	0.022	0.021	0.022	0.021	0.021	0.019	0.019	0.018
93	0.010	0.008	0.006	0.006	0.007	0.008	0.009	0.012	0.020	0.022	0.022	0.024	0.025	0.025	0.024	0.024	0.024	0.021	0.020	0.015
94	0.018	0.016	0.016	0.015	0.016	0.014	0.015	0.017	0.024	0.025	0.025	0.025	0.027	0.028	0.030	0.027	0.027	0.024	0.022	0.018
95	0.025	0.024	0.024	0.022	0.023	0.021	0.020	0.019	0.026	0.029	0.029	0.029	0.031	0.031	0.032	0.032	0.031	0.029	0.024	0.019
96	0.027	0.026	0.025	0.025	0.024	0.023	0.020	0.021	0.025	0.028	0.027	0.030	0.032	0.034	0.035	0.034	0.033	0.030	0.025	0.021
97	0.029	0.030	0.028	0.027	0.026	0.024	0.021	0.021	0.025	0.025	0.025	0.027	0.031	0.034	0.035	0.034	0.033	0.029	0.026	0.025
98	0.030	0.030	0.030	0.029	0.026	0.025	0.022	0.022	0.027	0.029	0.027	0.028	0.029	0.031	0.031	0.031	0.030	0.028	0.027	0.025

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 5.56 SEC
GROUP 116 HREF = 0.332E-01

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	0.217	0.225	0.235	0.249	0.264	0.277	0.288	0.298	0.312	0.330	0.347	0.358	0.369	0.379	0.384	0.393	0.407	0.424	0.439	0.449
65	0.216	0.225	0.235	0.250	0.263	0.274	0.285	0.295	0.308	0.323	0.340	0.349	0.359	0.362	0.355	0.340	0.326	0.314	0.313	0.323
66	0.216	0.225	0.237	0.249	0.261	0.272	0.282	0.293	0.305	0.316	0.328	0.343	0.357	0.365	0.370	0.374	0.374	0.365	0.340	0.304
67	0.214	0.227	0.241	0.254	0.265	0.270	0.278	0.291	0.304	0.315	0.324	0.336	0.348	0.353	0.355	0.359	0.364	0.370	0.373	0.371
68	0.205	0.218	0.231	0.246	0.257	0.259	0.264	0.280	0.303	0.320	0.332	0.341	0.352	0.363	0.369	0.373	0.376	0.378	0.377	0.380
69	0.201	0.214	0.223	0.233	0.245	0.258	0.270	0.281	0.295	0.311	0.330	0.345	0.356	0.365	0.372	0.378	0.385	0.389	0.389	0.390
70	0.202	0.214	0.224	0.231	0.242	0.253	0.264	0.273	0.283	0.295	0.306	0.320	0.332	0.340	0.347	0.355	0.363	0.372	0.381	0.390
71	0.199	0.210	0.221	0.229	0.237	0.247	0.257	0.266	0.276	0.286	0.297	0.306	0.315	0.322	0.324	0.329	0.335	0.341	0.346	0.353
72	0.200	0.211	0.221	0.228	0.236	0.246	0.257	0.267	0.277	0.286	0.294	0.303	0.309	0.315	0.317	0.317	0.319	0.325	0.331	0.335
73	0.202	0.212	0.221	0.228	0.235	0.245	0.258	0.270	0.280	0.290	0.297	0.304	0.311	0.318	0.322	0.325	0.326	0.327	0.329	0.331
74	0.198	0.205	0.214	0.223	0.232	0.240	0.251	0.265	0.276	0.284	0.290	0.297	0.308	0.316	0.322	0.325	0.326	0.328	0.332	0.336
75	0.189	0.194	0.201	0.210	0.221	0.229	0.237	0.248	0.259	0.267	0.276	0.282	0.290	0.297	0.302	0.304	0.306	0.311	0.315	0.317
76	0.180	0.185	0.190	0.198	0.207	0.214	0.219	0.226	0.234	0.241	0.247	0.252	0.257	0.259	0.263	0.263	0.262	0.262	0.264	0.265
77	0.181	0.185	0.190	0.196	0.203	0.210	0.217	0.224	0.230	0.233	0.237	0.238	0.237	0.236	0.238	0.237	0.230	0.226	0.225	0.223
78	0.186	0.191	0.195	0.201	0.208	0.216	0.224	0.231	0.239	0.244	0.248	0.249	0.249	0.246	0.246	0.245	0.239	0.233	0.230	0.226
79	0.186	0.193	0.199	0.205	0.210	0.218	0.226	0.235	0.241	0.249	0.255	0.260	0.263	0.265	0.266	0.267	0.263	0.259	0.254	0.251
80	0.185	0.191	0.198	0.205	0.211	0.219	0.228	0.236	0.244	0.252	0.259	0.264	0.268	0.271	0.275	0.276	0.278	0.281	0.280	0.278
81	0.182	0.187	0.193	0.200	0.207	0.217	0.226	0.235	0.245	0.253	0.261	0.267	0.272	0.276	0.280	0.284	0.287	0.288	0.289	0.290
82	0.187	0.189	0.193	0.198	0.205	0.214	0.224	0.233	0.242	0.252	0.260	0.268	0.272	0.276	0.279	0.282	0.285	0.288	0.291	0.293
83	0.185	0.187	0.190	0.193	0.196	0.198	0.203	0.217	0.233	0.246	0.254	0.261	0.267	0.272	0.277	0.278	0.279	0.281	0.283	0.287
84	0.158	0.167	0.172	0.177	0.183	0.184	0.189	0.198	0.209	0.223	0.237	0.247	0.254	0.261	0.267	0.272	0.274	0.277	0.279	0.282
85	0.048	0.053	0.059	0.066	0.073	0.078	0.080	0.082	0.087	0.096	0.104	0.113	0.120	0.128	0.135	0.141	0.148	0.156	0.163	0.170
86	0.029	0.028	0.029	0.028	0.030	0.029	0.030	0.030	0.031	0.031	0.033	0.033	0.035	0.035	0.037	0.036	0.038	0.038	0.039	0.039
87	0.023	0.024	0.025	0.026	0.026	0.027	0.027	0.028	0.027	0.027	0.026	0.027	0.027	0.028	0.029	0.030	0.030	0.030	0.031	0.031
88	0.019	0.019	0.021	0.021	0.022	0.023	0.024	0.023	0.023	0.022	0.022	0.022	0.023	0.023	0.024	0.024	0.024	0.024	0.025	0.025
89	0.018	0.019	0.019	0.021	0.020	0.021	0.020	0.021	0.021	0.021	0.021	0.022	0.022	0.022	0.021	0.022	0.022	0.022	0.023	0.024
90	0.018	0.018	0.020	0.019	0.020	0.019	0.021	0.020	0.021	0.022	0.027	0.051	0.075	0.063	0.038	0.027	0.023	0.022	0.023	0.022
91	0.018	0.018	0.018	0.018	0.019	0.019	0.020	0.020	0.021	0.022	0.037	0.095	0.141	0.124	0.073	0.039	0.027	0.022	0.022	0.022
92	0.018	0.016	0.018	0.018	0.019	0.018	0.020	0.019	0.021	0.021	0.023	0.029	0.042	0.040	0.031	0.024	0.022	0.021	0.021	0.021
93	0.017	0.014	0.018	0.016	0.020	0.018	0.021	0.020	0.023	0.022	0.024	0.021	0.022	0.020	0.022	0.021	0.022	0.021	0.021	0.021
94	0.017	0.017	0.019	0.019	0.021	0.021	0.023	0.023	0.025	0.025	0.026	0.024	0.024	0.022	0.022	0.021	0.022	0.021	0.021	0.019
95	0.018	0.016	0.020	0.020	0.022	0.022	0.024	0.024	0.026	0.026	0.026	0.026	0.026	0.024	0.022	0.020	0.021	0.019	0.020	0.019
96	0.019	0.020	0.021	0.022	0.023	0.025	0.025	0.026	0.026	0.027	0.027	0.027	0.027	0.026	0.023	0.022	0.020	0.020	0.019	0.019
97	0.025	0.026	0.024	0.025	0.025	0.027	0.027	0.026	0.027	0.026	0.025	0.026	0.026	0.026	0.027	0.024	0.021	0.021	0.022	0.021
98	0.027	0.027	0.028	0.028	0.029	0.028	0.029	0.030	0.031	0.029	0.028	0.027	0.027	0.026	0.025	0.024	0.026	0.043	0.081	0.100

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 5.56 SEC
GROUP 116 HREF = 0.332E-01

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	0.450	0.449	0.452	0.451	0.451	0.455	0.451	0.446	0.438	0.425	0.391	0.326	0.246	0.181	0.139	0.098	0.060	0.039	0.030	0.025
65	0.343	0.369	0.403	0.428	0.443	0.446	0.447	0.449	0.447	0.443	0.442	0.442	0.428	0.380	0.300	0.213	0.141	0.085	0.051	0.033
66	0.268	0.239	0.225	0.231	0.252	0.281	0.316	0.351	0.385	0.412	0.429	0.437	0.440	0.442	0.440	0.414	0.348	0.255	0.162	0.090
67	0.367	0.352	0.323	0.281	0.241	0.212	0.196	0.193	0.202	0.225	0.263	0.308	0.353	0.394	0.424	0.438	0.436	0.401	0.324	0.219
68	0.383	0.386	0.390	0.385	0.365	0.329	0.285	0.241	0.208	0.189	0.181	0.178	0.180	0.190	0.215	0.253	0.293	0.324	0.329	0.292
69	0.394	0.397	0.395	0.390	0.388	0.387	0.381	0.367	0.340	0.302	0.260	0.219	0.192	0.177	0.170	0.169	0.169	0.170	0.173	0.176
70	0.399	0.406	0.412	0.415	0.414	0.409	0.404	0.400	0.390	0.384	0.378	0.361	0.333	0.295	0.250	0.213	0.189	0.177	0.171	0.168
71	0.361	0.371	0.381	0.388	0.397	0.406	0.406	0.408	0.412	0.413	0.411	0.408	0.401	0.392	0.376	0.357	0.330	0.293	0.251	0.211
72	0.336	0.338	0.338	0.339	0.341	0.339	0.338	0.342	0.346	0.349	0.353	0.363	0.376	0.388	0.393	0.391	0.392	0.397	0.395	0.380
73	0.334	0.338	0.341	0.341	0.340	0.338	0.333	0.323	0.311	0.297	0.280	0.262	0.246	0.236	0.231	0.235	0.246	0.262	0.279	0.296
74	0.341	0.345	0.350	0.355	0.356	0.355	0.353	0.348	0.344	0.345	0.343	0.331	0.314	0.291	0.264	0.233	0.203	0.178	0.161	0.151
75	0.321	0.325	0.331	0.337	0.345	0.351	0.353	0.355	0.358	0.358	0.360	0.360	0.357	0.355	0.350	0.340	0.325	0.301	0.273	0.241
76	0.267	0.268	0.269	0.272	0.276	0.280	0.283	0.286	0.288	0.290	0.292	0.297	0.306	0.311	0.315	0.319	0.322	0.324	0.323	0.318
77	0.222	0.219	0.217	0.214	0.213	0.209	0.206	0.204	0.202	0.199	0.197	0.195	0.192	0.189	0.188	0.192	0.195	0.197	0.203	0.207
78	0.224	0.222	0.219	0.215	0.210	0.205	0.199	0.193	0.187	0.181	0.175	0.170	0.165	0.156	0.142	0.143	0.149	0.149	0.147	0.145
79	0.247	0.243	0.239	0.235	0.230	0.225	0.220	0.213	0.206	0.199	0.192	0.185	0.177	0.170	0.163	0.159	0.155	0.152	0.150	0.148
80	0.277	0.275	0.271	0.266	0.261	0.254	0.247	0.238	0.231	0.224	0.216	0.209	0.201	0.192	0.185	0.178	0.172	0.166	0.161	0.156
81	0.292	0.294	0.295	0.296	0.295	0.292	0.287	0.280	0.272	0.261	0.251	0.240	0.230	0.219	0.210	0.202	0.195	0.188	0.181	0.175
82	0.297	0.301	0.304	0.308	0.310	0.310	0.311	0.312	0.309	0.304	0.297	0.288	0.278	0.266	0.253	0.241	0.229	0.219	0.209	0.200
83	0.290	0.294	0.298	0.303	0.307	0.311	0.314	0.317	0.319	0.320	0.321	0.320	0.317	0.313	0.306	0.299	0.290	0.280	0.268	0.255
84	0.285	0.288	0.293	0.298	0.302	0.306	0.308	0.310	0.310	0.310	0.310	0.309	0.308	0.306	0.305	0.303	0.302	0.302	0.302	0.303
85	0.178	0.186	0.193	0.202	0.212	0.221	0.229	0.230	0.231	0.235	0.237	0.237	0.239	0.239	0.242	0.244	0.245	0.247	0.249	0.251
86	0.040	0.040	0.041	0.042	0.043	0.044	0.046	0.046	0.047	0.047	0.049	0.048	0.049	0.049	0.050	0.050	0.051	0.051	0.052	0.053
87	0.030	0.032	0.032	0.032	0.032	0.033	0.032	0.032	0.033	0.033	0.033	0.033	0.033	0.032	0.031	0.031	0.031	0.030	0.029	0.030
88	0.026	0.026	0.027	0.027	0.026	0.026	0.027	0.026	0.026	0.025	0.026	0.025	0.025	0.024	0.024	0.023	0.023	0.021	0.022	0.019
89	0.024	0.025	0.025	0.026	0.026	0.026	0.026	0.025	0.024	0.024	0.024	0.024	0.024	0.023	0.022	0.021	0.020	0.019	0.018	0.018
90	0.023	0.024	0.024	0.024	0.025	0.025	0.025	0.024	0.025	0.024	0.027	0.033	0.036	0.030	0.025	0.021	0.020	0.019	0.019	0.018
91	0.023	0.022	0.024	0.023	0.024	0.024	0.024	0.024	0.024	0.026	0.054	0.116	0.139	0.105	0.060	0.035	0.026	0.022	0.020	0.018
92	0.022	0.022	0.023	0.023	0.024	0.024	0.024	0.023	0.023	0.022	0.029	0.051	0.068	0.055	0.037	0.026	0.022	0.019	0.019	0.017
93	0.022	0.021	0.022	0.022	0.024	0.023	0.024	0.023	0.023	0.022	0.022	0.022	0.022	0.021	0.021	0.021	0.021	0.018	0.018	0.017
94	0.020	0.018	0.020	0.020	0.022	0.022	0.024	0.022	0.024	0.022	0.022	0.021	0.022	0.021	0.022	0.021	0.020	0.017	0.017	0.016
95	0.021	0.020	0.021	0.021	0.022	0.022	0.023	0.023	0.024	0.023	0.022	0.021	0.021	0.020	0.021	0.019	0.019	0.017	0.018	0.015
96	0.019	0.020	0.020	0.020	0.021	0.022	0.022	0.024	0.024	0.024	0.023	0.022	0.021	0.021	0.020	0.020	0.018	0.019	0.018	0.017
97	0.020	0.021	0.019	0.019	0.020	0.021	0.022	0.022	0.023	0.024	0.022	0.021	0.022	0.020	0.021	0.019	0.020	0.019	0.018	0.018
98	0.084	0.055	0.034	0.025	0.023	0.021	0.022	0.022	0.023	0.022	0.022	0.021	0.021	0.020	0.019	0.018	0.018	0.016	0.017	0.016

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 5.56 SEC
GROUP 116 HREF = 0.332E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.022	0.021	0.020	0.021	0.020	0.015	0.009	0.006	0.004	0.003	0.003	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.000
65	0.026	0.023	0.021	0.020	0.021	0.021	0.017	0.009	0.005	0.003	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
66	0.050	0.031	0.024	0.021	0.020	0.019	0.021	0.017	0.010	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
67	0.120	0.062	0.036	0.024	0.021	0.018	0.018	0.017	0.017	0.008	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
68	0.218	0.137	0.079	0.043	0.027	0.021	0.019	0.017	0.018	0.016	0.010	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
69	0.179	0.167	0.119	0.067	0.038	0.025	0.021	0.018	0.018	0.016	0.016	0.012	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
70	0.166	0.165	0.160	0.131	0.080	0.043	0.027	0.021	0.018	0.018	0.016	0.016	0.014	0.005	0.005	0.005	0.005	0.005	0.005	0.005
71	0.181	0.163	0.152	0.143	0.125	0.087	0.049	0.029	0.021	0.018	0.016	0.016	0.014	0.014	0.008	0.008	0.008	0.008	0.008	0.008
72	0.351	0.306	0.255	0.208	0.171	0.141	0.104	0.061	0.035	0.024	0.019	0.016	0.014	0.014	0.013	0.010	0.002	0.002	0.002	0.002
73	0.315	0.329	0.339	0.339	0.318	0.271	0.208	0.143	0.084	0.047	0.029	0.020	0.017	0.014	0.014	0.014	0.011	0.004	0.004	0.004
74	0.145	0.143	0.148	0.155	0.167	0.177	0.181	0.165	0.135	0.096	0.056	0.029	0.020	0.014	0.014	0.012	0.013	0.011	0.008	0.000
75	0.207	0.176	0.150	0.132	0.121	0.115	0.110	0.106	0.101	0.094	0.073	0.045	0.027	0.019	0.016	0.014	0.013	0.012	0.012	0.009
76	0.308	0.294	0.274	0.246	0.216	0.183	0.153	0.129	0.113	0.103	0.096	0.080	0.054	0.031	0.021	0.016	0.014	0.012	0.012	0.011
77	0.214	0.221	0.226	0.232	0.237	0.237	0.227	0.210	0.190	0.165	0.141	0.120	0.101	0.075	0.045	0.027	0.019	0.014	0.012	0.010
78	0.142	0.140	0.139	0.139	0.140	0.140	0.141	0.143	0.144	0.143	0.141	0.138	0.132	0.122	0.103	0.068	0.037	0.022	0.014	0.010
79	0.145	0.143	0.141	0.137	0.132	0.129	0.127	0.124	0.121	0.119	0.116	0.115	0.114	0.113	0.113	0.105	0.080	0.049	0.026	0.015
80	0.152	0.149	0.146	0.142	0.141	0.140	0.137	0.134	0.132	0.129	0.125	0.121	0.118	0.115	0.111	0.109	0.102	0.084	0.054	0.029
81	0.167	0.161	0.156	0.152	0.149	0.145	0.141	0.138	0.136	0.134	0.131	0.129	0.126	0.124	0.120	0.118	0.117	0.113	0.098	0.067
82	0.192	0.185	0.179	0.172	0.165	0.159	0.152	0.146	0.142	0.139	0.138	0.137	0.134	0.131	0.129	0.126	0.125	0.124	0.119	0.108
83	0.240	0.225	0.212	0.200	0.190	0.181	0.173	0.167	0.161	0.156	0.151	0.148	0.145	0.143	0.140	0.138	0.136	0.134	0.131	0.127
84	0.300	0.295	0.287	0.278	0.266	0.251	0.234	0.217	0.202	0.189	0.178	0.169	0.162	0.158	0.155	0.155	0.153	0.150	0.146	0.141
85	0.254	0.255	0.257	0.256	0.258	0.260	0.260	0.259	0.258	0.255	0.252	0.248	0.240	0.225	0.213	0.201	0.186	0.172	0.163	0.155
86	0.054	0.055	0.056	0.057	0.059	0.063	0.067	0.069	0.073	0.076	0.081	0.089	0.096	0.096	0.099	0.099	0.093	0.085	0.079	0.076
87	0.028	0.028	0.027	0.027	0.026	0.026	0.026	0.026	0.025	0.024	0.022	0.023	0.024	0.026	0.025	0.024	0.021	0.021	0.019	0.019
88	0.021	0.020	0.022	0.019	0.021	0.018	0.020	0.018	0.019	0.016	0.018	0.016	0.016	0.015	0.016	0.015	0.016	0.014	0.015	0.012
89	0.018	0.018	0.016	0.016	0.014	0.015	0.014	0.014	0.013	0.012	0.012	0.010	0.009	0.009	0.011	0.014	0.012	0.012	0.010	0.010
90	0.018	0.016	0.016	0.015	0.016	0.014	0.014	0.013	0.014	0.014	0.016	0.014	0.013	0.011	0.012	0.014	0.015	0.012	0.012	0.011
91	0.018	0.016	0.016	0.014	0.016	0.014	0.015	0.014	0.021	0.051	0.080	0.074	0.048	0.025	0.015	0.011	0.010	0.009	0.009	0.009
92	0.017	0.016	0.016	0.015	0.015	0.014	0.014	0.014	0.016	0.029	0.050	0.050	0.033	0.020	0.014	0.010	0.010	0.009	0.008	0.008
93	0.017	0.015	0.016	0.014	0.015	0.013	0.014	0.012	0.014	0.012	0.013	0.012	0.012	0.010	0.010	0.009	0.009	0.008	0.009	0.008
94	0.017	0.014	0.016	0.014	0.015	0.014	0.014	0.012	0.014	0.012	0.012	0.012	0.011	0.010	0.010	0.009	0.010	0.010	0.010	0.010
95	0.016	0.014	0.015	0.014	0.015	0.013	0.014	0.014	0.013	0.012	0.012	0.012	0.012	0.010	0.010	0.010	0.012	0.012	0.012	0.012
96	0.015	0.015	0.014	0.014	0.014	0.014	0.013	0.013	0.012	0.012	0.012	0.010	0.009	0.010	0.009	0.011	0.011	0.012	0.012	0.012
97	0.020	0.017	0.016	0.015	0.016	0.015	0.013	0.014	0.014	0.013	0.013	0.012	0.011	0.012	0.014	0.021	0.023	0.019	0.019	0.018
98	0.017	0.014	0.015	0.014	0.016	0.014	0.014	0.013	0.014	0.012	0.012	0.011	0.012	0.012	0.015	0.020	0.023	0.022	0.022	0.021

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 5.56 SEC
HREF = 0.332E-01

GROUP 116

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
66	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
67	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
68	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
69	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
70	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
71	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
72	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
73	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
74	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
75	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
76	0.011	0.009	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
77	0.010	0.009	0.009	0.008	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
78	0.009	0.009	0.008	0.008	0.008	0.008	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
79	0.010	0.008	0.008	0.008	0.008	0.008	0.008	0.007	0.006	0.004	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
80	0.016	0.011	0.008	0.008	0.008	0.008	0.008	0.006	0.006	0.006	0.006	0.005	0.004	0.001	0.001	0.001	0.001	0.001	0.001	0.001
81	0.037	0.019	0.012	0.008	0.008	0.009	0.008	0.008	0.006	0.006	0.005	0.006	0.005	0.005	0.005	0.004	0.004	0.003	0.003	0.003
82	0.081	0.048	0.024	0.012	0.008	0.007	0.006	0.006	0.005	0.005	0.004	0.005	0.005	0.005	0.005	0.004	0.005	0.005	0.003	0.004
83	0.118	0.094	0.060	0.031	0.015	0.008	0.008	0.006	0.005	0.005	0.004	0.004	0.004	0.005	0.004	0.005	0.002	0.004	0.002	0.004
84	0.136	0.126	0.106	0.072	0.039	0.020	0.010	0.006	0.005	0.005	0.005	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.003
85	0.149	0.141	0.130	0.111	0.078	0.042	0.021	0.009	0.005	0.004	0.004	0.005	0.005	0.004	0.004	0.004	0.004	0.003	0.004	0.004
86	0.073	0.069	0.064	0.057	0.047	0.030	0.018	0.010	0.008	0.008	0.008	0.005	0.003	0.003	0.003	0.002	0.003	0.002	0.003	0.003
87	0.017	0.016	0.014	0.012	0.009	0.008	0.008	0.008	0.008	0.008	0.006	0.004	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001
88	0.013	0.011	0.010	0.008	0.008	0.005	0.006	0.004	0.004	0.004	0.003	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.001
89	0.012	0.012	0.008	0.007	0.005	0.005	0.003	0.003	0.002	0.002	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.001
90	0.015	0.014	0.010	0.006	0.005	0.005	0.005	0.003	0.003	0.002	0.002	0.001	0.001	0.000	0.001	0.001	0.000	0.000	0.001	0.001
91	0.009	0.008	0.006	0.005	0.005	0.004	0.003	0.003	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.001
92	0.008	0.006	0.006	0.005	0.004	0.003	0.003	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000
93	0.008	0.006	0.006	0.005	0.005	0.003	0.003	0.003	0.003	0.002	0.002	0.001	0.002	0.001	0.001	0.001	0.001	0.000	0.002	0.001
94	0.010	0.008	0.008	0.005	0.005	0.004	0.004	0.003	0.003	0.002	0.003	0.002	0.001	0.001	0.002	0.000	0.001	0.000	0.001	0.000
95	0.012	0.010	0.009	0.006	0.005	0.004	0.003	0.004	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.001	0.001	0.000	0.001	0.000
96	0.011	0.012	0.009	0.007	0.005	0.004	0.003	0.002	0.002	0.002	0.003	0.002	0.001	0.001	0.001	0.001	0.001	0.000	0.001	0.000
97	0.018	0.020	0.017	0.011	0.005	0.003	0.005	0.005	0.005	0.004	0.003	0.001	0.002	0.001	0.003	0.003	0.002	0.000	0.001	0.001
98	0.021	0.020	0.017	0.012	0.009	0.008	0.005	0.005	0.005	0.005	0.005	0.004	0.004	0.003	0.003	0.003	0.003	0.002	0.003	0.001

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 5.56 SEC
GROUP 116 HREF = 0.332E-01

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
66	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
67	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
68	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
69	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
70	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
71	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
72	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
73	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
74	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
75	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
76	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
77	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
78	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
79	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
80	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
81	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
82	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001
83	0.002	0.003	0.002	0.004	0.001	0.003	0.001	0.000	0.000	0.000
84	0.003	0.003	0.003	0.003	0.003	0.002	0.001	0.002	0.001	0.002
85	0.004	0.003	0.003	0.003	0.003	0.002	0.003	0.001	0.002	0.001
86	0.003	0.002	0.003	0.001	0.002	0.001	0.001	0.001	0.001	0.001
87	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
88	0.001	0.001	0.001	0.001	0.002	0.001	0.000	0.001	0.001	0.001
89	0.001	0.000	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.001
90	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000
91	0.001	0.000	0.001	0.001	0.001	0.000	0.001	0.001	0.001	0.001
92	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001
93	0.002	0.001	0.001	0.001	0.001	0.000	0.001	0.001	0.001	0.000
94	0.001	0.002	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000
95	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
96	0.000	0.000	0.000	0.001	0.001	0.002	0.002	0.001	0.003	0.003
97	0.004	0.000	0.002	0.001	0.002	0.002	0.003	0.004	0.004	0.003
98	0.003	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.004

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

GROUP	* * * * TITLE TYPE	MODEL DESCRIPTION * * * * GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
119	RS1 AFT	0.02	0.015	0.01	29.99	0.053	6	12	53

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/F FT-1	HREF BTU/FT2-SEC-R	INITIAL TEMP DEG R
7.96	321.48	1281.67	93.74	0.0340	3778.	0.304E-04	0.755E-07	0.152E+07	0.253E-01	538.7

IR CAMERA INFORMATION

MOUNTING LOCATION	260
F STOP	1.8
LENS-DEG	15
SENSITIVITY	500.
BLACK LEVEL VOLTAGE	1.3426
LINE SCAN PHI	.90
MODEL EMISSIVITY	0.96
REF EMISSIVITY	0.94
WINDOW FACTOR	0.860

TIME RECORDS

LIFT OFF	0.00
CENTER LINE	1.99
IR SCAN TIME	7.53
DELTA TIME,SEC	6.41
PHOTO 1 TIME	.613
PHOTO 2 TIME	0
PHOTO 3 TIME	0
PHOTO 4 TIME	0

REFERENCE TARGET INFORMATION

TCR5	502.02
TCR6	-228.49

DIGITAL DATA AREA PRINTOUT LOCATION

LINE 29 THROUGH 98
POINT 1 THROUGH 110

NASA/RI OH90 TRANSITION TEST
V4IB-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 119

IR SCAN TIME 6.41 SEC
INITIAL TEMP 538.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	1.047	1.044	1.046	1.044	1.046	1.040	1.042	1.040	1.043	1.038	1.040	1.036	1.036	1.036	1.037	1.036	1.037	1.036	1.038	1.037
30	1.044	1.044	1.046	1.042	1.042	1.041	1.038	1.041	1.038	1.040	1.037	1.038	1.037	1.040	1.037	1.037	1.036	1.037	1.037	1.033
31	1.044	1.044	1.043	1.042	1.041	1.041	1.040	1.041	1.040	1.038	1.038	1.038	1.037	1.038	1.037	1.037	1.036	1.036	1.034	1.034
32	1.043	1.044	1.043	1.043	1.042	1.043	1.042	1.040	1.040	1.040	1.038	1.040	1.038	1.038	1.037	1.036	1.037	1.036	1.037	1.037
33	1.043	1.043	1.046	1.043	1.043	1.041	1.041	1.041	1.040	1.038	1.038	1.038	1.037	1.036	1.037	1.037	1.038	1.040	1.041	1.041
34	1.043	1.044	1.043	1.041	1.041	1.038	1.041	1.038	1.037	1.037	1.037	1.036	1.038	1.038	1.040	1.042	1.041	1.043	1.044	1.043
35	1.044	1.044	1.037	1.040	1.034	1.038	1.034	1.037	1.033	1.037	1.037	1.040	1.038	1.041	1.041	1.043	1.043	1.043	1.044	1.040
36	1.042	1.040	1.040	1.037	1.038	1.037	1.040	1.038	1.041	1.041	1.041	1.041	1.042	1.042	1.043	1.042	1.042	1.034	1.029	1.021
37	1.040	1.040	1.037	1.038	1.038	1.040	1.040	1.040	1.041	1.041	1.042	1.042	1.041	1.041	1.037	1.029	1.021	1.013	1.005	1.000
38	1.038	1.042	1.042	1.041	1.042	1.041	1.042	1.042	1.042	1.043	1.042	1.038	1.032	1.022	1.015	1.005	1.004	1.000	1.002	0.999
39	1.042	1.044	1.042	1.042	1.043	1.042	1.043	1.043	1.041	1.034	1.028	1.016	1.010	1.004	1.004	1.000	1.002	1.000	1.004	1.000
40	1.044	1.046	1.044	1.043	1.043	1.042	1.038	1.032	1.024	1.012	1.009	1.004	1.005	1.004	1.005	1.004	1.005	1.002	1.004	1.004
41	1.043	1.044	1.044	1.044	1.038	1.028	1.021	1.010	1.007	1.004	1.005	1.005	1.005	1.004	1.005	1.004	1.004	1.002	1.005	1.004
42	1.047	1.046	1.038	1.026	1.019	1.007	1.009	1.004	1.005	1.002	1.005	1.004	1.007	1.007	1.005	1.005	1.007	1.005	1.005	1.005
43	1.041	1.034	1.022	1.013	1.010	1.007	1.007	1.005	1.007	1.005	1.007	1.005	1.009	1.007	1.007	1.005	1.009	1.005	1.009	1.005
44	1.025	1.018	1.013	1.013	1.013	1.012	1.010	1.010	1.009	1.010	1.009	1.010	1.009	1.010	1.009	1.010	1.010	1.013	1.012	1.015
45	1.022	1.021	1.021	1.018	1.018	1.015	1.016	1.015	1.015	1.016	1.018	1.015	1.015	1.015	1.018	1.015	1.018	1.021	1.038	1.057
46	1.024	1.025	1.022	1.024	1.021	1.021	1.019	1.019	1.019	1.019	1.021	1.021	1.021	1.021	1.021	1.022	1.024	1.041	1.097	1.159
47	1.026	1.026	1.025	1.025	1.025	1.024	1.024	1.024	1.022	1.024	1.022	1.024	1.024	1.026	1.025	1.028	1.029	1.058	1.130	1.192
48	1.029	1.029	1.026	1.028	1.026	1.028	1.026	1.026	1.024	1.025	1.026	1.028	1.025	1.028	1.026	1.030	1.037	1.084	1.165	1.221
49	1.030	1.029	1.024	1.028	1.024	1.028	1.024	1.026	1.024	1.026	1.024	1.029	1.028	1.029	1.029	1.033	1.044	1.107	1.190	1.239
50	1.029	1.029	1.026	1.029	1.026	1.026	1.026	1.026	1.025	1.028	1.026	1.028	1.026	1.029	1.026	1.032	1.049	1.124	1.202	1.244
51	1.026	1.026	1.025	1.024	1.024	1.024	1.022	1.024	1.022	1.025	1.024	1.025	1.025	1.026	1.026	1.032	1.057	1.139	1.210	1.245
52	1.019	1.018	1.016	1.015	1.016	1.015	1.015	1.015	1.015	1.015	1.018	1.016	1.019	1.018	1.021	1.025	1.066	1.158	1.223	1.251
53	1.009	1.010	1.007	1.007	1.005	1.005	1.005	1.005	1.004	1.005	1.005	1.007	1.007	1.009	1.009	1.019	1.080	1.178	1.233	1.256
54	1.002	1.002	1.002	0.999	1.000	0.997	0.997	0.995	0.999	0.995	1.000	0.999	1.000	1.000	1.005	1.022	1.109	1.199	1.240	1.258
55	0.997	0.997	0.997	0.993	0.993	0.993	0.995	0.995	0.995	0.995	0.997	0.997	0.999	0.999	1.004	1.038	1.138	1.213	1.244	1.258
56	0.997	0.997	0.995	0.990	0.997	0.990	0.993	0.988	0.995	0.995	0.995	0.995	0.999	1.000	1.007	1.063	1.163	1.221	1.243	1.254
57	0.997	0.999	0.988	0.993	0.993	0.992	0.993	0.995	0.993	0.993	0.993	0.995	0.997	1.000	1.010	1.088	1.183	1.226	1.242	1.251
58	0.999	0.995	0.997	0.993	0.995	0.993	0.995	0.993	0.995	0.995	0.997	0.995	1.000	1.000	1.019	1.104	1.193	1.230	1.245	1.254
59	1.005	1.000	1.000	0.999	0.997	0.995	0.997	0.995	0.999	0.997	1.000	0.999	1.002	1.002	1.032	1.130	1.209	1.237	1.249	1.257
60	1.004	1.004	1.000	1.000	0.999	1.000	0.999	0.999	0.999	1.000	1.000	1.002	1.004	1.007	1.043	1.147	1.218	1.243	1.254	1.262
61	1.005	1.005	1.005	1.004	1.004	1.002	1.004	1.000	1.004	1.002	1.005	1.005	1.007	1.012	1.064	1.157	1.209	1.229	1.242	1.251
62	1.007	1.005	1.004	1.005	1.004	1.004	1.004	1.004	1.004	1.005	1.005	1.007	1.007	1.021	1.096	1.175	1.205	1.216	1.222	1.226
63	1.007	1.005	1.000	1.004	1.000	1.002	1.000	1.004	1.004	1.005	1.004	1.007	1.007	1.036	1.126	1.193	1.217	1.228	1.233	1.237

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 119

IR SCAN TIME 6.41 SEC
INITIAL TEMP 538.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	1.034	1.036	1.034	1.034	1.033	1.034	1.030	1.034	1.030	1.032	1.032	1.033	1.033	1.034	1.033	1.038	1.040	1.040	1.040	1.041
30	1.036	1.034	1.034	1.036	1.033	1.034	1.034	1.036	1.036	1.038	1.044	1.041	1.041	1.042	1.041	1.041	1.043	1.041	1.040	1.038
31	1.034	1.033	1.034	1.037	1.038	1.041	1.041	1.041	1.042	1.043	1.043	1.044	1.044	1.041	1.037	1.036	1.030	1.028	1.021	1.019
32	1.040	1.040	1.042	1.043	1.043	1.046	1.046	1.044	1.044	1.042	1.038	1.036	1.029	1.025	1.019	1.015	1.007	1.004	0.995	0.995
33	1.042	1.044	1.043	1.044	1.043	1.042	1.038	1.034	1.029	1.024	1.018	1.012	1.004	0.997	0.993	0.992	0.992	0.992	0.990	0.992
34	1.044	1.043	1.040	1.036	1.030	1.025	1.016	1.010	1.002	0.997	0.993	0.992	0.990	0.990	0.990	0.992	0.990	0.992	0.990	0.992
35	1.036	1.030	1.021	1.015	1.005	0.999	0.995	0.993	0.992	0.992	0.992	0.993	0.992	0.992	0.992	0.993	0.992	0.993	0.993	0.993
36	1.015	1.002	1.000	0.995	0.997	0.992	0.995	0.992	0.995	0.992	0.993	0.993	0.995	0.995	0.993	0.995	0.997	0.993	0.993	0.993
37	0.997	0.999	0.997	0.997	0.997	0.997	0.995	0.997	0.995	0.995	0.995	0.995	0.995	0.995	0.995	1.000	0.992	0.999	0.992	0.999
38	0.999	1.000	1.000	1.000	1.000	0.999	1.000	0.999	1.000	1.000	1.000	0.997	0.999	0.999	0.999	0.999	1.000	0.999	1.000	1.000
39	1.002	1.000	1.004	1.000	1.004	1.000	1.002	1.000	1.002	1.000	1.002	1.002	1.002	1.000	1.004	1.002	1.004	1.000	1.004	1.000
40	1.004	1.000	1.004	1.004	1.005	1.004	1.004	1.004	1.005	1.004	1.005	1.004	1.005	1.004	1.005	1.004	1.005	1.004	1.004	1.000
41	1.004	1.005	1.005	1.005	1.005	1.005	1.007	1.005	1.005	1.004	1.007	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.007	1.005
42	1.007	1.007	1.009	1.007	1.009	1.007	1.009	1.007	1.010	1.007	1.009	1.007	1.009	1.007	1.007	1.009	1.007	1.007	1.007	1.007
43	1.007	1.005	1.009	1.007	1.010	1.007	1.010	1.009	1.010	1.009	1.013	1.010	1.012	1.009	1.013	1.009	1.010	1.009	1.010	1.007
44	1.013	1.016	1.015	1.015	1.015	1.015	1.015	1.015	1.015	1.015	1.015	1.012	1.015	1.015	1.012	1.015	1.010	1.013	1.009	1.012
45	1.077	1.085	1.089	1.087	1.084	1.077	1.070	1.057	1.049	1.043	1.037	1.030	1.026	1.022	1.024	1.021	1.021	1.022	1.021	1.021
46	1.197	1.220	1.236	1.251	1.260	1.265	1.263	1.253	1.240	1.231	1.199	1.146	1.092	1.050	1.037	1.030	1.026	1.028	1.026	1.026
47	1.225	1.246	1.262	1.278	1.292	1.308	1.324	1.336	1.342	1.361	1.372	1.317	1.220	1.137	1.080	1.050	1.041	1.036	1.034	1.033
48	1.248	1.266	1.281	1.294	1.304	1.314	1.324	1.335	1.344	1.349	1.357	1.362	1.319	1.227	1.143	1.084	1.057	1.050	1.047	1.046
49	1.263	1.280	1.296	1.312	1.325	1.334	1.341	1.346	1.349	1.351	1.351	1.354	1.361	1.332	1.249	1.158	1.091	1.053	1.044	1.047
50	1.266	1.284	1.302	1.321	1.338	1.353	1.362	1.369	1.372	1.370	1.364	1.359	1.356	1.361	1.351	1.287	1.188	1.109	1.061	1.044
51	1.264	1.280	1.296	1.314	1.335	1.355	1.369	1.381	1.391	1.394	1.390	1.384	1.374	1.364	1.359	1.350	1.292	1.197	1.116	1.070
52	1.268	1.282	1.296	1.312	1.330	1.345	1.358	1.374	1.392	1.407	1.414	1.416	1.412	1.403	1.390	1.375	1.360	1.326	1.255	1.163
53	1.269	1.280	1.293	1.308	1.324	1.338	1.349	1.360	1.375	1.390	1.403	1.413	1.420	1.423	1.420	1.414	1.405	1.391	1.361	1.290
54	1.272	1.284	1.297	1.312	1.328	1.339	1.346	1.355	1.367	1.380	1.390	1.398	1.402	1.404	1.406	1.409	1.414	1.417	1.414	1.396
55	1.270	1.283	1.297	1.310	1.325	1.337	1.347	1.356	1.367	1.378	1.389	1.396	1.402	1.403	1.401	1.391	1.380	1.381	1.396	1.413
56	1.263	1.274	1.287	1.301	1.312	1.321	1.333	1.347	1.364	1.378	1.389	1.396	1.400	1.401	1.402	1.403	1.399	1.384	1.359	1.342
57	1.261	1.271	1.285	1.299	1.308	1.316	1.326	1.339	1.355	1.372	1.386	1.397	1.405	1.408	1.409	1.408	1.409	1.410	1.409	1.396
58	1.262	1.270	1.285	1.297	1.308	1.316	1.325	1.336	1.350	1.363	1.375	1.385	1.393	1.402	1.409	1.413	1.417	1.418	1.421	1.422
59	1.264	1.274	1.287	1.298	1.309	1.318	1.325	1.334	1.346	1.358	1.370	1.379	1.388	1.393	1.397	1.403	1.409	1.414	1.422	1.428
60	1.268	1.277	1.289	1.301	1.313	1.323	1.332	1.341	1.353	1.363	1.374	1.385	1.390	1.393	1.399	1.403	1.402	1.403	1.403	1.406
61	1.261	1.272	1.285	1.299	1.314	1.329	1.339	1.347	1.359	1.369	1.380	1.389	1.394	1.400	1.403	1.403	1.403	1.402	1.402	1.404
62	1.232	1.240	1.249	1.263	1.280	1.300	1.315	1.330	1.349	1.365	1.378	1.390	1.399	1.406	1.411	1.413	1.414	1.410	1.408	1.410
63	1.240	1.241	1.242	1.245	1.251	1.258	1.264	1.275	1.293	1.316	1.340	1.363	1.384	1.400	1.412	1.418	1.420	1.424	1.429	1.431

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VAF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 119

IR SCAN TIME 6.41 SEC
INITIAL TEMP 538.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	1.040	1.041	1.040	1.037	1.036	1.033	1.030	1.029	1.025	1.022	1.018	1.016	1.012	1.010	1.009	1.007	1.004	1.004	1.000	1.000
30	1.036	1.030	1.028	1.025	1.018	1.018	1.015	1.010	1.007	1.000	1.000	0.995	0.995	0.993	0.990	0.990	0.992	0.990	0.988	0.988
31	1.013	1.009	1.004	1.000	0.995	0.992	0.990	0.988	0.988	0.986	0.986	0.986	0.988	0.986	0.986	0.988	0.984	0.988	0.984	0.988
32	0.990	0.992	0.992	0.990	0.988	0.990	0.988	0.988	0.988	0.988	0.986	0.988	0.986	0.988	0.986	0.986	0.986	0.988	0.988	0.988
33	0.990	0.992	0.990	0.992	0.990	0.990	0.988	0.990	0.988	0.990	0.988	0.988	0.988	0.988	0.986	0.986	0.988	0.988	0.988	0.988
34	0.990	0.992	0.990	0.992	0.992	0.992	0.990	0.990	0.990	0.990	0.990	0.990	0.986	0.990	0.986	0.988	0.988	0.988	0.986	0.986
35	0.993	0.993	0.993	0.993	0.992	0.993	0.992	0.992	0.993	0.993	0.992	0.992	0.992	0.990	0.988	0.990	0.988	0.990	0.988	0.990
36	0.995	0.995	0.997	0.995	0.997	0.995	0.995	0.995	0.995	0.995	0.995	0.993	0.995	0.993	0.993	0.992	0.995	0.993	0.993	0.993
37	0.992	0.999	0.992	0.999	0.993	0.997	0.992	0.997	0.992	0.995	0.990	0.999	0.995	0.997	0.995	0.995	0.993	0.993	0.993	0.995
38	1.002	0.999	1.000	0.999	1.000	0.999	1.000	0.999	1.000	0.999	1.000	0.999	0.999	0.995	0.997	0.995	0.999	0.992	0.995	0.993
39	1.002	1.000	1.002	1.000	1.002	1.000	1.002	1.000	1.000	1.000	1.002	1.000	1.000	0.999	0.999	0.997	0.999	0.997	0.999	0.997
40	1.005	1.004	1.005	1.004	1.005	1.002	1.004	1.004	1.004	1.002	1.004	1.000	1.002	1.000	1.000	0.999	1.000	1.000	1.000	0.999
41	1.005	1.005	1.005	1.005	1.004	1.004	1.005	1.004	1.004	1.002	1.004	1.002	1.004	1.002	1.004	1.000	1.002	1.000	1.004	1.000
42	1.009	1.007	1.007	1.007	1.009	1.005	1.005	1.004	1.005	1.004	1.005	1.004	1.004	1.004	1.004	1.004	1.004	1.002	1.004	1.000
43	1.010	1.009	1.010	1.007	1.009	1.007	1.009	1.010	1.009	1.007	1.009	1.005	1.005	1.005	1.005	1.004	1.005	1.004	1.005	1.002
44	1.009	1.012	1.010	1.012	1.009	1.012	1.007	1.010	1.005	1.012	1.009	1.009	1.009	1.009	1.009	1.007	1.007	1.009	1.009	1.007
45	1.021	1.018	1.019	1.016	1.018	1.015	1.018	1.015	1.016	1.015	1.015	1.013	1.013	1.012	1.015	1.012	1.015	1.012	1.013	1.012
46	1.025	1.026	1.025	1.025	1.026	1.024	1.021	1.022	1.021	1.021	1.019	1.021	1.019	1.021	1.019	1.019	1.019	1.019	1.018	1.018
47	1.032	1.030	1.030	1.030	1.028	1.028	1.025	1.026	1.024	1.025	1.024	1.022	1.022	1.024	1.022	1.022	1.022	1.022	1.021	1.022
48	1.040	1.038	1.036	1.033	1.033	1.030	1.028	1.029	1.026	1.026	1.026	1.025	1.025	1.025	1.025	1.025	1.024	1.024	1.022	1.024
49	1.048	1.047	1.044	1.040	1.036	1.032	1.030	1.029	1.028	1.028	1.026	1.028	1.026	1.025	1.025	1.026	1.024	1.025	1.025	1.026
50	1.041	1.041	1.044	1.047	1.046	1.042	1.037	1.034	1.030	1.030	1.029	1.029	1.026	1.029	1.028	1.028	1.026	1.026	1.025	1.026
51	1.042	1.040	1.036	1.038	1.040	1.044	1.044	1.041	1.034	1.029	1.026	1.028	1.026	1.026	1.025	1.026	1.025	1.026	1.024	1.025
52	1.093	1.053	1.036	1.036	1.036	1.036	1.038	1.041	1.038	1.028	1.022	1.018	1.018	1.015	1.016	1.012	1.016	1.015	1.016	1.016
53	1.192	1.112	1.064	1.042	1.036	1.034	1.033	1.036	1.038	1.036	1.022	1.013	1.005	1.005	1.004	1.004	1.000	1.004	1.005	1.009
54	1.340	1.241	1.144	1.080	1.046	1.037	1.036	1.036	1.037	1.037	1.036	1.019	1.010	1.000	0.999	0.995	0.999	0.997	1.004	1.005
55	1.417	1.381	1.290	1.180	1.101	1.057	1.042	1.036	1.036	1.034	1.037	1.037	1.026	1.009	1.004	0.997	0.999	1.000	1.005	1.009
56	1.359	1.390	1.390	1.325	1.214	1.122	1.068	1.044	1.040	1.034	1.034	1.037	1.038	1.030	1.015	1.005	1.004	1.004	1.007	1.010
57	1.361	1.319	1.313	1.336	1.317	1.230	1.140	1.082	1.048	1.040	1.034	1.032	1.033	1.040	1.034	1.018	1.005	1.004	1.005	1.007
58	1.422	1.411	1.377	1.321	1.287	1.283	1.236	1.148	1.082	1.048	1.040	1.030	1.029	1.028	1.034	1.034	1.024	1.010	1.005	1.004
59	1.429	1.427	1.426	1.422	1.397	1.342	1.272	1.195	1.119	1.068	1.046	1.034	1.029	1.024	1.025	1.026	1.032	1.024	1.015	1.004
60	1.411	1.419	1.427	1.431	1.434	1.434	1.418	1.370	1.288	1.192	1.113	1.064	1.038	1.029	1.022	1.022	1.022	1.028	1.025	1.016
61	1.401	1.392	1.379	1.372	1.382	1.403	1.419	1.423	1.410	1.372	1.299	1.193	1.106	1.056	1.036	1.024	1.022	1.021	1.025	1.024
62	1.411	1.411	1.408	1.394	1.364	1.328	1.313	1.333	1.366	1.379	1.360	1.296	1.191	1.104	1.058	1.036	1.022	1.019	1.016	1.019
63	1.429	1.421	1.419	1.421	1.417	1.408	1.383	1.336	1.285	1.265	1.285	1.302	1.281	1.217	1.137	1.078	1.041	1.026	1.019	1.016

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 119

IR SCAN TIME 6.41 SEC
INITIAL TEMP 538.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.997	0.997	0.995	0.995	0.995	0.995	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.995	0.993	0.993	0.993	0.993
30	0.990	0.990	0.988	0.990	0.988	0.988	0.988	0.988	0.988	0.988	0.986	0.990	0.988	0.990	0.988	0.990	0.990	0.990	0.988	0.992
31	0.982	0.986	0.982	0.986	0.984	0.984	0.984	0.984	0.982	0.986	0.982	0.988	0.986	0.986	0.986	0.986	0.986	0.988	0.988	0.988
32	0.986	0.986	0.986	0.986	0.984	0.986	0.986	0.986	0.986	0.984	0.984	0.982	0.984	0.986	0.980	0.986	0.982	0.986	0.982	0.986
33	0.986	0.988	0.986	0.988	0.986	0.986	0.984	0.986	0.982	0.986	0.984	0.984	0.984	0.984	0.984	0.986	0.984	0.984	0.982	0.984
34	0.986	0.988	0.986	0.986	0.986	0.986	0.984	0.986	0.984	0.984	0.984	0.986	0.984	0.984	0.982	0.984	0.984	0.984	0.984	0.984
35	0.988	0.990	0.986	0.990	0.986	0.988	0.988	0.988	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.984	0.984	0.984	0.984	0.986
36	0.993	0.990	0.993	0.990	0.992	0.990	0.992	0.988	0.992	0.988	0.992	0.988	0.990	0.988	0.990	0.988	0.990	0.986	0.988	0.986
37	0.992	0.993	0.993	0.993	0.992	0.993	0.992	0.993	0.992	0.993	0.992	0.993	0.992	0.992	0.990	0.990	0.988	0.990	0.988	0.990
38	0.995	0.993	0.995	0.993	0.995	0.992	0.995	0.992	0.995	0.993	0.995	0.993	0.995	0.993	0.993	0.992	0.993	0.992	0.993	0.992
39	0.999	0.997	0.999	0.995	0.997	0.995	0.997	0.993	0.995	0.995	0.995	0.992	0.995	0.990	0.995	0.992	0.993	0.992	0.993	0.992
40	1.002	0.999	1.000	0.999	0.999	0.999	0.999	0.997	0.999	0.997	0.999	0.997	0.999	0.997	0.997	0.997	0.999	0.995	0.995	0.995
41	1.000	1.000	1.000	0.999	1.000	0.999	0.999	1.000	1.000	0.999	1.000	0.999	0.999	0.999	0.999	0.997	0.999	0.997	0.999	0.995
42	1.004	1.000	1.002	1.000	1.002	1.000	1.002	0.999	1.000	0.999	1.000	1.000	1.000	0.999	1.000	0.999	1.000	0.999	0.999	0.997
43	1.004	1.002	1.004	1.002	1.004	1.002	1.002	1.004	1.004	1.002	1.002	1.000	1.002	1.000	1.000	1.000	1.000	0.999	1.000	1.000
44	1.005	1.007	1.005	1.005	1.004	1.007	1.004	1.005	1.005	1.005	1.005	1.004	1.004	1.005	1.002	1.005	1.004	1.004	1.004	1.004
45	1.012	1.010	1.013	1.009	1.012	1.009	1.012	1.012	1.012	1.012	1.010	1.010	1.012	1.009	1.012	1.010	1.012	1.007	1.012	1.010
46	1.018	1.018	1.016	1.018	1.015	1.016	1.015	1.016	1.015	1.019	1.010	1.018	1.010	1.018	1.012	1.016	1.010	1.016	1.012	1.016
47	1.021	1.021	1.021	1.022	1.019	1.021	1.018	1.019	1.019	1.019	1.018	1.018	1.018	1.018	1.018	1.021	1.018	1.019	1.018	1.019
48	1.022	1.024	1.021	1.024	1.021	1.022	1.021	1.021	1.021	1.022	1.021	1.021	1.021	1.021	1.019	1.021	1.021	1.021	1.019	1.022
49	1.024	1.025	1.024	1.024	1.022	1.024	1.022	1.024	1.022	1.024	1.022	1.022	1.021	1.022	1.021	1.024	1.021	1.022	1.021	1.024
50	1.025	1.026	1.025	1.026	1.024	1.025	1.024	1.024	1.022	1.024	1.024	1.025	1.022	1.024	1.022	1.024	1.022	1.024	1.024	1.025
51	1.024	1.025	1.025	1.026	1.025	1.026	1.025	1.025	1.025	1.025	1.025	1.024	1.024	1.025	1.025	1.025	1.024	1.025	1.024	1.025
52	1.021	1.018	1.022	1.021	1.025	1.024	1.026	1.025	1.026	1.025	1.025	1.025	1.026	1.025	1.025	1.025	1.025	1.024	1.025	1.022
53	1.012	1.018	1.019	1.022	1.022	1.024	1.024	1.025	1.022	1.025	1.022	1.026	1.024	1.024	1.022	1.026	1.022	1.025	1.021	1.025
54	1.012	1.015	1.018	1.021	1.024	1.024	1.025	1.024	1.026	1.025	1.026	1.025	1.028	1.026	1.025	1.025	1.025	1.025	1.024	1.024
55	1.013	1.016	1.021	1.022	1.024	1.024	1.025	1.026	1.025	1.026	1.028	1.028	1.026	1.026	1.026	1.024	1.025	1.022	1.025	1.021
56	1.013	1.016	1.019	1.021	1.022	1.022	1.025	1.024	1.024	1.022	1.024	1.024	1.025	1.022	1.025	1.021	1.022	1.019	1.019	1.018
57	1.010	1.012	1.013	1.013	1.015	1.015	1.015	1.015	1.016	1.015	1.015	1.013	1.013	1.013	1.015	1.012	1.013	1.012	1.012	1.010
58	1.005	1.007	1.007	1.007	1.009	1.007	1.009	1.007	1.009	1.007	1.007	1.005	1.007	1.005	1.007	1.007	1.007	1.005	1.005	1.004
59	1.004	0.999	1.004	1.000	1.002	1.000	1.002	1.000	1.000	0.999	1.000	0.999	1.000	0.995	1.000	0.997	0.999	0.995	0.999	0.997
60	1.005	1.002	1.000	0.999	0.999	0.999	0.997	0.999	0.995	0.999	0.993	0.995	0.993	0.997	0.992	0.995	0.992	0.995	0.992	0.995
61	1.021	1.010	1.005	1.002	1.002	0.999	1.002	0.999	1.000	0.997	0.999	0.995	0.997	0.995	0.997	0.995	0.995	0.995	0.997	0.997
62	1.021	1.018	1.007	1.004	1.000	1.000	0.997	0.997	0.997	0.997	0.995	0.995	0.995	0.995	0.995	0.993	0.993	0.995	0.995	0.995
63	1.016	1.018	1.018	1.012	1.002	0.999	0.997	0.997	0.995	0.993	0.993	0.993	0.992	0.990	0.992	0.993	0.992	0.993	0.995	0.995

NASA/RI 0H90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 119

IR SCAN TIME 6.41 SEC
INITIAL TEMP 530.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.993	0.995	0.993	0.997	0.993	0.993	0.993	0.995	0.993	0.995	0.992	0.995	0.992	0.990	0.990	0.990	0.988	0.988	0.988	0.988
30	0.990	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.990	0.990	0.988	0.988	0.986	0.988	0.986	0.988	0.984	0.986
31	0.986	0.988	0.988	0.990	0.988	0.988	0.988	0.990	0.988	0.988	0.986	0.988	0.988	0.988	0.986	0.984	0.984	0.984	0.984	0.982
32	0.982	0.988	0.982	0.986	0.982	0.988	0.982	0.986	0.984	0.986	0.986	0.986	0.986	0.986	0.984	0.984	0.982	0.984	0.980	0.984
33	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.982	0.984	0.982	0.984	0.984	0.978	0.982	0.978	0.984	0.976	0.982	0.976	0.980
34	0.982	0.982	0.982	0.984	0.980	0.982	0.980	0.982	0.980	0.982	0.980	0.982	0.982	0.982	0.980	0.980	0.980	0.980	0.980	0.980
35	0.984	0.984	0.984	0.984	0.982	0.984	0.980	0.984	0.982	0.982	0.980	0.984	0.982	0.980	0.982	0.982	0.980	0.982	0.980	0.984
36	0.988	0.986	0.988	0.986	0.986	0.986	0.986	0.984	0.986	0.986	0.984	0.984	0.986	0.984	0.986	0.984	0.988	0.984	0.984	0.982
37	0.990	0.990	0.988	0.988	0.986	0.988	0.986	0.988	0.986	0.986	0.986	0.986	0.984	0.986	0.986	0.986	0.984	0.986	0.986	0.988
38	0.993	0.992	0.993	0.992	0.993	0.992	0.992	0.990	0.992	0.990	0.992	0.990	0.992	0.990	0.992	0.988	0.992	0.988	0.990	0.988
39	0.993	0.990	0.995	0.990	0.992	0.990	0.993	0.992	0.992	0.992	0.993	0.990	0.992	0.990	0.992	0.990	0.993	0.990	0.992	0.992
40	0.997	0.993	0.995	0.993	0.993	0.993	0.993	0.992	0.995	0.992	0.993	0.992	0.993	0.990	0.993	0.990	0.993	0.990	0.992	0.990
41	0.995	0.995	0.997	0.995	0.995	0.995	0.997	0.993	0.995	0.993	0.995	0.993	0.995	0.993	0.995	0.992	0.993	0.993	0.993	0.993
42	0.999	0.997	0.999	0.997	0.999	0.997	0.997	0.995	0.997	0.997	0.997	0.995	0.997	0.993	0.995	0.993	0.997	0.993	0.995	0.993
43	1.000	0.999	1.000	0.999	1.000	0.999	1.000	0.999	1.000	0.997	1.000	0.999	0.997	0.999	0.999	0.999	0.997	0.997	0.999	0.995
44	1.002	1.004	1.002	1.004	1.002	1.002	1.002	1.002	1.002	1.004	1.002	1.002	1.002	1.000	1.000	1.000	1.002	1.004	1.000	1.002
45	1.010	1.009	1.012	1.010	1.012	1.010	1.012	1.009	1.010	1.009	1.012	1.010	1.010	1.009	1.010	1.009	1.009	1.009	1.009	1.007
46	1.012	1.018	1.013	1.018	1.013	1.018	1.016	1.018	1.016	1.018	1.015	1.016	1.015	1.016	1.016	1.016	1.012	1.015	1.013	1.015
47	1.019	1.021	1.021	1.022	1.019	1.021	1.019	1.019	1.016	1.019	1.016	1.019	1.018	1.019	1.015	1.019	1.016	1.019	1.016	1.019
48	1.022	1.024	1.024	1.024	1.022	1.022	1.022	1.022	1.021	1.021	1.019	1.021	1.019	1.021	1.019	1.021	1.019	1.021	1.019	1.019
49	1.022	1.025	1.022	1.025	1.022	1.024	1.021	1.022	1.022	1.021	1.019	1.022	1.021	1.022	1.021	1.022	1.021	1.022	1.019	1.021
50	1.022	1.024	1.024	1.025	1.024	1.024	1.024	1.024	1.021	1.024	1.021	1.022	1.021	1.022	1.022	1.022	1.021	1.021	1.021	1.021
51	1.024	1.024	1.024	1.024	1.022	1.022	1.021	1.021	1.021	1.019	1.018	1.019	1.019	1.018	1.018	1.019	1.018	1.019	1.016	1.018
52	1.024	1.024	1.024	1.021	1.021	1.016	1.016	1.013	1.013	1.012	1.012	1.010	1.012	1.009	1.010	1.009	1.012	1.009	1.010	1.009
53	1.019	1.021	1.018	1.019	1.015	1.013	1.007	1.007	1.004	1.004	1.002	1.002	1.000	1.002	0.999	1.000	0.999	1.000	0.997	1.000
54	1.022	1.021	1.019	1.016	1.015	1.007	1.005	1.000	1.000	0.993	0.995	0.992	0.992	0.992	0.993	0.992	0.993	0.990	0.990	0.990
55	1.022	1.019	1.019	1.016	1.013	1.009	1.005	1.000	0.997	0.995	0.995	0.992	0.992	0.990	0.992	0.990	0.988	0.988	0.988	0.986
56	1.019	1.016	1.016	1.013	1.012	1.007	1.004	0.999	0.997	0.995	0.993	0.990	0.993	0.990	0.990	0.988	0.990	0.988	0.988	0.986
57	1.010	1.009	1.009	1.005	1.005	1.002	1.000	0.995	0.993	0.992	0.993	0.990	0.992	0.988	0.990	0.988	0.990	0.988	0.988	0.986
58	1.005	1.004	1.005	1.002	1.004	1.000	1.000	0.999	0.999	0.993	0.995	0.993	0.993	0.993	0.993	0.993	0.995	0.993	0.993	0.992
59	0.997	0.997	0.997	0.995	0.995	0.995	0.997	0.993	0.993	0.990	0.992	0.990	0.992	0.990	0.992	0.988	0.992	0.990	0.992	0.988
60	0.993	0.995	0.993	0.995	0.995	0.995	0.992	0.992	0.992	0.992	0.990	0.992	0.990	0.992	0.990	0.990	0.988	0.990	0.990	0.990
61	0.997	0.995	0.997	0.993	0.993	0.993	0.993	0.992	0.993	0.990	0.992	0.990	0.992	0.990	0.993	0.990	0.992	0.988	0.993	0.990
62	0.995	0.995	0.992	0.995	0.993	0.993	0.993	0.993	0.992	0.993	0.992	0.990	0.992	0.992	0.990	0.990	0.990	0.990	0.988	0.990
63	0.993	0.995	0.993	0.993	0.992	0.993	0.992	0.992	0.990	0.992	0.988	0.990	0.990	0.990	0.988	0.988	0.988	0.988	0.988	0.988

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 119

IR SCAN TIME 6.41 SEC
INITIAL TEMP 538.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.986	0.988	0.986	0.988	0.986	0.988	0.984	0.986	0.986	0.986
30	0.984	0.986	0.984	0.984	0.982	0.982	0.982	0.984	0.982	0.982
31	0.980	0.982	0.982	0.982	0.980	0.982	0.980	0.982	0.980	0.980
32	0.980	0.982	0.980	0.980	0.978	0.980	0.978	0.982	0.980	0.980
33	0.978	0.980	0.976	0.978	0.976	0.978	0.974	0.980	0.978	0.978
34	0.978	0.978	0.978	0.978	0.978	0.978	0.978	0.978	0.976	0.978
35	0.980	0.980	0.980	0.982	0.980	0.980	0.978	0.978	0.980	0.980
36	0.986	0.982	0.984	0.984	0.984	0.984	0.984	0.982	0.984	0.982
37	0.984	0.986	0.984	0.986	0.986	0.986	0.984	0.986	0.984	0.984
38	0.990	0.988	0.990	0.988	0.990	0.988	0.990	0.988	0.990	0.988
39	0.992	0.990	0.992	0.992	0.993	0.990	0.993	0.990	0.992	0.990
40	0.993	0.990	0.992	0.990	0.993	0.993	0.993	0.992	0.993	0.993
41	0.993	0.993	0.995	0.993	0.995	0.993	0.993	0.993	0.993	0.988
42	0.995	0.993	0.995	0.995	0.997	0.993	0.995	0.995	0.997	0.997
43	0.997	0.997	0.999	0.997	0.997	0.997	1.000	0.997	1.000	0.999
44	1.002	1.004	1.002	1.002	1.002	1.002	1.002	1.000	1.000	1.002
45	1.009	1.009	1.010	1.007	1.007	1.007	1.009	1.007	1.009	1.007
46	1.015	1.016	1.013	1.015	1.013	1.013	1.013	1.013	1.013	1.013
47	1.016	1.018	1.015	1.019	1.018	1.018	1.016	1.018	1.016	1.018
48	1.018	1.019	1.019	1.019	1.018	1.019	1.016	1.019	1.015	1.018
49	1.022	1.021	1.019	1.019	1.019	1.021	1.019	1.021	1.019	1.019
50	1.021	1.021	1.019	1.021	1.018	1.019	1.019	1.019	1.016	1.019
51	1.016	1.018	1.015	1.018	1.015	1.016	1.015	1.015	1.013	1.013
52	1.010	1.007	1.007	1.007	1.007	1.005	1.007	1.005	1.005	1.004
53	0.999	1.000	0.999	0.997	0.995	0.997	0.995	0.997	0.995	0.995
54	0.992	0.990	0.992	0.988	0.992	0.988	0.986	0.986	0.988	0.986
55	0.986	0.986	0.986	0.980	0.984	0.976	0.982	0.976	0.982	0.972
56	0.988	0.986	0.984	0.984	0.984	0.982	0.984	0.980	0.984	0.978
57	0.988	0.986	0.988	0.984	0.986	0.984	0.988	0.984	0.984	0.984
58	0.992	0.990	0.993	0.992	0.993	0.990	0.992	0.990	0.992	0.986
59	0.988	0.988	0.988	0.988	0.988	0.986	0.990	0.986	0.990	0.986
60	0.990	0.992	0.990	0.990	0.988	0.990	0.988	0.990	0.988	0.990
61	0.992	0.990	0.993	0.993	0.992	0.992	0.993	0.992	0.993	0.992
62	0.990	0.990	0.986	0.990	0.986	0.990	0.986	0.988	0.986	0.990
63	0.988	0.988	0.988	0.988	0.986	0.988	0.986	0.988	0.988	0.986

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 119

IR SCAN TIME 6.41 SEC
INITIAL TEMP 538.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	1.004	1.004	1.000	1.002	1.000	1.002	0.999	1.000	1.000	1.002	1.000	1.004	1.005	1.053	1.146	1.200	1.219	1.231	1.239	1.247
65	0.999	1.000	0.997	0.997	0.995	0.997	0.995	0.995	0.993	0.997	0.997	1.002	1.009	1.076	1.166	1.205	1.219	1.229	1.238	1.246
66	0.992	0.993	0.990	0.990	0.988	0.988	0.988	0.990	0.988	0.992	0.992	0.995	1.009	1.093	1.176	1.208	1.221	1.231	1.238	1.245
67	0.984	0.986	0.984	0.982	0.980	0.980	0.980	0.980	0.978	0.982	0.984	0.990	1.013	1.109	1.181	1.209	1.220	1.230	1.237	1.245
68	0.980	0.978	0.976	0.974	0.976	0.974	0.974	0.974	0.974	0.976	0.976	0.984	1.016	1.112	1.173	1.196	1.209	1.217	1.226	1.232
69	0.978	0.976	0.974	0.974	0.974	0.972	0.972	0.972	0.969	0.974	0.978	0.982	1.036	1.130	1.178	1.195	1.206	1.214	1.221	1.225
70	0.976	0.976	0.969	0.972	0.965	0.972	0.972	0.972	0.974	0.974	0.974	0.992	1.072	1.154	1.185	1.199	1.209	1.217	1.223	1.229
71	0.978	0.976	0.974	0.972	0.972	0.972	0.969	0.969	0.965	0.972	0.974	1.005	1.098	1.167	1.189	1.202	1.211	1.217	1.225	1.231
72	0.978	0.976	0.969	0.972	0.969	0.972	0.969	0.972	0.972	0.974	0.976	1.028	1.127	1.177	1.194	1.204	1.213	1.220	1.229	1.234
73	0.978	0.976	0.972	0.974	0.972	0.969	0.969	0.969	0.969	0.972	0.982	1.048	1.137	1.176	1.189	1.199	1.208	1.217	1.226	1.231
74	0.978	0.976	0.974	0.969	0.969	0.972	0.969	0.969	0.969	0.972	0.984	1.054	1.130	1.159	1.169	1.178	1.186	1.195	1.202	1.207
75	0.980	0.976	0.972	0.974	0.969	0.969	0.969	0.967	0.969	0.972	0.988	1.053	1.111	1.132	1.140	1.149	1.154	1.161	1.167	1.171
76	0.978	0.978	0.978	0.969	0.974	0.972	0.969	0.969	0.969	0.969	0.992	1.056	1.099	1.113	1.120	1.125	1.130	1.132	1.136	1.137
77	0.990	1.005	1.013	1.009	1.007	1.010	1.007	0.988	0.974	0.974	1.012	1.081	1.115	1.123	1.129	1.132	1.134	1.134	1.136	1.137
78	1.021	1.041	1.026	1.041	1.048	1.040	1.048	1.036	0.999	0.986	1.042	1.115	1.140	1.150	1.154	1.158	1.160	1.164	1.164	1.165
79	1.044	1.049	1.024	1.043	1.064	1.063	1.053	1.067	1.044	1.015	1.076	1.140	1.160	1.169	1.175	1.180	1.184	1.188	1.192	1.195
80	1.057	1.075	1.061	1.054	1.059	1.071	1.071	1.059	1.063	1.059	1.109	1.155	1.169	1.177	1.183	1.188	1.194	1.199	1.206	1.212
81	1.066	1.081	1.090	1.080	1.060	1.054	1.061	1.060	1.064	1.084	1.131	1.164	1.175	1.181	1.186	1.190	1.194	1.199	1.205	1.211
82	1.072	1.080	1.096	1.094	1.066	1.053	1.037	1.033	1.044	1.078	1.129	1.158	1.168	1.175	1.180	1.185	1.190	1.194	1.198	1.205
83	1.084	1.076	1.084	1.090	1.072	1.055	1.033	1.016	1.026	1.068	1.123	1.149	1.157	1.162	1.166	1.171	1.179	1.190	1.199	1.199
84	1.095	1.064	1.068	1.069	1.063	1.041	1.024	1.013	1.029	1.053	1.108	1.127	1.136	1.147	1.154	1.158	1.162	1.168	1.174	1.171
85	1.071	1.053	1.057	1.059	1.052	1.038	1.022	1.030	1.038	1.041	1.047	1.050	1.052	1.055	1.059	1.066	1.069	1.077	1.085	1.095
86	1.030	1.030	1.040	1.046	1.041	1.029	1.028	1.032	1.041	1.038	1.038	1.037	1.037	1.037	1.037	1.034	1.036	1.034	1.036	1.036
87	1.013	1.013	1.015	1.018	1.019	1.015	1.022	1.034	1.043	1.040	1.038	1.037	1.036	1.036	1.034	1.034	1.034	1.034	1.034	1.034
88	1.004	1.002	1.000	1.002	1.009	1.009	1.018	1.030	1.042	1.043	1.040	1.037	1.036	1.034	1.034	1.034	1.033	1.029	1.030	1.029
89	0.992	0.990	0.992	0.997	1.005	1.010	1.016	1.026	1.042	1.043	1.042	1.040	1.037	1.036	1.034	1.034	1.033	1.032	1.032	1.032
90	0.984	0.980	0.986	0.992	1.004	1.007	1.012	1.019	1.036	1.042	1.043	1.040	1.040	1.037	1.034	1.034	1.033	1.032	1.033	1.034
91	0.982	0.980	0.986	0.992	1.000	1.004	1.005	1.012	1.032	1.041	1.044	1.044	1.043	1.040	1.038	1.037	1.036	1.036	1.033	1.033
92	0.984	0.982	0.976	0.992	0.995	1.005	1.000	1.010	1.025	1.042	1.043	1.044	1.044	1.042	1.038	1.040	1.036	1.037	1.034	1.034
93	1.005	1.002	1.002	1.000	1.005	1.007	1.012	1.013	1.032	1.041	1.043	1.044	1.046	1.044	1.044	1.042	1.040	1.037	1.036	1.030
94	1.025	1.025	1.022	1.024	1.022	1.024	1.024	1.029	1.040	1.042	1.043	1.044	1.048	1.047	1.049	1.046	1.042	1.040	1.034	1.029
95	1.041	1.041	1.038	1.041	1.040	1.036	1.034	1.037	1.044	1.048	1.046	1.047	1.049	1.052	1.050	1.049	1.048	1.043	1.036	1.028
96	1.049	1.048	1.047	1.046	1.044	1.042	1.038	1.041	1.048	1.049	1.052	1.053	1.055	1.054	1.057	1.056	1.052	1.046	1.040	1.029
97	1.050	1.052	1.049	1.048	1.049	1.043	1.041	1.042	1.046	1.044	1.048	1.049	1.059	1.060	1.056	1.058	1.054	1.047	1.044	1.037
98	1.058	1.055	1.056	1.053	1.049	1.047	1.043	1.042	1.048	1.044	1.042	1.043	1.048	1.050	1.056	1.056	1.052	1.048	1.047	1.044

NASA/RI 0H90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 119

IR SCAN TIME 6.41 SEC
INITIAL TEMP 538.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	1.253	1.259	1.265	1.274	1.279	1.280	1.274	1.266	1.260	1.256	1.255	1.262	1.273	1.290	1.311	1.334	1.358	1.384	1.406	1.422
65	1.253	1.261	1.271	1.284	1.296	1.304	1.311	1.316	1.317	1.318	1.309	1.292	1.268	1.249	1.229	1.222	1.223	1.237	1.254	1.279
66	1.252	1.262	1.271	1.284	1.294	1.303	1.312	1.322	1.331	1.340	1.349	1.355	1.357	1.350	1.333	1.308	1.278	1.248	1.221	1.204
67	1.253	1.263	1.274	1.285	1.295	1.303	1.312	1.322	1.332	1.339	1.346	1.355	1.364	1.369	1.370	1.370	1.369	1.364	1.348	1.322
68	1.242	1.256	1.271	1.287	1.301	1.305	1.309	1.314	1.333	1.346	1.354	1.360	1.370	1.374	1.376	1.378	1.360	1.383	1.383	1.384
69	1.233	1.244	1.255	1.264	1.275	1.286	1.298	1.308	1.323	1.340	1.356	1.368	1.376	1.383	1.388	1.392	1.394	1.396	1.394	1.394
70	1.236	1.248	1.256	1.262	1.269	1.278	1.285	1.290	1.296	1.302	1.309	1.318	1.325	1.332	1.336	1.341	1.351	1.361	1.371	1.380
71	1.238	1.250	1.259	1.265	1.272	1.281	1.289	1.295	1.300	1.304	1.307	1.307	1.306	1.300	1.292	1.287	1.283	1.281	1.281	1.285
72	1.241	1.253	1.262	1.268	1.276	1.286	1.294	1.303	1.310	1.317	1.323	1.327	1.328	1.328	1.320	1.312	1.304	1.296	1.285	1.271
73	1.239	1.250	1.258	1.265	1.274	1.285	1.296	1.306	1.315	1.322	1.327	1.331	1.335	1.337	1.338	1.340	1.339	1.337	1.335	1.331
74	1.213	1.221	1.230	1.239	1.247	1.254	1.266	1.278	1.288	1.296	1.302	1.309	1.319	1.326	1.332	1.334	1.336	1.338	1.341	1.344
75	1.175	1.181	1.186	1.194	1.202	1.208	1.214	1.224	1.231	1.237	1.241	1.247	1.253	1.261	1.267	1.272	1.276	1.282	1.288	1.294
76	1.140	1.144	1.146	1.151	1.156	1.160	1.164	1.167	1.172	1.176	1.179	1.182	1.185	1.188	1.190	1.191	1.192	1.193	1.197	1.199
77	1.137	1.138	1.138	1.140	1.142	1.144	1.146	1.147	1.149	1.148	1.149	1.149	1.149	1.149	1.151	1.151	1.149	1.148	1.149	1.149
78	1.167	1.167	1.165	1.165	1.166	1.167	1.166	1.165	1.164	1.162	1.158	1.156	1.152	1.149	1.147	1.148	1.143	1.142	1.140	1.142
79	1.199	1.202	1.203	1.206	1.206	1.208	1.208	1.208	1.205	1.203	1.198	1.192	1.185	1.178	1.170	1.165	1.157	1.153	1.148	1.146
80	1.217	1.223	1.229	1.233	1.237	1.243	1.248	1.253	1.255	1.256	1.254	1.250	1.243	1.236	1.228	1.219	1.210	1.201	1.190	1.180
81	1.217	1.226	1.233	1.240	1.248	1.256	1.264	1.272	1.279	1.285	1.290	1.291	1.292	1.290	1.288	1.284	1.277	1.270	1.262	1.252
82	1.211	1.217	1.224	1.232	1.242	1.251	1.260	1.269	1.278	1.286	1.293	1.299	1.303	1.306	1.308	1.311	1.313	1.314	1.312	1.311
83	1.196	1.200	1.206	1.212	1.218	1.228	1.235	1.244	1.252	1.260	1.267	1.272	1.276	1.280	1.282	1.284	1.286	1.289	1.292	1.295
84	1.169	1.170	1.173	1.176	1.181	1.183	1.188	1.199	1.210	1.218	1.224	1.228	1.230	1.233	1.235	1.236	1.236	1.237	1.238	1.240
85	1.102	1.111	1.117	1.125	1.136	1.141	1.143	1.151	1.158	1.166	1.178	1.184	1.188	1.192	1.195	1.198	1.201	1.203	1.205	1.207
86	1.037	1.037	1.038	1.038	1.041	1.041	1.042	1.040	1.042	1.041	1.044	1.049	1.050	1.047	1.049	1.052	1.056	1.057	1.060	1.057
87	1.037	1.034	1.036	1.034	1.033	1.034	1.033	1.034	1.033	1.030	1.030	1.029	1.030	1.029	1.030	1.030	1.030	1.029	1.032	1.029
88	1.032	1.033	1.034	1.036	1.036	1.036	1.036	1.033	1.034	1.030	1.030	1.029	1.030	1.029	1.029	1.029	1.029	1.028	1.029	1.028
89	1.033	1.032	1.033	1.032	1.034	1.033	1.036	1.034	1.032	1.029	1.029	1.028	1.029	1.028	1.029	1.028	1.029	1.026	1.029	1.028
90	1.034	1.036	1.034	1.034	1.033	1.030	1.033	1.034	1.036	1.034	1.034	1.034	1.034	1.032	1.029	1.026	1.029	1.028	1.028	1.028
91	1.034	1.034	1.036	1.036	1.036	1.034	1.032	1.032	1.033	1.036	1.044	1.086	1.125	1.111	1.068	1.040	1.032	1.026	1.026	1.025
92	1.032	1.033	1.032	1.036	1.034	1.034	1.034	1.033	1.034	1.033	1.037	1.061	1.102	1.101	1.067	1.043	1.034	1.030	1.028	1.028
93	1.032	1.026	1.032	1.030	1.034	1.030	1.034	1.033	1.038	1.034	1.037	1.032	1.034	1.029	1.032	1.026	1.028	1.025	1.028	1.026
94	1.026	1.028	1.029	1.032	1.033	1.034	1.036	1.037	1.038	1.038	1.037	1.036	1.036	1.034	1.030	1.029	1.026	1.026	1.024	1.024
95	1.026	1.025	1.026	1.030	1.034	1.034	1.037	1.037	1.038	1.038	1.040	1.038	1.037	1.037	1.034	1.032	1.032	1.029	1.028	1.028
96	1.026	1.029	1.032	1.033	1.036	1.040	1.040	1.042	1.041	1.042	1.042	1.041	1.040	1.037	1.036	1.033	1.032	1.030	1.029	1.028
97	1.036	1.037	1.037	1.040	1.040	1.040	1.042	1.042	1.043	1.043	1.043	1.042	1.042	1.040	1.036	1.034	1.033	1.029	1.029	1.029
98	1.044	1.044	1.046	1.044	1.047	1.046	1.048	1.048	1.047	1.046	1.044	1.043	1.043	1.041	1.040	1.036	1.034	1.036	1.042	1.046

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NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 119

IR SCAN TIME 6.41 SEC
INITIAL TEMP 538.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	1.430	1.431	1.434	1.434	1.434	1.435	1.432	1.423	1.405	1.370	1.314	1.250	1.209	1.201	1.165	1.098	1.050	1.034	1.022	1.019
65	1.304	1.336	1.365	1.386	1.404	1.413	1.417	1.422	1.423	1.424	1.422	1.406	1.364	1.297	1.224	1.161	1.101	1.056	1.034	1.025
66	1.198	1.199	1.206	1.219	1.237	1.257	1.279	1.301	1.322	1.346	1.371	1.395	1.410	1.411	1.391	1.344	1.271	1.185	1.105	1.054
67	1.290	1.258	1.231	1.214	1.211	1.209	1.207	1.209	1.212	1.218	1.228	1.241	1.266	1.304	1.338	1.353	1.343	1.314	1.264	1.177
68	1.385	1.381	1.368	1.342	1.305	1.265	1.234	1.215	1.209	1.207	1.208	1.206	1.205	1.202	1.205	1.215	1.243	1.277	1.291	1.272
69	1.396	1.398	1.397	1.395	1.391	1.381	1.364	1.334	1.297	1.260	1.232	1.213	1.206	1.202	1.199	1.199	1.198	1.196	1.197	1.204
70	1.389	1.397	1.404	1.408	1.409	1.407	1.404	1.398	1.388	1.376	1.358	1.327	1.288	1.253	1.225	1.211	1.206	1.203	1.202	1.200
71	1.292	1.302	1.315	1.329	1.344	1.358	1.368	1.379	1.390	1.396	1.401	1.400	1.393	1.379	1.354	1.319	1.278	1.241	1.216	1.203
72	1.255	1.243	1.233	1.228	1.228	1.231	1.239	1.251	1.265	1.280	1.295	1.314	1.334	1.350	1.359	1.362	1.361	1.355	1.336	1.304
73	1.323	1.313	1.297	1.275	1.252	1.229	1.209	1.197	1.189	1.186	1.189	1.194	1.200	1.207	1.213	1.221	1.233	1.246	1.255	1.262
74	1.345	1.347	1.347	1.345	1.337	1.324	1.307	1.282	1.256	1.233	1.210	1.188	1.172	1.163	1.159	1.156	1.156	1.159	1.162	1.164
75	1.301	1.308	1.315	1.322	1.327	1.328	1.327	1.324	1.319	1.310	1.298	1.282	1.257	1.230	1.203	1.180	1.162	1.149	1.143	1.139
76	1.203	1.206	1.210	1.216	1.224	1.231	1.238	1.243	1.248	1.251	1.253	1.254	1.257	1.253	1.246	1.236	1.221	1.201	1.181	1.160
77	1.151	1.149	1.150	1.149	1.150	1.149	1.151	1.149	1.151	1.151	1.153	1.154	1.159	1.162	1.165	1.169	1.171	1.173	1.174	1.173
78	1.141	1.142	1.141	1.139	1.139	1.137	1.136	1.134	1.133	1.132	1.131	1.131	1.130	1.129	1.125	1.127	1.127	1.128	1.129	1.132
79	1.144	1.143	1.142	1.141	1.139	1.139	1.137	1.136	1.135	1.134	1.132	1.131	1.129	1.128	1.126	1.127	1.127	1.127	1.127	1.127
80	1.171	1.164	1.157	1.152	1.148	1.145	1.141	1.140	1.137	1.137	1.136	1.134	1.133	1.133	1.131	1.132	1.131	1.132	1.131	1.132
81	1.242	1.230	1.218	1.206	1.193	1.181	1.170	1.160	1.153	1.146	1.143	1.141	1.139	1.137	1.137	1.136	1.137	1.136	1.136	1.135
82	1.309	1.306	1.301	1.294	1.284	1.271	1.257	1.241	1.223	1.206	1.190	1.175	1.163	1.154	1.148	1.144	1.142	1.140	1.139	1.138
83	1.300	1.305	1.311	1.316	1.320	1.321	1.323	1.321	1.316	1.308	1.296	1.281	1.264	1.246	1.226	1.209	1.191	1.178	1.165	1.155
84	1.242	1.244	1.247	1.250	1.254	1.256	1.259	1.262	1.265	1.269	1.273	1.277	1.279	1.281	1.281	1.280	1.277	1.271	1.262	1.251
85	1.209	1.212	1.213	1.215	1.217	1.216	1.215	1.213	1.211	1.208	1.206	1.204	1.201	1.200	1.198	1.199	1.199	1.202	1.206	1.212
86	1.058	1.057	1.058	1.064	1.069	1.071	1.076	1.077	1.080	1.081	1.085	1.087	1.090	1.091	1.095	1.096	1.096	1.097	1.101	1.103
87	1.032	1.029	1.030	1.029	1.029	1.028	1.029	1.029	1.029	1.026	1.028	1.024	1.026	1.022	1.025	1.022	1.022	1.021	1.024	1.021
88	1.029	1.028	1.029	1.028	1.029	1.026	1.025	1.022	1.024	1.021	1.021	1.018	1.021	1.018	1.018	1.013	1.015	1.007	1.012	1.005
89	1.029	1.026	1.026	1.025	1.026	1.025	1.025	1.022	1.022	1.019	1.021	1.016	1.016	1.015	1.015	1.009	1.012	1.007	1.009	1.005
90	1.030	1.029	1.029	1.029	1.030	1.028	1.028	1.026	1.028	1.024	1.024	1.022	1.024	1.019	1.018	1.013	1.012	1.007	1.009	1.005
91	1.025	1.025	1.026	1.026	1.029	1.028	1.032	1.029	1.029	1.028	1.034	1.052	1.063	1.048	1.033	1.025	1.021	1.015	1.015	1.009
92	1.025	1.025	1.024	1.025	1.024	1.024	1.024	1.024	1.022	1.024	1.030	1.064	1.090	1.078	1.046	1.029	1.021	1.019	1.015	1.013
93	1.029	1.028	1.030	1.028	1.029	1.026	1.028	1.024	1.024	1.021	1.022	1.021	1.022	1.021	1.019	1.015	1.016	1.015	1.016	1.013
94	1.022	1.025	1.024	1.025	1.024	1.028	1.025	1.026	1.024	1.025	1.021	1.022	1.019	1.021	1.018	1.018	1.013	1.015	1.012	1.012
95	1.024	1.025	1.024	1.025	1.025	1.026	1.025	1.026	1.026	1.025	1.025	1.024	1.022	1.021	1.019	1.019	1.015	1.015	1.012	1.015
96	1.026	1.029	1.028	1.026	1.026	1.028	1.026	1.028	1.026	1.028	1.026	1.026	1.024	1.025	1.024	1.022	1.021	1.019	1.016	1.016
97	1.028	1.028	1.026	1.028	1.026	1.028	1.026	1.028	1.026	1.028	1.026	1.026	1.024	1.022	1.022	1.022	1.021	1.021	1.021	1.019
98	1.041	1.036	1.029	1.026	1.026	1.028	1.028	1.028	1.028	1.026	1.026	1.025	1.024	1.024	1.021	1.022	1.019	1.019	1.018	1.019

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NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 6.41 SEC
GROUP 119 INITIAL TEMP 538.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	1.015	1.016	1.016	1.019	1.010	1.004	0.997	0.993	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.993	0.992	0.993
65	1.018	1.015	1.013	1.016	1.016	1.015	1.005	0.995	0.992	0.990	0.988	0.988	0.988	0.988	0.986	0.988	0.988	0.990	0.988	0.990
66	1.029	1.021	1.015	1.013	1.013	1.016	1.013	1.005	0.993	0.988	0.982	0.982	0.982	0.982	0.980	0.982	0.980	0.982	0.980	0.982
67	1.090	1.043	1.024	1.016	1.007	1.012	1.010	1.015	1.004	0.992	0.978	0.976	0.969	0.974	0.965	0.974	0.969	0.972	0.969	0.974
68	1.204	1.124	1.072	1.036	1.021	1.012	1.010	1.010	1.012	1.009	0.997	0.980	0.974	0.963	0.965	0.965	0.960	0.958	0.963	0.963
69	1.225	1.219	1.162	1.084	1.038	1.019	1.013	1.009	1.009	1.007	1.010	1.000	0.982	0.969	0.965	0.963	0.960	0.960	0.960	0.958
70	1.198	1.195	1.184	1.139	1.075	1.036	1.018	1.010	1.007	1.009	1.005	1.009	1.000	0.984	0.967	0.958	0.960	0.958	0.955	0.955
71	1.195	1.190	1.184	1.174	1.139	1.082	1.040	1.019	1.010	1.005	1.004	1.005	1.004	1.002	0.988	0.969	0.963	0.955	0.955	0.958
72	1.266	1.228	1.199	1.180	1.167	1.144	1.096	1.046	1.022	1.013	1.007	1.005	1.004	1.004	1.000	0.992	0.976	0.963	0.958	0.955
73	1.263	1.258	1.247	1.232	1.213	1.193	1.166	1.123	1.069	1.036	1.018	1.012	1.005	1.004	1.004	1.004	0.993	0.980	0.965	0.963
74	1.168	1.173	1.179	1.186	1.189	1.194	1.191	1.182	1.146	1.098	1.050	1.024	1.005	1.007	1.002	1.004	0.999	0.999	0.986	0.972
75	1.136	1.134	1.133	1.133	1.133	1.134	1.134	1.136	1.135	1.118	1.081	1.038	1.018	1.009	1.005	1.004	1.004	1.002	0.999	0.995
76	1.146	1.134	1.129	1.125	1.124	1.123	1.122	1.119	1.118	1.115	1.111	1.090	1.049	1.022	1.012	1.005	1.004	1.000	1.002	1.000
77	1.171	1.166	1.160	1.152	1.148	1.141	1.134	1.125	1.121	1.118	1.118	1.116	1.103	1.068	1.033	1.012	1.005	1.000	1.004	1.000
78	1.133	1.136	1.139	1.144	1.147	1.149	1.151	1.152	1.151	1.150	1.147	1.144	1.139	1.130	1.100	1.057	1.025	1.009	1.000	0.999
79	1.127	1.128	1.127	1.127	1.126	1.126	1.128	1.133	1.133	1.134	1.137	1.140	1.145	1.151	1.151	1.130	1.082	1.040	1.013	1.004
80	1.132	1.132	1.131	1.132	1.131	1.132	1.131	1.131	1.131	1.132	1.130	1.130	1.129	1.129	1.129	1.128	1.109	1.073	1.033	1.012
81	1.133	1.134	1.133	1.135	1.136	1.137	1.136	1.137	1.137	1.137	1.136	1.136	1.134	1.134	1.133	1.134	1.132	1.122	1.090	1.044
82	1.137	1.137	1.136	1.136	1.136	1.137	1.137	1.136	1.137	1.137	1.139	1.139	1.140	1.139	1.140	1.139	1.143	1.144	1.135	1.114
83	1.147	1.143	1.141	1.138	1.137	1.137	1.136	1.136	1.136	1.137	1.139	1.141	1.144	1.145	1.146	1.147	1.149	1.151	1.152	1.151
84	1.239	1.223	1.208	1.194	1.180	1.168	1.158	1.152	1.148	1.144	1.143	1.142	1.143	1.145	1.149	1.152	1.156	1.159	1.160	1.160
85	1.218	1.225	1.231	1.236	1.240	1.240	1.239	1.234	1.228	1.220	1.213	1.205	1.197	1.188	1.181	1.176	1.172	1.169	1.166	1.166
86	1.107	1.109	1.112	1.117	1.127	1.138	1.154	1.170	1.186	1.202	1.220	1.239	1.243	1.235	1.234	1.227	1.208	1.187	1.174	1.169
87	1.021	1.018	1.021	1.019	1.021	1.022	1.026	1.026	1.026	1.026	1.030	1.038	1.046	1.049	1.052	1.049	1.048	1.046	1.042	1.043
88	1.010	1.005	1.009	1.005	1.010	1.007	1.012	1.009	1.012	1.007	1.012	1.009	1.013	1.016	1.016	1.013	1.016	1.013	1.015	1.010
89	1.005	1.005	1.007	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.007	1.005	1.007	1.005	1.007	1.007	1.009	1.007	1.009	1.007
90	1.009	1.004	1.007	1.005	1.007	1.004	1.007	1.005	1.005	1.004	1.004	1.002	1.005	1.002	1.005	1.013	1.012	1.005	1.005	1.005
91	1.009	1.005	1.009	1.005	1.007	1.004	1.005	1.005	1.009	1.013	1.026	1.025	1.018	1.005	1.004	1.002	1.004	1.002	1.004	1.000
92	1.010	1.010	1.007	1.005	1.007	1.007	1.007	1.007	1.010	1.024	1.050	1.058	1.037	1.018	1.005	1.004	1.000	1.000	0.999	1.000
93	1.013	1.010	1.013	1.009	1.010	1.005	1.007	1.005	1.007	1.005	1.012	1.012	1.012	1.005	1.004	1.000	1.000	0.999	1.000	0.999
94	1.010	1.010	1.007	1.010	1.009	1.009	1.005	1.009	1.005	1.007	1.005	1.005	1.005	1.004	1.004	1.004	1.002	1.002	1.002	1.002
95	1.009	1.013	1.009	1.012	1.005	1.010	1.005	1.009	1.005	1.004	1.004	1.005	1.005	1.005	1.004	1.004	1.004	1.004	1.004	1.004
96	1.013	1.013	1.013	1.013	1.013	1.013	1.012	1.010	1.010	1.007	1.009	1.007	1.005	1.005	1.002	1.004	1.002	1.005	1.004	1.007
97	1.018	1.018	1.015	1.013	1.013	1.013	1.012	1.013	1.012	1.012	1.010	1.010	1.009	1.010	1.010	1.012	1.012	1.009	1.012	1.013
98	1.019	1.018	1.015	1.016	1.013	1.013	1.012	1.012	1.010	1.013	1.012	1.012	1.012	1.012	1.015	1.024	1.024	1.024	1.022	1.022

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 119

IR SCAN TIME 6.41 SEC
INITIAL TEMP 538.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.992	0.993	0.992	0.992	0.988	0.992	0.988	0.990	0.988	0.990	0.988	0.988	0.986	0.988	0.986	0.988	0.984	0.986	0.984	0.986
65	0.988	0.988	0.986	0.986	0.986	0.984	0.984	0.984	0.984	0.984	0.982	0.984	0.984	0.984	0.980	0.982	0.980	0.984	0.980	0.982
66	0.982	0.982	0.980	0.982	0.978	0.980	0.976	0.978	0.978	0.978	0.976	0.976	0.974	0.976	0.974	0.974	0.974	0.974	0.972	0.972
67	0.972	0.974	0.972	0.972	0.972	0.969	0.969	0.967	0.967	0.967	0.967	0.967	0.963	0.967	0.965	0.967	0.965	0.967	0.965	0.965
68	0.967	0.963	0.963	0.960	0.960	0.958	0.960	0.955	0.960	0.958	0.963	0.955	0.960	0.955	0.958	0.955	0.960	0.958	0.958	0.958
69	0.960	0.963	0.960	0.955	0.960	0.958	0.958	0.958	0.958	0.958	0.958	0.955	0.955	0.953	0.955	0.955	0.950	0.950	0.953	0.945
70	0.958	0.955	0.955	0.955	0.955	0.955	0.953	0.955	0.953	0.953	0.953	0.953	0.953	0.953	0.950	0.950	0.950	0.950	0.948	0.948
71	0.955	0.950	0.953	0.953	0.953	0.955	0.953	0.953	0.953	0.953	0.953	0.953	0.950	0.948	0.948	0.950	0.950	0.945	0.948	0.950
72	0.955	0.955	0.955	0.953	0.955	0.955	0.953	0.953	0.950	0.953	0.950	0.950	0.950	0.953	0.950	0.950	0.950	0.950	0.950	0.948
73	0.958	0.958	0.955	0.953	0.953	0.953	0.953	0.953	0.953	0.953	0.953	0.953	0.950	0.950	0.948	0.950	0.948	0.950	0.948	0.948
74	0.963	0.958	0.955	0.955	0.955	0.955	0.953	0.955	0.953	0.955	0.953	0.953	0.950	0.953	0.950	0.950	0.950	0.950	0.950	0.950
75	0.978	0.967	0.955	0.958	0.950	0.953	0.948	0.953	0.948	0.953	0.948	0.950	0.948	0.948	0.948	0.950	0.950	0.950	0.950	0.950
76	1.002	0.992	0.980	0.967	0.960	0.955	0.955	0.953	0.953	0.950	0.950	0.948	0.950	0.950	0.948	0.948	0.950	0.945	0.948	0.945
77	1.000	1.000	1.002	0.993	0.982	0.967	0.960	0.955	0.953	0.950	0.953	0.950	0.950	0.950	0.950	0.948	0.950	0.948	0.950	0.948
78	0.999	0.999	0.997	1.000	0.999	0.995	0.984	0.972	0.963	0.955	0.953	0.950	0.948	0.950	0.950	0.948	0.950	0.950	0.948	0.948
79	0.999	0.999	0.997	0.999	0.999	0.999	0.997	0.995	0.988	0.980	0.972	0.963	0.958	0.955	0.960	0.950	0.950	0.950	0.948	0.950
80	1.000	0.999	0.997	0.999	0.997	0.999	0.999	0.999	1.000	1.000	0.997	0.993	0.984	0.978	0.972	0.967	0.958	0.963	0.958	0.958
81	1.018	1.005	1.000	1.000	1.000	1.002	1.004	1.004	1.002	1.002	1.002	1.004	0.999	0.999	0.995	0.993	0.990	0.986	0.980	0.976
82	1.070	1.030	1.007	1.002	0.999	1.002	1.000	1.002	1.000	1.000	1.002	1.002	1.000	1.004	1.002	0.999	0.999	1.000	0.997	0.997
83	1.137	1.099	1.052	1.019	1.005	1.002	1.002	0.999	1.000	1.000	1.000	1.002	1.002	1.000	1.000	1.000	0.995	0.999	0.993	0.999
84	1.162	1.155	1.129	1.060	1.037	1.013	1.004	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	0.997	0.999	0.997	0.997	0.995
85	1.166	1.166	1.162	1.143	1.099	1.049	1.018	1.005	0.999	0.999	0.999	1.000	1.000	0.999	1.000	1.000	0.999	0.999	0.997	0.997
86	1.163	1.152	1.144	1.134	1.111	1.069	1.030	1.009	1.004	1.000	1.002	1.002	1.002	1.000	0.999	0.997	1.000	0.997	0.999	0.997
87	1.041	1.038	1.036	1.030	1.025	1.018	1.012	1.007	1.010	1.010	1.009	1.004	0.999	0.995	0.997	0.993	0.995	0.995	0.997	0.995
88	1.012	1.010	1.007	1.005	1.005	1.004	1.004	1.002	1.005	1.005	1.004	0.999	0.997	0.993	0.995	0.993	0.993	0.995	0.995	0.995
89	1.009	1.005	1.005	1.004	1.004	1.004	1.007	1.000	1.002	0.999	1.000	0.999	0.997	0.995	0.997	0.995	0.997	0.995	0.995	0.995
90	1.013	1.013	1.010	1.005	1.005	1.004	1.005	1.005	1.004	1.002	1.000	0.997	0.999	0.993	0.995	0.993	0.997	0.993	0.999	0.993
91	1.004	1.004	1.004	1.000	1.004	1.004	1.005	1.004	1.004	1.002	1.004	0.999	0.997	0.995	0.997	0.995	0.997	0.995	0.997	0.995
92	1.000	1.000	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.999	1.000	0.997	0.995	0.993	0.995	0.993	0.993	0.993	0.995
93	1.000	0.999	1.002	1.000	1.000	1.002	1.002	1.000	1.000	0.999	1.000	0.997	0.999	0.995	0.997	0.993	0.995	0.993	0.997	0.993
94	1.000	1.002	1.002	1.002	1.000	1.002	1.000	1.000	0.999	1.000	0.999	0.997	0.995	0.997	0.995	0.995	0.993	0.995	0.993	0.993
95	1.004	1.005	1.004	1.002	1.000	1.000	1.000	1.000	0.995	0.999	0.999	0.999	0.997	0.997	0.995	0.997	0.995	0.995	0.995	0.995
96	1.005	1.005	1.005	1.004	1.000	1.000	0.999	0.999	0.999	1.000	0.999	1.000	0.997	0.997	0.995	0.997	0.995	0.997	0.993	0.995
97	1.013	1.012	1.009	1.005	1.004	1.004	1.000	1.002	1.000	1.000	1.000	1.000	0.997	0.997	0.993	0.997	0.993	0.995	0.992	0.995
98	1.025	1.024	1.019	1.013	1.009	1.009	1.005	1.005	1.004	1.004	1.004	1.002	1.000	1.000	0.997	0.999	0.997	0.997	0.997	0.995

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 119

IR SCAN TIME 6.41 SEC
INITIAL TEMP 538.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.984	0.984	0.984	0.984	0.984	0.986	0.982	0.984	0.980	0.982
65	0.978	0.980	0.980	0.980	0.978	0.978	0.976	0.980	0.976	0.978
66	0.972	0.972	0.972	0.972	0.969	0.972	0.969	0.969	0.967	0.969
67	0.963	0.963	0.965	0.963	0.963	0.963	0.960	0.963	0.963	0.963
68	0.958	0.958	0.958	0.955	0.953	0.958	0.955	0.953	0.955	0.955
69	0.953	0.945	0.953	0.945	0.950	0.945	0.953	0.945	0.950	0.942
70	0.945	0.948	0.945	0.948	0.948	0.948	0.948	0.948	0.948	0.948
71	0.942	0.945	0.948	0.945	0.948	0.948	0.945	0.948	0.945	0.945
72	0.950	0.948	0.948	0.948	0.948	0.950	0.948	0.948	0.948	0.945
73	0.950	0.948	0.948	0.945	0.948	0.945	0.948	0.948	0.948	0.945
74	0.948	0.948	0.948	0.950	0.948	0.950	0.948	0.948	0.945	0.948
75	0.948	0.948	0.948	0.950	0.950	0.948	0.948	0.945	0.945	0.948
76	0.948	0.942	0.948	0.942	0.948	0.942	0.945	0.945	0.948	0.945
77	0.950	0.948	0.948	0.948	0.948	0.945	0.948	0.948	0.945	0.945
78	0.948	0.948	0.945	0.948	0.948	0.948	0.945	0.948	0.945	0.945
79	0.948	0.948	0.948	0.950	0.948	0.950	0.948	0.948	0.945	0.948
80	0.955	0.953	0.953	0.950	0.950	0.950	0.950	0.953	0.953	0.953
81	0.972	0.965	0.963	0.958	0.955	0.955	0.953	0.953	0.950	0.948
82	0.993	0.993	0.988	0.984	0.980	0.978	0.974	0.969	0.965	0.965
83	0.993	0.997	0.995	0.995	0.999	0.995	0.999	0.988	0.988	0.988
84	0.997	0.995	0.995	0.992	0.997	0.995	0.997	0.995	0.997	0.995
85	0.995	0.997	0.992	0.997	0.995	0.997	0.995	0.995	0.995	0.995
86	0.999	0.997	0.999	0.995	0.997	0.995	0.995	0.993	0.995	0.995
87	0.997	0.993	0.997	0.997	0.997	0.997	0.997	0.993	0.997	0.995
88	0.997	0.995	0.995	0.995	0.997	0.995	0.997	0.995	0.997	0.995
89	0.997	0.995	0.997	0.993	0.995	0.995	0.999	0.993	0.997	0.997
90	0.997	0.993	0.997	0.992	0.997	0.993	0.997	0.995	0.997	0.997
91	0.997	0.995	0.997	0.995	0.995	0.995	0.997	0.995	0.997	0.995
92	0.995	0.997	0.993	0.995	0.995	0.997	0.995	0.995	0.995	0.995
93	0.997	0.995	0.999	0.995	0.997	0.995	0.997	0.995	0.997	0.993
94	0.995	0.997	0.995	0.995	0.995	0.995	0.995	0.999	0.995	0.995
95	0.993	0.995	0.995	0.993	0.993	0.995	0.995	0.997	0.995	0.997
96	0.995	0.995	0.995	0.997	0.995	0.999	0.997	0.999	0.999	1.000
97	0.992	0.995	0.993	0.997	0.997	0.995	0.997	1.000	1.002	1.004
98	0.997	0.999	0.997	1.000	1.000	1.002	1.002	1.002	1.004	1.005

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 6.41 SEC
GROUP 119 HREF = 0.253E-01

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	0.031	0.030	0.030	0.030	0.030	0.026	0.028	0.026	0.029	0.025	0.026	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.025	0.024
30	0.030	0.030	0.030	0.028	0.028	0.027	0.025	0.027	0.025	0.026	0.024	0.025	0.024	0.026	0.024	0.024	0.024	0.024	0.024	0.022
31	0.030	0.030	0.029	0.028	0.027	0.027	0.026	0.027	0.026	0.025	0.025	0.025	0.024	0.025	0.024	0.024	0.024	0.024	0.023	0.023
32	0.029	0.030	0.029	0.029	0.028	0.029	0.028	0.026	0.026	0.026	0.025	0.026	0.025	0.025	0.024	0.024	0.024	0.024	0.024	0.024
33	0.029	0.029	0.030	0.029	0.029	0.027	0.027	0.027	0.026	0.025	0.025	0.025	0.024	0.024	0.024	0.024	0.025	0.026	0.027	0.027
34	0.029	0.030	0.029	0.027	0.027	0.025	0.027	0.025	0.024	0.024	0.024	0.024	0.024	0.025	0.025	0.026	0.028	0.027	0.029	0.030	0.029
35	0.030	0.030	0.024	0.026	0.023	0.025	0.023	0.024	0.022	0.024	0.024	0.026	0.025	0.027	0.027	0.029	0.029	0.029	0.030	0.026
36	0.028	0.026	0.026	0.024	0.025	0.024	0.026	0.025	0.027	0.027	0.027	0.027	0.028	0.028	0.029	0.028	0.028	0.023	0.019	0.014
37	0.026	0.026	0.024	0.025	0.025	0.026	0.026	0.026	0.027	0.027	0.028	0.028	0.027	0.027	0.024	0.019	0.014	0.009	0.003	0.000
38	0.025	0.028	0.028	0.027	0.028	0.027	0.028	0.028	0.028	0.029	0.028	0.025	0.021	0.014	0.010	0.003	0.002	0.000	0.001	0.001
39	0.028	0.030	0.028	0.028	0.029	0.028	0.029	0.029	0.027	0.023	0.018	0.011	0.007	0.002	0.002	0.000	0.001	0.000	0.002	0.000
40	0.030	0.030	0.030	0.029	0.029	0.028	0.025	0.021	0.015	0.008	0.006	0.002	0.003	0.002	0.003	0.002	0.003	0.001	0.002	0.002
41	0.029	0.030	0.030	0.030	0.025	0.018	0.014	0.007	0.005	0.002	0.003	0.003	0.003	0.002	0.003	0.002	0.002	0.001	0.003	0.002
42	0.031	0.030	0.025	0.017	0.013	0.005	0.006	0.002	0.003	0.001	0.003	0.002	0.005	0.005	0.003	0.003	0.005	0.003	0.003	0.003
43	0.027	0.023	0.014	0.009	0.007	0.005	0.005	0.003	0.005	0.003	0.005	0.003	0.006	0.005	0.005	0.003	0.006	0.003	0.006	0.003
44	0.016	0.012	0.009	0.009	0.009	0.008	0.007	0.007	0.006	0.007	0.006	0.007	0.006	0.007	0.006	0.007	0.007	0.009	0.008	0.010
45	0.014	0.014	0.014	0.012	0.012	0.010	0.011	0.010	0.010	0.011	0.012	0.010	0.010	0.010	0.012	0.010	0.012	0.014	0.025	0.038
46	0.015	0.016	0.014	0.015	0.014	0.014	0.013	0.013	0.013	0.013	0.014	0.014	0.014	0.014	0.014	0.014	0.015	0.027	0.067	0.116
47	0.017	0.017	0.016	0.016	0.016	0.015	0.015	0.015	0.014	0.015	0.014	0.015	0.015	0.017	0.016	0.018	0.019	0.039	0.092	0.143
48	0.019	0.019	0.017	0.018	0.017	0.018	0.017	0.017	0.015	0.016	0.017	0.018	0.016	0.018	0.017	0.020	0.024	0.058	0.120	0.168
49	0.020	0.019	0.015	0.018	0.015	0.018	0.015	0.017	0.015	0.017	0.015	0.019	0.018	0.019	0.019	0.022	0.030	0.074	0.142	0.185
50	0.019	0.019	0.017	0.019	0.017	0.017	0.017	0.017	0.016	0.018	0.017	0.018	0.017	0.019	0.017	0.021	0.033	0.087	0.152	0.190
51	0.017	0.017	0.016	0.015	0.015	0.015	0.014	0.015	0.014	0.016	0.015	0.016	0.016	0.017	0.017	0.021	0.038	0.100	0.159	0.191
52	0.013	0.012	0.011	0.010	0.011	0.010	0.010	0.010	0.010	0.010	0.012	0.011	0.013	0.012	0.014	0.016	0.044	0.114	0.171	0.197
53	0.006	0.007	0.005	0.005	0.003	0.003	0.003	0.003	0.002	0.003	0.003	0.005	0.005	0.006	0.006	0.013	0.054	0.131	0.179	0.201
54	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.014	0.076	0.149	0.186	0.203
55	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.025	0.099	0.162	0.190	0.203
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.042	0.119	0.168	0.189	0.199
57	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.000	0.000	0.007	0.060	0.135	0.173	0.188	0.197
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.013	0.072	0.144	0.177	0.191	0.199
59	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.021	0.092	0.158	0.184	0.195	0.202
60	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.002	0.005	0.029	0.106	0.166	0.189	0.199	0.207
61	0.003	0.003	0.003	0.002	0.002	0.001	0.002	0.000	0.002	0.001	0.003	0.003	0.005	0.008	0.043	0.114	0.158	0.176	0.188	0.197
62	0.005	0.003	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.005	0.005	0.014	0.066	0.129	0.154	0.164	0.169	0.173
63	0.005	0.003	0.000	0.002	0.000	0.001	0.000	0.002	0.002	0.003	0.002	0.005	0.005	0.024	0.089	0.144	0.165	0.175	0.180	0.184

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 6.41 SEC
GROUP 119 HREF = 0.253E-01

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	0.023	0.024	0.023	0.023	0.022	0.023	0.020	0.023	0.020	0.021	0.021	0.022	0.022	0.023	0.022	0.025	0.026	0.026	0.026	0.027
30	0.024	0.023	0.023	0.024	0.022	0.023	0.023	0.024	0.024	0.025	0.030	0.027	0.027	0.028	0.027	0.027	0.029	0.027	0.026	0.025
31	0.023	0.022	0.023	0.024	0.025	0.027	0.027	0.027	0.028	0.029	0.029	0.030	0.030	0.027	0.024	0.024	0.020	0.018	0.014	0.013
32	0.026	0.026	0.028	0.029	0.029	0.030	0.030	0.030	0.030	0.028	0.025	0.024	0.019	0.016	0.013	0.010	0.005	0.002	0.002	0.002
33	0.028	0.030	0.029	0.030	0.029	0.028	0.025	0.023	0.019	0.015	0.012	0.008	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
34	0.030	0.029	0.026	0.024	0.020	0.016	0.011	0.007	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.024	0.020	0.014	0.010	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
36	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	0.001	0.000	0.002	0.000	0.002	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000	0.002	0.001	0.002	0.000	0.002	0.000
40	0.002	0.000	0.002	0.002	0.003	0.002	0.002	0.002	0.003	0.002	0.003	0.002	0.003	0.002	0.003	0.002	0.003	0.002	0.002	0.000
41	0.002	0.003	0.003	0.003	0.003	0.003	0.005	0.003	0.003	0.002	0.005	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.005	0.003
42	0.005	0.005	0.006	0.005	0.006	0.005	0.006	0.005	0.007	0.005	0.006	0.005	0.006	0.005	0.005	0.005	0.006	0.005	0.005	0.005
43	0.005	0.003	0.006	0.005	0.007	0.005	0.007	0.006	0.007	0.006	0.009	0.007	0.008	0.006	0.009	0.006	0.007	0.006	0.007	0.005
44	0.009	0.011	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.008	0.010	0.010	0.008	0.010	0.007	0.009	0.006	0.008
45	0.052	0.058	0.061	0.060	0.058	0.052	0.047	0.038	0.033	0.029	0.024	0.020	0.017	0.014	0.015	0.014	0.014	0.014	0.014	0.014
46	0.147	0.168	0.184	0.196	0.205	0.210	0.208	0.198	0.187	0.178	0.149	0.105	0.063	0.034	0.024	0.020	0.017	0.018	0.017	0.017
47	0.172	0.192	0.208	0.223	0.238	0.254	0.271	0.285	0.292	0.315	0.328	0.264	0.168	0.098	0.054	0.034	0.027	0.024	0.023	0.022
48	0.194	0.211	0.226	0.240	0.250	0.261	0.272	0.284	0.294	0.300	0.309	0.316	0.266	0.174	0.103	0.058	0.038	0.034	0.031	0.030
49	0.208	0.225	0.242	0.259	0.272	0.283	0.290	0.296	0.300	0.303	0.302	0.305	0.314	0.281	0.195	0.115	0.063	0.035	0.030	0.031
50	0.211	0.229	0.248	0.268	0.288	0.304	0.315	0.324	0.327	0.324	0.318	0.312	0.309	0.314	0.302	0.233	0.140	0.076	0.041	0.030
51	0.210	0.225	0.242	0.261	0.284	0.307	0.323	0.339	0.351	0.355	0.350	0.342	0.330	0.318	0.312	0.301	0.237	0.147	0.081	0.047
52	0.213	0.227	0.242	0.259	0.278	0.295	0.311	0.329	0.353	0.371	0.381	0.383	0.378	0.367	0.350	0.331	0.313	0.274	0.200	0.119
53	0.214	0.226	0.238	0.254	0.271	0.288	0.300	0.313	0.330	0.350	0.367	0.380	0.390	0.393	0.389	0.380	0.369	0.352	0.314	0.235
54	0.217	0.229	0.242	0.258	0.276	0.289	0.297	0.306	0.321	0.337	0.350	0.359	0.365	0.368	0.370	0.375	0.381	0.385	0.381	0.358
55	0.215	0.229	0.243	0.257	0.273	0.286	0.298	0.309	0.321	0.335	0.348	0.358	0.365	0.367	0.363	0.352	0.338	0.339	0.357	0.380
56	0.209	0.219	0.232	0.247	0.259	0.269	0.282	0.298	0.318	0.335	0.348	0.357	0.362	0.363	0.365	0.366	0.361	0.342	0.312	0.292
57	0.206	0.217	0.231	0.244	0.254	0.263	0.274	0.289	0.307	0.327	0.345	0.359	0.369	0.373	0.374	0.372	0.374	0.376	0.375	0.357
58	0.207	0.216	0.230	0.243	0.254	0.263	0.273	0.285	0.301	0.316	0.331	0.343	0.354	0.365	0.374	0.380	0.384	0.387	0.391	0.392
59	0.210	0.219	0.232	0.244	0.255	0.266	0.273	0.283	0.297	0.311	0.325	0.336	0.348	0.353	0.359	0.367	0.374	0.381	0.392	0.401
60	0.214	0.222	0.234	0.247	0.260	0.271	0.281	0.291	0.304	0.316	0.330	0.343	0.350	0.354	0.362	0.366	0.366	0.366	0.367	0.370
61	0.206	0.217	0.230	0.245	0.261	0.277	0.288	0.298	0.312	0.324	0.337	0.348	0.355	0.362	0.367	0.367	0.367	0.365	0.366	0.368
62	0.179	0.186	0.195	0.208	0.225	0.246	0.262	0.278	0.300	0.319	0.335	0.349	0.361	0.370	0.376	0.379	0.381	0.376	0.373	0.376
63	0.186	0.187	0.188	0.191	0.197	0.203	0.209	0.220	0.239	0.263	0.289	0.317	0.342	0.363	0.378	0.387	0.390	0.394	0.401	0.404

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 6.41 SEC
GROUP 119 HREF = 0.253E-01

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	0.026	0.027	0.026	0.024	0.024	0.022	0.020	0.019	0.016	0.014	0.012	0.011	0.008	0.007	0.006	0.005	0.002	0.002	0.000	0.000
30	0.024	0.020	0.018	0.016	0.012	0.012	0.010	0.007	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	0.009	0.006	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
33	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.003	0.002	0.003	0.002	0.003	0.001	0.002	0.002	0.002	0.001	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.003	0.003	0.003	0.003	0.002	0.002	0.003	0.002	0.002	0.001	0.002	0.001	0.002	0.001	0.002	0.000	0.001	0.000	0.002	0.000
42	0.006	0.005	0.005	0.005	0.006	0.003	0.003	0.002	0.003	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.002	0.000
43	0.007	0.006	0.007	0.005	0.006	0.005	0.006	0.007	0.006	0.005	0.006	0.003	0.003	0.003	0.003	0.002	0.003	0.002	0.003	0.001
44	0.006	0.008	0.007	0.008	0.006	0.008	0.005	0.007	0.003	0.008	0.006	0.006	0.006	0.006	0.006	0.005	0.005	0.006	0.006	0.005
45	0.014	0.012	0.013	0.011	0.012	0.010	0.012	0.010	0.011	0.010	0.010	0.009	0.009	0.008	0.010	0.008	0.010	0.008	0.009	0.008
46	0.016	0.017	0.016	0.016	0.017	0.015	0.014	0.014	0.014	0.014	0.013	0.014	0.013	0.014	0.013	0.013	0.013	0.013	0.012	0.012
47	0.021	0.020	0.020	0.020	0.018	0.018	0.016	0.017	0.015	0.016	0.015	0.014	0.014	0.015	0.014	0.014	0.014	0.014	0.014	0.014
48	0.026	0.025	0.024	0.022	0.022	0.020	0.018	0.019	0.017	0.017	0.017	0.016	0.016	0.016	0.016	0.016	0.015	0.015	0.014	0.015
49	0.032	0.031	0.030	0.026	0.024	0.021	0.020	0.019	0.018	0.018	0.017	0.018	0.017	0.016	0.016	0.017	0.015	0.016	0.016	0.017
50	0.027	0.027	0.030	0.031	0.030	0.028	0.024	0.023	0.020	0.020	0.019	0.019	0.017	0.019	0.018	0.018	0.017	0.017	0.016	0.017
51	0.028	0.026	0.024	0.025	0.026	0.030	0.030	0.027	0.023	0.019	0.017	0.018	0.017	0.017	0.016	0.017	0.016	0.017	0.015	0.016
52	0.064	0.035	0.025	0.024	0.024	0.024	0.025	0.027	0.025	0.018	0.014	0.012	0.012	0.010	0.011	0.008	0.011	0.010	0.011	0.011
53	0.143	0.079	0.043	0.028	0.024	0.023	0.022	0.024	0.025	0.024	0.014	0.009	0.003	0.003	0.002	0.002	0.000	0.002	0.003	0.006
54	0.289	0.187	0.103	0.054	0.030	0.024	0.024	0.024	0.024	0.024	0.024	0.013	0.007	0.000	0.000	0.000	0.000	0.000	0.002	0.003
55	0.384	0.339	0.235	0.132	0.070	0.038	0.028	0.024	0.024	0.023	0.024	0.024	0.017	0.006	0.002	0.002	0.002	0.000	0.003	0.006
56	0.312	0.349	0.350	0.273	0.163	0.086	0.046	0.030	0.026	0.023	0.023	0.024	0.025	0.020	0.010	0.003	0.002	0.002	0.005	0.007
57	0.314	0.266	0.259	0.285	0.264	0.177	0.100	0.056	0.032	0.026	0.023	0.021	0.022	0.026	0.023	0.012	0.003	0.002	0.003	0.005
58	0.392	0.377	0.333	0.269	0.232	0.229	0.183	0.107	0.056	0.032	0.026	0.020	0.019	0.018	0.023	0.023	0.015	0.007	0.003	0.002
59	0.401	0.398	0.397	0.392	0.358	0.292	0.217	0.145	0.084	0.046	0.030	0.023	0.019	0.015	0.016	0.017	0.021	0.015	0.010	0.002
60	0.377	0.388	0.399	0.404	0.409	0.409	0.387	0.325	0.233	0.143	0.079	0.043	0.025	0.019	0.014	0.014	0.014	0.018	0.016	0.011
61	0.364	0.352	0.336	0.327	0.340	0.366	0.388	0.393	0.376	0.328	0.245	0.144	0.074	0.039	0.024	0.015	0.014	0.014	0.016	0.015
62	0.376	0.377	0.373	0.355	0.318	0.277	0.260	0.282	0.320	0.336	0.313	0.242	0.143	0.072	0.039	0.024	0.014	0.013	0.011	0.013
63	0.401	0.391	0.388	0.391	0.385	0.373	0.341	0.285	0.230	0.210	0.230	0.248	0.226	0.166	0.097	0.053	0.027	0.017	0.013	0.011

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 6.41 SEC
GROUP 119 HREF = 0.253E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
33	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	0.002	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	0.002	0.001	0.002	0.001	0.002	0.001	0.001	0.002	0.002	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	0.003	0.005	0.003	0.003	0.002	0.005	0.002	0.003	0.003	0.003	0.003	0.002	0.002	0.003	0.001	0.003	0.002	0.002	0.002	0.002
45	0.008	0.007	0.009	0.006	0.008	0.006	0.008	0.008	0.008	0.008	0.007	0.007	0.008	0.006	0.008	0.007	0.008	0.005	0.008	0.007
46	0.012	0.012	0.011	0.012	0.010	0.011	0.010	0.011	0.010	0.013	0.007	0.012	0.007	0.012	0.008	0.011	0.007	0.011	0.008	0.011
47	0.014	0.014	0.014	0.014	0.013	0.014	0.012	0.013	0.013	0.013	0.012	0.012	0.012	0.012	0.012	0.014	0.012	0.013	0.012	0.013
48	0.014	0.015	0.014	0.015	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.013	0.014	0.014	0.014	0.013	0.014
49	0.015	0.016	0.015	0.015	0.014	0.015	0.014	0.015	0.014	0.015	0.014	0.014	0.014	0.014	0.014	0.015	0.014	0.014	0.014	0.015
50	0.016	0.017	0.016	0.017	0.015	0.016	0.015	0.015	0.014	0.015	0.015	0.016	0.014	0.015	0.014	0.015	0.014	0.015	0.015	0.016
51	0.015	0.016	0.016	0.017	0.016	0.017	0.016	0.016	0.016	0.016	0.016	0.015	0.015	0.016	0.016	0.016	0.015	0.016	0.015	0.016
52	0.014	0.012	0.014	0.014	0.016	0.015	0.017	0.016	0.017	0.016	0.016	0.016	0.017	0.016	0.016	0.016	0.016	0.015	0.016	0.014
53	0.008	0.012	0.013	0.014	0.014	0.015	0.015	0.016	0.014	0.016	0.014	0.017	0.015	0.015	0.014	0.017	0.014	0.016	0.014	0.016
54	0.008	0.010	0.012	0.014	0.015	0.015	0.016	0.015	0.017	0.016	0.017	0.016	0.018	0.017	0.016	0.016	0.016	0.016	0.015	0.015
55	0.009	0.011	0.014	0.014	0.015	0.015	0.016	0.017	0.016	0.017	0.018	0.018	0.017	0.017	0.017	0.015	0.016	0.014	0.016	0.014
56	0.009	0.011	0.013	0.014	0.014	0.014	0.016	0.015	0.015	0.014	0.015	0.015	0.016	0.014	0.016	0.014	0.014	0.013	0.013	0.012
57	0.007	0.008	0.009	0.009	0.010	0.010	0.010	0.010	0.011	0.010	0.010	0.009	0.009	0.009	0.010	0.008	0.009	0.008	0.008	0.007
58	0.003	0.005	0.005	0.005	0.006	0.005	0.006	0.005	0.006	0.005	0.005	0.003	0.005	0.003	0.005	0.005	0.005	0.003	0.003	0.002
59	0.002	0.002	0.002	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
61	0.014	0.007	0.003	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
62	0.014	0.012	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
63	0.011	0.012	0.012	0.008	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001

NASA/RI UH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR HEAT TRANSFER COEFFICIENT - H(.9IO)/HREF
IR SCAN TIME 6.41 SEC
HREF = 0.253E-01

GROUP 119

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
33	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	0.001	0.002	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.001	0.002	0.000	0.001
45	0.007	0.006	0.008	0.007	0.008	0.007	0.008	0.006	0.007	0.006	0.008	0.007	0.007	0.006	0.007	0.006	0.006	0.006	0.006	0.005
46	0.008	0.012	0.009	0.012	0.009	0.012	0.011	0.012	0.011	0.012	0.010	0.011	0.010	0.011	0.011	0.011	0.008	0.010	0.009	0.010
47	0.013	0.014	0.014	0.014	0.013	0.014	0.013	0.013	0.011	0.013	0.011	0.013	0.012	0.013	0.010	0.013	0.011	0.013	0.011	0.013
48	0.014	0.015	0.015	0.015	0.014	0.014	0.014	0.014	0.014	0.014	0.013	0.014	0.013	0.014	0.013	0.014	0.013	0.014	0.013	0.013
49	0.014	0.016	0.014	0.016	0.014	0.015	0.014	0.014	0.014	0.014	0.013	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.013	0.014
50	0.014	0.015	0.015	0.016	0.015	0.015	0.015	0.015	0.014	0.015	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
51	0.015	0.015	0.015	0.015	0.014	0.014	0.014	0.014	0.014	0.013	0.012	0.013	0.013	0.012	0.012	0.013	0.012	0.013	0.011	0.012
52	0.015	0.015	0.015	0.014	0.014	0.011	0.011	0.009	0.009	0.008	0.008	0.007	0.008	0.006	0.007	0.006	0.008	0.006	0.007	0.006
53	0.013	0.014	0.012	0.013	0.010	0.009	0.005	0.005	0.002	0.002	0.001	0.001	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000
54	0.014	0.014	0.013	0.011	0.010	0.005	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
55	0.014	0.013	0.013	0.011	0.009	0.006	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56	0.013	0.011	0.011	0.009	0.008	0.005	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
57	0.007	0.006	0.006	0.003	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	0.003	0.002	0.003	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
61	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
62	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
63	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 6.41 SEC
HREF = 0.253E-01.

GROUP 119

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
33	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.001
45	0.006	0.006	0.007	0.005	0.005	0.005	0.006	0.005	0.005	0.005
46	0.010	0.011	0.009	0.010	0.009	0.009	0.009	0.009	0.009	0.009
47	0.011	0.012	0.010	0.013	0.012	0.012	0.011	0.012	0.011	0.012
48	0.012	0.013	0.013	0.013	0.012	0.013	0.011	0.013	0.010	0.012
49	0.014	0.014	0.013	0.013	0.013	0.014	0.013	0.014	0.013	0.013
50	0.014	0.014	0.013	0.014	0.012	0.013	0.013	0.013	0.011	0.013
51	0.011	0.012	0.010	0.012	0.010	0.011	0.010	0.010	0.009	0.009
52	0.007	0.005	0.005	0.005	0.005	0.003	0.005	0.003	0.003	0.002
53	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
55	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
61	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
62	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
63	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 6.41 SEC
GROUP 119 HREF = 0.2536-01

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.002	0.002	0.000	0.001	0.000	0.001	0.001	0.000	0.000	0.001	0.000	0.002	0.003	0.035	0.105	0.150	0.167	0.178	0.186	0.193
65	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.006	0.051	0.121	0.154	0.167	0.176	0.185	0.192
66	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.006	0.064	0.129	0.157	0.168	0.178	0.185	0.191
67	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.009	0.076	0.134	0.158	0.168	0.177	0.184	0.191
68	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.011	0.079	0.127	0.147	0.158	0.165	0.173	0.179
69	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.024	0.092	0.131	0.145	0.156	0.162	0.168	0.172
70	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.049	0.111	0.137	0.149	0.158	0.165	0.171	0.176
71	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.068	0.122	0.140	0.152	0.159	0.165	0.172	0.178
72	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.018	0.090	0.130	0.145	0.154	0.162	0.168	0.176	0.181
73	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.032	0.098	0.129	0.140	0.149	0.157	0.166	0.173	0.178
74	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.036	0.092	0.115	0.124	0.131	0.138	0.146	0.152	0.156
75	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.035	0.077	0.094	0.100	0.107	0.111	0.117	0.122	0.125
76	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.038	0.068	0.079	0.085	0.088	0.092	0.093	0.096	0.098
77	0.001	0.003	0.009	0.006	0.005	0.007	0.005	0.005	0.005	0.005	0.008	0.056	0.081	0.087	0.091	0.093	0.095	0.095	0.097	0.097
78	0.014	0.027	0.017	0.027	0.032	0.026	0.032	0.025	0.025	0.025	0.028	0.080	0.100	0.108	0.111	0.114	0.116	0.119	0.120	0.121
79	0.030	0.033	0.015	0.029	0.043	0.042	0.035	0.045	0.030	0.010	0.051	0.100	0.116	0.123	0.128	0.132	0.136	0.140	0.143	0.146
80	0.038	0.051	0.041	0.036	0.040	0.048	0.048	0.040	0.042	0.040	0.076	0.112	0.124	0.130	0.135	0.140	0.145	0.149	0.155	0.160
81	0.044	0.056	0.061	0.054	0.041	0.036	0.041	0.041	0.043	0.058	0.093	0.119	0.128	0.134	0.138	0.141	0.145	0.149	0.154	0.160
82	0.049	0.054	0.066	0.065	0.044	0.035	0.024	0.022	0.030	0.053	0.091	0.115	0.123	0.129	0.133	0.137	0.141	0.145	0.149	0.154
83	0.058	0.051	0.058	0.061	0.049	0.037	0.022	0.011	0.017	0.046	0.087	0.107	0.114	0.117	0.121	0.126	0.132	0.141	0.149	0.149
84	0.065	0.043	0.046	0.047	0.042	0.027	0.015	0.009	0.019	0.035	0.076	0.090	0.097	0.106	0.111	0.115	0.118	0.122	0.128	0.125
85	0.048	0.035	0.038	0.040	0.034	0.025	0.014	0.020	0.025	0.027	0.031	0.034	0.034	0.037	0.040	0.044	0.047	0.052	0.058	0.065
86	0.020	0.020	0.026	0.030	0.027	0.019	0.018	0.021	0.027	0.025	0.025	0.024	0.024	0.024	0.024	0.023	0.024	0.023	0.024	0.024
87	0.009	0.009	0.010	0.012	0.013	0.010	0.014	0.023	0.029	0.026	0.025	0.024	0.024	0.024	0.023	0.023	0.023	0.023	0.023	0.023
88	0.002	0.001	0.000	0.001	0.006	0.006	0.012	0.020	0.028	0.029	0.026	0.024	0.024	0.023	0.023	0.023	0.022	0.019	0.020	0.019
89	0.002	0.002	0.002	0.002	0.003	0.007	0.011	0.017	0.028	0.029	0.028	0.026	0.024	0.024	0.023	0.023	0.022	0.021	0.021	0.021
90	0.000	0.000	0.000	0.000	0.002	0.005	0.008	0.013	0.024	0.028	0.029	0.026	0.026	0.024	0.023	0.023	0.022	0.021	0.022	0.023
91	0.000	0.000	0.000	0.000	0.000	0.002	0.003	0.008	0.021	0.027	0.030	0.030	0.029	0.026	0.025	0.024	0.024	0.024	0.022	0.022
92	0.002	0.002	0.002	0.002	0.002	0.003	0.000	0.007	0.016	0.028	0.029	0.030	0.030	0.028	0.025	0.026	0.024	0.024	0.023	0.023
93	0.003	0.001	0.001	0.000	0.003	0.005	0.008	0.009	0.021	0.027	0.029	0.030	0.030	0.030	0.030	0.028	0.026	0.024	0.024	0.020
94	0.016	0.016	0.014	0.015	0.014	0.015	0.015	0.019	0.026	0.028	0.029	0.030	0.032	0.031	0.033	0.030	0.028	0.026	0.023	0.019
95	0.027	0.027	0.025	0.027	0.026	0.024	0.023	0.024	0.030	0.032	0.030	0.031	0.033	0.034	0.034	0.033	0.032	0.029	0.024	0.018
96	0.033	0.032	0.031	0.030	0.030	0.028	0.025	0.027	0.032	0.033	0.034	0.035	0.037	0.036	0.038	0.038	0.034	0.030	0.026	0.019
97	0.034	0.034	0.033	0.032	0.033	0.029	0.027	0.028	0.030	0.030	0.032	0.033	0.040	0.041	0.038	0.039	0.036	0.031	0.030	0.024
98	0.039	0.037	0.038	0.035	0.033	0.031	0.029	0.028	0.032	0.030	0.028	0.029	0.032	0.034	0.038	0.038	0.034	0.032	0.031	0.030

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 6.41 SEC
GROUP 119 HREF = 0.253E-01

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	0.198	0.204	0.210	0.219	0.225	0.226	0.219	0.211	0.205	0.202	0.200	0.207	0.218	0.235	0.257	0.282	0.310	0.342	0.370	0.392
65	0.198	0.206	0.216	0.230	0.242	0.250	0.258	0.263	0.264	0.266	0.255	0.237	0.214	0.194	0.176	0.170	0.170	0.183	0.200	0.225
66	0.198	0.207	0.216	0.229	0.240	0.249	0.259	0.269	0.279	0.289	0.300	0.307	0.309	0.301	0.282	0.255	0.223	0.193	0.168	0.154
67	0.198	0.208	0.220	0.231	0.240	0.249	0.259	0.269	0.280	0.288	0.296	0.307	0.318	0.324	0.325	0.325	0.324	0.318	0.299	0.270
68	0.188	0.201	0.216	0.233	0.247	0.251	0.255	0.261	0.281	0.297	0.306	0.313	0.324	0.330	0.332	0.335	0.337	0.341	0.341	0.343
69	0.180	0.190	0.200	0.209	0.220	0.232	0.244	0.255	0.270	0.289	0.309	0.322	0.332	0.341	0.348	0.352	0.355	0.358	0.355	0.355
70	0.183	0.194	0.201	0.207	0.215	0.223	0.230	0.236	0.241	0.248	0.255	0.266	0.273	0.280	0.285	0.291	0.302	0.314	0.326	0.337
71	0.184	0.196	0.205	0.211	0.217	0.226	0.234	0.240	0.246	0.250	0.253	0.253	0.252	0.246	0.238	0.233	0.229	0.226	0.226	0.230
72	0.187	0.198	0.207	0.214	0.221	0.231	0.240	0.249	0.257	0.264	0.270	0.275	0.276	0.276	0.268	0.258	0.250	0.242	0.230	0.216
73	0.186	0.196	0.204	0.211	0.219	0.230	0.242	0.253	0.262	0.270	0.275	0.279	0.284	0.287	0.288	0.289	0.288	0.287	0.284	0.280
74	0.162	0.168	0.177	0.185	0.192	0.199	0.211	0.223	0.233	0.241	0.248	0.255	0.266	0.274	0.280	0.283	0.285	0.288	0.291	0.294
75	0.128	0.133	0.138	0.145	0.151	0.157	0.163	0.171	0.178	0.184	0.187	0.192	0.199	0.206	0.212	0.217	0.221	0.228	0.233	0.239
76	0.100	0.103	0.105	0.108	0.113	0.116	0.119	0.122	0.126	0.129	0.132	0.134	0.137	0.139	0.142	0.143	0.143	0.144	0.147	0.149
77	0.098	0.099	0.099	0.100	0.102	0.104	0.105	0.106	0.107	0.107	0.107	0.107	0.107	0.107	0.109	0.109	0.107	0.107	0.107	0.107
78	0.122	0.122	0.120	0.120	0.121	0.122	0.121	0.120	0.119	0.117	0.115	0.113	0.109	0.107	0.106	0.106	0.103	0.102	0.100	0.102
79	0.149	0.151	0.153	0.155	0.155	0.157	0.157	0.157	0.154	0.153	0.148	0.143	0.137	0.131	0.125	0.121	0.114	0.110	0.107	0.105
80	0.165	0.170	0.176	0.180	0.184	0.189	0.194	0.199	0.201	0.201	0.199	0.195	0.189	0.182	0.175	0.167	0.159	0.151	0.141	0.132
81	0.166	0.173	0.179	0.187	0.193	0.201	0.209	0.217	0.224	0.230	0.235	0.237	0.237	0.236	0.233	0.229	0.222	0.215	0.207	0.198
82	0.160	0.165	0.172	0.179	0.188	0.197	0.206	0.215	0.224	0.232	0.238	0.245	0.249	0.252	0.255	0.257	0.259	0.260	0.259	0.258
83	0.146	0.150	0.155	0.160	0.166	0.175	0.182	0.190	0.198	0.206	0.212	0.217	0.221	0.225	0.228	0.230	0.232	0.234	0.238	0.241
84	0.123	0.125	0.127	0.129	0.133	0.135	0.139	0.149	0.159	0.166	0.172	0.175	0.177	0.179	0.181	0.182	0.183	0.183	0.184	0.186
85	0.071	0.077	0.082	0.089	0.096	0.101	0.103	0.108	0.114	0.123	0.131	0.136	0.139	0.143	0.146	0.149	0.151	0.153	0.154	0.156
86	0.024	0.024	0.025	0.025	0.027	0.027	0.028	0.026	0.028	0.027	0.030	0.033	0.034	0.031	0.033	0.034	0.038	0.038	0.041	0.038
87	0.024	0.023	0.024	0.023	0.022	0.023	0.022	0.023	0.022	0.020	0.020	0.019	0.020	0.019	0.020	0.020	0.020	0.019	0.021	0.019
88	0.021	0.022	0.023	0.024	0.024	0.024	0.024	0.022	0.023	0.020	0.020	0.019	0.020	0.019	0.019	0.019	0.019	0.018	0.019	0.018
89	0.022	0.021	0.022	0.021	0.023	0.022	0.024	0.023	0.021	0.019	0.019	0.018	0.019	0.018	0.019	0.018	0.019	0.017	0.019	0.018
90	0.023	0.024	0.023	0.023	0.022	0.020	0.022	0.023	0.024	0.023	0.023	0.023	0.023	0.021	0.019	0.017	0.019	0.018	0.018	0.018
91	0.023	0.023	0.024	0.024	0.024	0.023	0.021	0.021	0.022	0.024	0.030	0.059	0.088	0.077	0.046	0.026	0.021	0.017	0.017	0.016
92	0.021	0.022	0.021	0.024	0.023	0.023	0.023	0.022	0.023	0.022	0.024	0.041	0.071	0.070	0.045	0.029	0.023	0.020	0.018	0.018
93	0.021	0.017	0.021	0.020	0.023	0.020	0.023	0.022	0.025	0.023	0.024	0.021	0.023	0.019	0.021	0.017	0.018	0.016	0.018	0.017
94	0.017	0.018	0.019	0.021	0.022	0.023	0.024	0.024	0.025	0.025	0.024	0.024	0.024	0.023	0.020	0.019	0.017	0.017	0.015	0.015
95	0.017	0.016	0.017	0.020	0.023	0.023	0.024	0.024	0.025	0.025	0.026	0.025	0.024	0.024	0.023	0.021	0.021	0.019	0.018	0.018
96	0.017	0.019	0.021	0.022	0.024	0.026	0.026	0.028	0.027	0.028	0.028	0.027	0.026	0.024	0.024	0.022	0.021	0.020	0.019	0.018
97	0.024	0.024	0.024	0.026	0.026	0.026	0.028	0.028	0.029	0.029	0.029	0.028	0.028	0.026	0.024	0.023	0.022	0.019	0.019	0.019
98	0.030	0.030	0.030	0.030	0.031	0.030	0.032	0.032	0.031	0.030	0.030	0.029	0.029	0.027	0.026	0.024	0.023	0.024	0.028	0.030

IR HEAT TRANSFER COEFFICIENT - H(.9IO)/HREF
IR SCAN TIME 6.41 SEC
HREF = 0.253E-01.

GROUP 119

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	0.403	0.404	0.408	0.408	0.408	0.410	0.405	0.393	0.369	0.325	0.260	0.195	0.158	0.151	0.120	0.068	0.034	0.023	0.014	0.013
65	0.250	0.265	0.319	0.345	0.368	0.379	0.386	0.392	0.393	0.394	0.392	0.370	0.317	0.243	0.171	0.117	0.070	0.038	0.023	0.016
66	0.149	0.149	0.155	0.167	0.183	0.202	0.224	0.247	0.269	0.296	0.326	0.357	0.376	0.377	0.351	0.294	0.216	0.137	0.073	0.036
67	0.236	0.203	0.178	0.163	0.160	0.158	0.156	0.158	0.161	0.166	0.175	0.187	0.211	0.250	0.288	0.305	0.293	0.261	0.210	0.130
68	0.343	0.338	0.323	0.292	0.251	0.211	0.181	0.163	0.158	0.156	0.157	0.156	0.154	0.152	0.154	0.164	0.189	0.222	0.236	0.217
69	0.358	0.360	0.359	0.356	0.351	0.339	0.317	0.283	0.243	0.206	0.179	0.162	0.155	0.151	0.149	0.149	0.149	0.147	0.147	0.154
70	0.349	0.359	0.368	0.373	0.375	0.372	0.368	0.360	0.347	0.333	0.311	0.275	0.233	0.198	0.172	0.159	0.155	0.153	0.151	0.150
71	0.237	0.248	0.262	0.277	0.294	0.310	0.322	0.336	0.349	0.357	0.364	0.362	0.354	0.336	0.305	0.266	0.223	0.187	0.164	0.153
72	0.200	0.189	0.180	0.175	0.175	0.178	0.185	0.197	0.211	0.226	0.241	0.261	0.282	0.301	0.312	0.315	0.314	0.307	0.285	0.250
73	0.271	0.259	0.242	0.221	0.197	0.176	0.158	0.147	0.140	0.139	0.140	0.145	0.150	0.156	0.161	0.168	0.180	0.192	0.200	0.207
74	0.296	0.298	0.298	0.296	0.287	0.272	0.253	0.227	0.201	0.180	0.159	0.140	0.126	0.118	0.115	0.113	0.113	0.116	0.117	0.120
75	0.247	0.255	0.262	0.269	0.275	0.277	0.275	0.272	0.267	0.256	0.244	0.227	0.202	0.177	0.153	0.133	0.117	0.107	0.102	0.099
76	0.153	0.155	0.159	0.164	0.171	0.178	0.184	0.189	0.193	0.196	0.198	0.200	0.202	0.198	0.192	0.182	0.169	0.151	0.133	0.116
77	0.108	0.107	0.108	0.107	0.108	0.107	0.108	0.107	0.109	0.108	0.110	0.111	0.115	0.118	0.120	0.123	0.126	0.127	0.128	0.127
78	0.101	0.102	0.101	0.099	0.099	0.098	0.096	0.095	0.094	0.093	0.093	0.093	0.092	0.091	0.088	0.090	0.090	0.091	0.091	0.093
79	0.104	0.103	0.102	0.101	0.100	0.099	0.098	0.096	0.096	0.095	0.093	0.093	0.091	0.091	0.089	0.090	0.090	0.090	0.090	0.090
80	0.126	0.120	0.114	0.110	0.106	0.104	0.101	0.100	0.097	0.098	0.096	0.095	0.094	0.094	0.093	0.093	0.093	0.093	0.093	0.093
81	0.188	0.177	0.166	0.156	0.144	0.134	0.124	0.116	0.110	0.106	0.103	0.101	0.099	0.097	0.098	0.097	0.097	0.096	0.096	0.096
82	0.256	0.253	0.247	0.240	0.229	0.217	0.202	0.187	0.171	0.155	0.141	0.128	0.118	0.111	0.107	0.104	0.102	0.100	0.099	0.099
83	0.246	0.251	0.257	0.263	0.267	0.269	0.270	0.269	0.262	0.254	0.242	0.226	0.209	0.192	0.174	0.158	0.143	0.131	0.121	0.112
84	0.188	0.190	0.193	0.196	0.199	0.201	0.205	0.207	0.211	0.214	0.218	0.222	0.225	0.226	0.226	0.225	0.222	0.216	0.208	0.197
85	0.158	0.160	0.162	0.163	0.165	0.164	0.164	0.161	0.159	0.157	0.155	0.153	0.151	0.150	0.149	0.149	0.149	0.152	0.155	0.161
86	0.039	0.038	0.039	0.043	0.047	0.048	0.051	0.052	0.055	0.056	0.058	0.060	0.061	0.063	0.065	0.066	0.066	0.067	0.070	0.071
87	0.021	0.019	0.020	0.019	0.019	0.018	0.019	0.019	0.019	0.017	0.018	0.015	0.017	0.014	0.016	0.014	0.014	0.014	0.015	0.014
88	0.019	0.018	0.019	0.018	0.019	0.017	0.016	0.014	0.015	0.014	0.014	0.012	0.014	0.012	0.012	0.009	0.010	0.005	0.008	0.003
89	0.019	0.017	0.017	0.016	0.017	0.016	0.016	0.014	0.014	0.013	0.014	0.011	0.011	0.010	0.010	0.006	0.008	0.005	0.006	0.003
90	0.020	0.019	0.019	0.019	0.020	0.018	0.018	0.017	0.018	0.015	0.015	0.014	0.015	0.013	0.012	0.009	0.008	0.005	0.006	0.003
91	0.016	0.016	0.017	0.017	0.019	0.018	0.021	0.019	0.019	0.018	0.023	0.034	0.042	0.032	0.022	0.016	0.014	0.010	0.010	0.006
92	0.016	0.016	0.015	0.016	0.015	0.015	0.015	0.014	0.015	0.020	0.043	0.062	0.053	0.030	0.019	0.014	0.013	0.010	0.009	
93	0.019	0.018	0.020	0.018	0.019	0.017	0.018	0.015	0.015	0.014	0.014	0.014	0.014	0.014	0.013	0.010	0.011	0.010	0.011	0.009
94	0.014	0.016	0.015	0.016	0.015	0.018	0.016	0.017	0.015	0.016	0.014	0.014	0.013	0.014	0.012	0.012	0.009	0.010	0.008	0.008
95	0.015	0.016	0.015	0.016	0.016	0.017	0.016	0.017	0.017	0.016	0.016	0.015	0.014	0.014	0.013	0.013	0.010	0.010	0.008	0.010
96	0.017	0.019	0.018	0.017	0.017	0.018	0.017	0.018	0.017	0.018	0.017	0.017	0.015	0.016	0.015	0.014	0.014	0.013	0.011	0.011
97	0.018	0.018	0.017	0.018	0.017	0.019	0.017	0.018	0.017	0.018	0.017	0.017	0.015	0.014	0.014	0.014	0.014	0.014	0.014	0.013
98	0.027	0.024	0.019	0.017	0.017	0.016	0.018	0.018	0.018	0.017	0.017	0.016	0.015	0.015	0.014	0.014	0.013	0.013	0.012	0.013

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 6.41 SEC
HREF = 0.253E-01

GROUP 119

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.010	0.011	0.011	0.013	0.007	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
65	0.012	0.010	0.009	0.011	0.011	0.010	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
66	0.019	0.014	0.010	0.009	0.009	0.011	0.009	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
67	0.062	0.029	0.015	0.011	0.005	0.008	0.007	0.010	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
68	0.153	0.087	0.049	0.024	0.014	0.008	0.007	0.007	0.008	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
69	0.172	0.167	0.118	0.058	0.025	0.013	0.009	0.006	0.006	0.005	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
70	0.148	0.145	0.136	0.099	0.051	0.024	0.012	0.007	0.005	0.006	0.003	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
71	0.146	0.141	0.136	0.128	0.100	0.056	0.026	0.013	0.007	0.003	0.002	0.003	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001
72	0.211	0.175	0.149	0.133	0.122	0.103	0.066	0.030	0.014	0.009	0.005	0.003	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000
73	0.208	0.203	0.192	0.179	0.161	0.144	0.121	0.086	0.047	0.024	0.012	0.008	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002
74	0.123	0.127	0.132	0.138	0.140	0.145	0.143	0.134	0.105	0.068	0.034	0.015	0.003	0.005	0.001	0.002	0.002	0.002	0.002	0.002
75	0.096	0.095	0.094	0.094	0.094	0.095	0.095	0.097	0.096	0.083	0.056	0.025	0.012	0.006	0.003	0.002	0.002	0.001	0.001	0.001
76	0.105	0.095	0.091	0.088	0.087	0.087	0.086	0.084	0.082	0.081	0.077	0.061	0.033	0.014	0.008	0.003	0.002	0.000	0.001	0.000
77	0.125	0.121	0.116	0.110	0.106	0.101	0.095	0.089	0.085	0.083	0.083	0.081	0.071	0.046	0.022	0.008	0.003	0.000	0.002	0.000
78	0.094	0.097	0.100	0.103	0.106	0.107	0.108	0.110	0.109	0.108	0.106	0.104	0.099	0.092	0.069	0.038	0.016	0.006	0.000	0.000
79	0.090	0.091	0.090	0.090	0.089	0.089	0.091	0.094	0.094	0.095	0.097	0.100	0.104	0.109	0.109	0.092	0.056	0.026	0.009	0.002
80	0.093	0.094	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.092	0.092	0.091	0.091	0.091	0.091	0.076	0.049	0.022	0.008
81	0.094	0.095	0.094	0.096	0.096	0.097	0.096	0.098	0.097	0.097	0.096	0.096	0.095	0.095	0.094	0.095	0.093	0.086	0.062	0.030
82	0.097	0.097	0.097	0.097	0.096	0.097	0.097	0.097	0.097	0.098	0.099	0.100	0.100	0.100	0.100	0.100	0.102	0.103	0.096	0.080
83	0.106	0.103	0.101	0.099	0.098	0.097	0.096	0.096	0.096	0.098	0.099	0.101	0.103	0.104	0.105	0.106	0.107	0.109	0.110	0.108
84	0.185	0.171	0.157	0.145	0.133	0.123	0.115	0.109	0.106	0.103	0.103	0.102	0.103	0.104	0.107	0.109	0.113	0.116	0.116	0.116
85	0.166	0.172	0.178	0.183	0.186	0.187	0.185	0.181	0.175	0.168	0.161	0.154	0.147	0.139	0.134	0.129	0.126	0.124	0.121	0.121
86	0.074	0.076	0.079	0.082	0.090	0.099	0.111	0.124	0.138	0.151	0.168	0.186	0.189	0.182	0.181	0.174	0.157	0.139	0.128	0.123
87	0.014	0.012	0.014	0.013	0.014	0.014	0.017	0.017	0.017	0.017	0.020	0.025	0.030	0.033	0.034	0.033	0.032	0.030	0.028	0.029
88	0.007	0.003	0.006	0.003	0.007	0.005	0.008	0.006	0.008	0.005	0.008	0.006	0.009	0.011	0.011	0.009	0.011	0.009	0.010	0.007
89	0.003	0.003	0.005	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.005	0.003	0.005	0.003	0.005	0.005	0.006	0.005	0.006	0.005
90	0.006	0.002	0.005	0.003	0.005	0.002	0.005	0.003	0.003	0.002	0.002	0.001	0.003	0.001	0.003	0.009	0.008	0.003	0.003	0.003
91	0.006	0.003	0.006	0.003	0.005	0.002	0.003	0.003	0.006	0.009	0.017	0.016	0.012	0.003	0.002	0.001	0.002	0.001	0.002	0.000
92	0.007	0.007	0.005	0.003	0.005	0.005	0.005	0.005	0.007	0.015	0.034	0.039	0.024	0.012	0.003	0.002	0.000	0.000	0.000	0.000
93	0.009	0.007	0.009	0.006	0.007	0.003	0.005	0.003	0.005	0.003	0.008	0.008	0.008	0.003	0.002	0.000	0.000	0.000	0.000	0.000
94	0.007	0.007	0.005	0.007	0.006	0.006	0.003	0.006	0.003	0.005	0.003	0.003	0.003	0.002	0.002	0.002	0.001	0.001	0.001	0.001
95	0.006	0.009	0.006	0.008	0.003	0.007	0.003	0.006	0.003	0.002	0.002	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002
96	0.009	0.009	0.009	0.009	0.009	0.009	0.008	0.007	0.007	0.005	0.006	0.005	0.003	0.003	0.001	0.002	0.001	0.003	0.002	0.005
97	0.012	0.012	0.010	0.009	0.009	0.009	0.008	0.009	0.008	0.008	0.007	0.007	0.006	0.007	0.007	0.008	0.008	0.006	0.008	0.009
98	0.013	0.012	0.010	0.011	0.009	0.009	0.008	0.008	0.007	0.009	0.008	0.008	0.008	0.008	0.010	0.015	0.015	0.015	0.014	0.014

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 6.41 SEC
HREF = 0.253E-01

GROUP 119

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
65	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
66	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
67	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
68	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
69	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
70	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
71	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
72	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
74	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
75	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
76	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
77	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
78	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
79	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
80	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
81	0.012	0.003	0.000	0.000	0.000	0.001	0.002	0.002	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
82	0.047	0.020	0.005	0.001	0.001	0.001	0.000	0.001	0.000	0.000	0.001	0.001	0.000	0.002	0.001	0.001	0.001	0.000	0.000	0.000
83	0.097	0.068	0.034	0.013	0.003	0.001	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84	0.117	0.112	0.091	0.055	0.024	0.009	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
85	0.121	0.121	0.117	0.103	0.068	0.033	0.012	0.003	0.003	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
86	0.118	0.110	0.104	0.095	0.077	0.047	0.020	0.006	0.002	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
87	0.027	0.025	0.024	0.020	0.016	0.012	0.008	0.005	0.007	0.007	0.006	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
88	0.008	0.007	0.005	0.003	0.003	0.002	0.002	0.001	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
89	0.006	0.003	0.003	0.002	0.002	0.002	0.005	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.009	0.009	0.007	0.003	0.003	0.002	0.003	0.003	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91	0.002	0.002	0.002	0.000	0.002	0.002	0.003	0.002	0.002	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
92	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
93	0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
94	0.000	0.001	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	0.002	0.003	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
96	0.003	0.003	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97	0.009	0.008	0.006	0.003	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
98	0.016	0.015	0.013	0.009	0.006	0.006	0.003	0.003	0.002	0.002	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

IR HEAT TRANSFER COEFFICIENT - H(,9TO)/HREF
IR SCAN TIME 6.41 SEC
HREF = 0.253E-01.

GROUP 119

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
65	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
66	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
67	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
68	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
69	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
70	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
71	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
72	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
74	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
75	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
76	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
77	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
78	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
79	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
80	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
81	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
82	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
83	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
85	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
86	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
87	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
88	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
89	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
92	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
93	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
94	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
96	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.002
98	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.002	0.003

NASA/RI UH90 TRANSITION TEST
V41B-P4A
AEDC, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

GROUP	* * * * TITLE TYPE	MODEL DESCRIPTION * * * * GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCK1/2	HR	MIN	SEC
122	RSI AFT	0.02	0.015	0.02	29.98	0.053	6	40	51

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/F FT-1	HREF BTU/FT2-SEC-R	INITIAL TEMP DEG R
7.94	211.07	1275.67	93.74	0.0227	3769.	0.203E-04	0.755E-07	0.101E+07	0.206E-01	545.7

IR CAMERA INFORMATION

MOUNTING LOCATION	260
F STOP	1.8
LENS-DEG	15
SENSITIVITY	500.
BLACK LEVEL VOLTAGE	1.3424
LINE SCAN PHI	90
MODEL EMISSIVITY	0.96
REF EMISSIVITY	0.94
WINDOW FACTOR	0.860

TIME RECORDS

LIFT OFF	0.00
CENTER LINE	1.99
IR SCAN TIME	16.20
DELTA TIME,SEC	15.08
PHOTO 1 TIME	641
PHOTO 2 TIME	0
PHOTO 3 TIME	0
PHOTO 4 TIME	0

REFERENCE TARGET INFORMATION

TCR5	502.02
TCR6	-228.49

DIGITAL DATA AREA PRINTOUT LOCATION

LINE 29 THROUGH 98
POINT 1 THROUGH 110

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 122

IR SCAN TIME 15.08 SEC
INITIAL TEMP 545.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	1.012	1.013	1.012	1.009	1.009	1.009	1.008	1.009	1.006	1.008	1.006	1.002	1.008	1.009	1.005	1.003	1.006	1.005	1.006	1.002
30	1.012	1.010	1.012	1.009	1.009	1.008	1.009	1.008	1.008	1.006	1.008	1.006	1.008	1.005	1.008	1.003	1.005	1.003	1.003	1.003
31	1.012	1.012	1.010	1.009	1.010	1.006	1.010	1.008	1.008	1.006	1.008	1.005	1.006	1.003	1.005	1.003	1.006	1.002	1.003	1.003
32	1.010	1.010	1.009	1.009	1.009	1.009	1.008	1.006	1.005	1.006	1.003	1.005	1.005	1.003	1.003	1.002	1.005	1.008	1.006	1.009
33	1.009	1.010	1.010	1.008	1.008	1.006	1.008	1.003	1.005	1.005	1.005	1.002	1.003	1.003	1.006	1.005	1.008	1.009	1.009	1.009
34	1.009	1.009	1.008	1.006	1.005	1.003	1.003	1.002	1.002	1.003	1.003	1.005	1.005	1.009	1.005	1.009	1.009	1.008	1.009	1.006
35	1.006	1.006	0.999	1.005	0.999	1.003	1.000	1.005	1.002	1.006	1.003	1.008	1.003	1.008	1.005	1.009	1.006	1.002	0.996	0.989
36	1.005	1.005	1.005	1.003	1.005	1.005	1.005	1.006	1.006	1.008	1.006	1.006	1.008	1.005	1.000	0.996	0.989	0.982	0.973	0.971
37	1.005	1.009	1.008	1.008	1.006	1.008	1.006	1.008	1.006	1.008	1.006	1.002	0.997	0.991	0.982	0.979	0.973	0.971	0.969	0.971
38	1.009	1.009	1.009	1.009	1.008	1.009	1.008	1.008	1.005	1.002	0.994	0.989	0.981	0.977	0.973	0.975	0.973	0.973	0.973	0.975
39	1.006	1.010	1.009	1.009	1.009	1.009	1.005	1.000	0.992	0.986	0.979	0.977	0.977	0.975	0.975	0.977	0.975	0.977	0.975	0.975
40	1.010	1.009	1.012	1.009	1.006	0.999	0.992	0.984	0.981	0.977	0.979	0.975	0.979	0.975	0.977	0.975	0.979	0.975	0.979	0.977
41	1.012	1.012	1.006	0.999	0.991	0.984	0.979	0.981	0.977	0.979	0.977	0.979	0.979	0.979	0.977	0.979	0.979	0.979	0.979	0.981
42	1.008	0.997	0.992	0.981	0.982	0.977	0.981	0.975	0.981	0.975	0.979	0.977	0.981	0.979	0.981	0.979	0.981	0.979	0.982	0.981
43	0.994	0.989	0.986	0.982	0.984	0.981	0.982	0.981	0.982	0.981	0.981	0.981	0.982	0.981	0.982	0.981	0.984	0.981	0.986	0.984
44	0.989	0.989	0.989	0.986	0.988	0.986	0.986	0.986	0.986	0.984	0.986	0.984	0.986	0.986	0.988	0.986	0.989	0.994	1.015	1.036
45	0.994	0.992	0.992	0.992	0.991	0.991	0.991	0.989	0.991	0.989	0.991	0.989	0.992	0.989	0.991	0.991	0.999	1.025	1.097	1.157
46	0.996	0.994	0.996	0.994	0.994	0.994	0.992	0.992	0.992	0.992	0.991	0.992	0.992	0.994	0.992	0.996	0.996	1.002	1.045	1.129	1.191
47	0.999	0.997	0.999	0.997	0.997	0.996	0.996	0.994	0.996	0.994	0.996	0.994	0.997	0.996	0.997	0.999	1.009	1.062	1.153	1.211
48	0.997	1.000	0.997	0.997	0.997	0.997	0.996	0.996	0.994	0.996	0.996	0.996	0.996	0.997	0.997	0.997	1.000	1.010	1.076	1.168	1.224
49	0.999	0.999	0.997	0.996	0.999	0.996	0.996	0.994	0.994	0.997	0.994	0.997	1.002	0.997	0.999	1.002	1.024	1.092	1.181	1.227
50	0.996	0.996	0.994	0.992	0.994	0.994	0.992	0.992	0.992	0.992	0.992	0.994	0.992	0.996	0.996	1.000	1.039	1.134	1.205	1.237
51	0.991	0.991	0.991	0.989	0.986	0.986	0.986	0.988	0.988	0.986	0.989	0.989	0.989	0.991	0.991	1.002	1.061	1.162	1.222	1.249
52	0.984	0.982	0.982	0.981	0.979	0.979	0.979	0.979	0.979	0.981	0.979	0.982	0.981	0.982	0.984	1.005	1.090	1.187	1.233	1.255
53	0.977	0.975	0.975	0.975	0.973	0.973	0.971	0.971	0.971	0.971	0.973	0.973	0.975	0.979	0.981	1.012	1.114	1.198	1.235	1.254
54	0.973	0.969	0.971	0.969	0.969	0.967	0.969	0.967	0.969	0.969	0.967	0.969	0.969	0.975	0.977	1.027	1.131	1.198	1.223	1.238
55	0.971	0.971	0.967	0.967	0.967	0.967	0.967	0.967	0.969	0.969	0.969	0.969	0.971	0.973	0.984	1.048	1.149	1.207	1.228	1.238
56	0.973	0.973	0.971	0.961	0.969	0.961	0.969	0.961	0.969	0.967	0.971	0.971	0.973	0.973	0.989	1.066	1.162	1.209	1.229	1.240
57	0.973	0.973	0.971	0.971	0.969	0.969	0.969	0.969	0.969	0.969	0.969	0.973	0.971	0.977	0.997	1.091	1.179	1.218	1.233	1.243
58	0.979	0.979	0.977	0.975	0.975	0.973	0.975	0.971	0.975	0.973	0.977	0.975	0.981	0.977	1.019	1.124	1.196	1.224	1.239	1.248
59	0.981	0.981	0.979	0.979	0.979	0.977	0.981	0.977	0.981	0.979	0.981	0.981	0.984	0.988	1.032	1.129	1.187	1.210	1.226	1.239
60	0.986	0.986	0.984	0.981	0.982	0.982	0.982	0.973	0.988	0.982	0.984	0.984	0.986	0.992	1.040	1.112	1.146	1.163	1.178	1.191
61	0.986	0.988	0.986	0.984	0.986	0.984	0.986	0.984	0.986	0.984	0.986	0.986	0.989	1.002	1.055	1.103	1.122	1.132	1.140	1.148
62	0.986	0.986	0.988	0.984	0.986	0.986	0.986	0.986	0.986	0.986	0.989	0.988	0.991	1.008	1.068	1.112	1.124	1.131	1.134	1.139
63	0.984	0.986	0.982	0.981	0.982	0.981	0.982	0.982	0.984	0.982	0.984	0.986	0.991	1.024	1.103	1.146	1.156	1.158	1.157	1.157

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERORUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 122

IR SCAN TIME 15.08 SEC
INITIAL TEMP 545.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	1.005	1.000	1.003	1.000	1.003	1.000	1.002	1.002	1.005	1.003	1.008	1.005	1.009	1.005	1.009	1.009	1.012	1.009	1.008	1.006
30	1.003	1.002	1.003	1.003	1.006	1.006	1.008	1.008	1.009	1.009	1.012	1.010	1.012	1.009	1.009	1.003	1.003	0.996	0.996	0.989
31	1.006	1.005	1.008	1.008	1.010	1.010	1.012	1.010	1.012	1.009	1.008	1.003	1.000	0.994	0.992	0.988	0.984	0.977	0.975	0.969
32	1.008	1.009	1.009	1.010	1.009	1.012	1.006	1.003	1.000	0.996	0.991	0.986	0.981	0.973	0.971	0.965	0.965	0.965	0.963	0.969
33	1.010	1.010	1.008	1.005	1.002	0.996	0.991	0.984	0.979	0.969	0.969	0.965	0.965	0.961	0.965	0.965	0.965	0.965	0.965	0.963
34	1.002	0.997	0.991	0.986	0.979	0.971	0.969	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.967	0.963	0.969	0.965	0.965
35	0.984	0.977	0.969	0.969	0.967	0.971	0.967	0.967	0.965	0.967	0.965	0.967	0.967	0.967	0.967	0.967	0.967	0.967	0.967	0.969
36	0.967	0.967	0.967	0.967	0.965	0.969	0.967	0.969	0.965	0.969	0.969	0.967	0.967	0.967	0.969	0.967	0.969	0.969	0.971	0.969
37	0.969	0.971	0.969	0.971	0.969	0.971	0.969	0.971	0.973	0.969	0.971	0.971	0.971	0.971	0.969	0.973	0.967	0.973	0.969	0.973
38	0.975	0.973	0.973	0.975	0.973	0.975	0.975	0.975	0.973	0.975	0.971	0.975	0.973	0.973	0.971	0.973	0.973	0.975	0.973	0.975
39	0.975	0.975	0.977	0.977	0.975	0.977	0.975	0.979	0.975	0.977	0.977	0.977	0.975	0.977	0.973	0.975	0.975	0.975	0.975	0.975
40	0.979	0.977	0.979	0.977	0.979	0.977	0.981	0.979	0.979	0.977	0.979	0.979	0.981	0.977	0.981	0.977	0.979	0.977	0.979	0.979
41	0.979	0.981	0.979	0.981	0.979	0.981	0.979	0.982	0.979	0.981	0.981	0.981	0.979	0.981	0.979	0.981	0.979	0.981	0.979	0.981
42	0.982	0.982	0.984	0.982	0.982	0.982	0.984	0.982	0.984	0.982	0.984	0.982	0.982	0.984	0.984	0.981	0.982	0.981	0.984	0.981
43	0.986	0.984	0.988	0.984	0.989	0.986	0.988	0.986	0.986	0.986	0.988	0.988	0.988	0.986	0.988	0.984	0.986	0.984	0.984	0.984
44	1.047	1.056	1.052	1.050	1.042	1.035	1.025	1.012	1.008	1.003	1.000	0.996	0.994	0.989	0.991	0.988	0.989	0.986	0.989	0.988
45	1.191	1.213	1.227	1.235	1.236	1.224	1.200	1.179	1.177	1.173	1.142	1.093	1.042	1.015	1.005	0.997	0.997	0.996	0.997	0.992
46	1.225	1.247	1.266	1.283	1.300	1.313	1.314	1.304	1.310	1.354	1.355	1.275	1.176	1.094	1.039	1.016	1.008	1.002	1.002	0.999
47	1.240	1.259	1.276	1.290	1.303	1.316	1.329	1.339	1.336	1.328	1.339	1.340	1.275	1.174	1.095	1.047	1.029	1.020	1.016	1.009
48	1.251	1.269	1.287	1.303	1.316	1.327	1.336	1.343	1.348	1.352	1.346	1.334	1.316	1.262	1.171	1.090	1.038	1.019	1.013	1.019
49	1.253	1.270	1.290	1.309	1.327	1.342	1.352	1.360	1.363	1.363	1.360	1.357	1.349	1.326	1.273	1.190	1.105	1.048	1.019	1.010
50	1.252	1.264	1.277	1.295	1.318	1.340	1.356	1.369	1.379	1.381	1.378	1.372	1.364	1.355	1.338	1.295	1.212	1.124	1.058	1.021
51	1.266	1.279	1.288	1.295	1.301	1.307	1.317	1.336	1.360	1.378	1.389	1.394	1.392	1.384	1.370	1.353	1.321	1.256	1.165	1.085
52	1.269	1.282	1.296	1.310	1.323	1.327	1.321	1.311	1.307	1.316	1.337	1.362	1.383	1.395	1.396	1.389	1.375	1.345	1.282	1.186
53	1.269	1.282	1.297	1.314	1.329	1.340	1.345	1.349	1.345	1.331	1.306	1.289	1.294	1.321	1.353	1.378	1.390	1.385	1.364	1.313
54	1.252	1.268	1.284	1.303	1.323	1.336	1.346	1.355	1.365	1.373	1.372	1.355	1.321	1.282	1.260	1.270	1.306	1.348	1.372	1.370
55	1.245	1.252	1.260	1.270	1.280	1.292	1.309	1.331	1.354	1.373	1.385	1.391	1.389	1.373	1.340	1.294	1.252	1.234	1.251	1.294
56	1.250	1.259	1.271	1.281	1.284	1.283	1.280	1.281	1.291	1.309	1.335	1.360	1.381	1.391	1.393	1.385	1.360	1.318	1.269	1.232
57	1.252	1.263	1.277	1.291	1.300	1.307	1.312	1.316	1.314	1.307	1.295	1.285	1.290	1.313	1.343	1.369	1.387	1.394	1.380	1.343
58	1.257	1.269	1.282	1.293	1.304	1.313	1.320	1.331	1.342	1.350	1.352	1.343	1.323	1.293	1.268	1.262	1.283	1.321	1.362	1.388
59	1.252	1.265	1.281	1.296	1.309	1.319	1.328	1.338	1.349	1.360	1.370	1.380	1.382	1.376	1.361	1.331	1.291	1.253	1.239	1.257
60	1.205	1.223	1.243	1.264	1.286	1.306	1.322	1.338	1.354	1.367	1.379	1.386	1.390	1.395	1.400	1.397	1.385	1.360	1.325	1.282
61	1.156	1.165	1.176	1.190	1.207	1.226	1.244	1.267	1.294	1.320	1.345	1.366	1.382	1.394	1.400	1.402	1.405	1.403	1.399	1.390
62	1.145	1.149	1.154	1.160	1.168	1.175	1.181	1.188	1.201	1.217	1.237	1.261	1.289	1.319	1.348	1.369	1.385	1.397	1.408	1.416
63	1.156	1.154	1.156	1.159	1.163	1.166	1.168	1.170	1.175	1.180	1.184	1.189	1.195	1.202	1.214	1.229	1.251	1.283	1.318	1.350

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 122

IR SCAN TIME 15.08 SEC
INITIAL TEMP 545.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	1.005	1.002	1.000	0.996	0.996	0.989	0.988	0.984	0.981	0.977	0.975	0.973	0.973	0.967	0.967	0.965	0.965	0.965	0.967	0.965
30	0.989	0.981	0.981	0.973	0.973	0.965	0.967	0.961	0.963	0.959	0.965	0.961	0.963	0.963	0.963	0.963	0.963	0.963	0.963	0.963
31	0.967	0.963	0.963	0.963	0.963	0.963	0.963	0.961	0.963	0.961	0.961	0.961	0.963	0.961	0.961	0.959	0.961	0.957	0.961	0.957
32	0.963	0.967	0.965	0.965	0.963	0.963	0.961	0.961	0.963	0.963	0.963	0.963	0.961	0.963	0.961	0.957	0.961	0.963	0.961	0.961
33	0.965	0.963	0.965	0.965	0.965	0.965	0.967	0.961	0.963	0.963	0.965	0.963	0.965	0.963	0.963	0.963	0.963	0.963	0.963	0.963
34	0.965	0.965	0.965	0.965	0.967	0.965	0.963	0.965	0.963	0.965	0.965	0.963	0.965	0.963	0.963	0.965	0.963	0.963	0.961	0.961
35	0.967	0.967	0.967	0.969	0.967	0.967	0.967	0.969	0.965	0.967	0.965	0.967	0.963	0.965	0.965	0.965	0.963	0.963	0.965	0.967
36	0.969	0.969	0.969	0.969	0.971	0.969	0.969	0.969	0.967	0.969	0.967	0.967	0.967	0.969	0.967	0.965	0.965	0.967	0.967	0.967
37	0.965	0.969	0.965	0.973	0.965	0.971	0.965	0.971	0.965	0.971	0.967	0.971	0.971	0.969	0.969	0.969	0.969	0.965	0.967	0.967
38	0.973	0.975	0.971	0.973	0.971	0.973	0.973	0.973	0.971	0.969	0.969	0.969	0.969	0.971	0.967	0.971	0.967	0.971	0.965	0.971
39	0.975	0.975	0.975	0.975	0.975	0.975	0.973	0.975	0.971	0.973	0.973	0.975	0.973	0.973	0.971	0.973	0.971	0.971	0.971	0.971
40	0.979	0.977	0.979	0.977	0.977	0.977	0.977	0.975	0.975	0.975	0.977	0.973	0.975	0.973	0.975	0.973	0.973	0.971	0.973	0.973
41	0.979	0.979	0.979	0.979	0.979	0.981	0.979	0.977	0.975	0.977	0.975	0.975	0.975	0.977	0.975	0.973	0.973	0.975	0.973	0.975
42	0.981	0.981	0.982	0.981	0.981	0.979	0.979	0.979	0.979	0.979	0.979	0.975	0.977	0.975	0.977	0.975	0.977	0.975	0.975	0.973
43	0.986	0.982	0.984	0.981	0.982	0.981	0.984	0.981	0.982	0.981	0.981	0.981	0.979	0.979	0.979	0.977	0.979	0.979	0.979	0.977
44	0.986	0.986	0.989	0.984	0.986	0.982	0.986	0.982	0.986	0.984	0.986	0.984	0.986	0.982	0.986	0.981	0.984	0.982	0.984	0.982
45	0.994	0.992	0.994	0.991	0.992	0.989	0.991	0.989	0.991	0.989	0.989	0.986	0.989	0.986	0.988	0.984	0.988	0.986	0.986	0.986
46	0.999	0.997	0.997	0.997	0.996	0.994	0.996	0.992	0.994	0.992	0.992	0.991	0.991	0.989	0.991	0.989	0.992	0.989	0.991	0.989
47	1.006	1.002	1.002	0.999	0.999	0.996	0.996	0.996	0.996	0.992	0.994	0.992	0.994	0.992	0.992	0.992	0.994	0.991	0.992	0.994
48	1.019	1.016	1.012	1.005	1.002	0.999	0.997	0.997	0.996	0.996	0.994	0.994	0.994	0.992	0.992	0.994	0.992	0.992	0.991	0.991
49	1.009	1.013	1.017	1.020	1.015	1.010	1.003	1.000	1.000	0.999	0.997	1.003	0.997	0.996	0.994	0.996	0.996	0.991	0.992	0.996
50	1.008	1.005	1.003	1.006	1.012	1.020	1.016	1.008	1.002	0.997	0.996	0.996	0.996	0.994	0.992	0.994	0.992	0.994	0.992	0.992
51	1.031	1.009	0.999	0.999	1.000	1.006	1.009	1.015	1.005	0.999	0.991	0.991	0.989	0.989	0.988	0.989	0.988	0.989	0.989	0.989
52	1.097	1.038	1.012	1.000	0.999	1.000	1.002	1.006	1.006	1.002	0.988	0.982	0.977	0.977	0.975	0.977	0.973	0.977	0.977	0.981
53	1.222	1.124	1.054	1.019	1.002	1.000	1.000	1.003	1.005	1.006	1.002	0.986	0.977	0.971	0.971	0.967	0.969	0.971	0.973	0.977
54	1.334	1.255	1.153	1.072	1.024	1.006	1.000	1.000	1.002	1.005	1.006	1.003	0.989	0.979	0.969	0.969	0.967	0.969	0.973	0.979
55	1.334	1.338	1.288	1.195	1.102	1.040	1.012	1.002	1.000	1.000	1.002	1.006	1.008	0.997	0.981	0.973	0.969	0.971	0.973	0.981
56	1.220	1.242	1.280	1.289	1.239	1.148	1.072	1.025	1.008	1.000	1.000	1.000	1.005	1.009	1.005	0.988	0.979	0.975	0.979	0.979
57	1.288	1.241	1.212	1.210	1.238	1.239	1.176	1.090	1.035	1.010	0.999	0.997	0.997	1.000	1.005	1.005	0.991	0.984	0.979	0.982
58	1.390	1.361	1.309	1.252	1.211	1.188	1.168	1.113	1.053	1.019	1.006	0.996	0.996	0.992	0.999	1.000	1.005	0.994	0.988	0.982
59	1.298	1.343	1.372	1.373	1.340	1.284	1.227	1.180	1.129	1.066	1.024	1.003	0.997	0.991	0.992	0.992	0.997	0.999	0.994	0.986
60	1.243	1.223	1.234	1.270	1.316	1.341	1.329	1.285	1.233	1.171	1.101	1.045	1.015	0.999	0.992	0.991	0.992	0.994	0.999	0.996
61	1.365	1.326	1.277	1.233	1.211	1.215	1.247	1.291	1.293	1.277	1.238	1.173	1.086	1.030	1.010	0.996	0.994	0.991	0.994	0.996
62	1.418	1.409	1.395	1.367	1.319	1.267	1.223	1.198	1.200	1.230	1.260	1.257	1.202	1.118	1.058	1.017	1.000	0.992	0.991	0.989
63	1.377	1.393	1.408	1.417	1.412	1.393	1.354	1.300	1.244	1.201	1.177	1.171	1.182	1.178	1.127	1.058	1.017	0.999	0.991	0.989

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 122

IR SCAN TIME 15.08 SEC
INITIAL TEMP 545.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.965	0.963	0.965	0.965	0.965	0.963	0.963	0.963	0.965	0.963	0.963	0.961	0.965	0.963	0.965	0.965	0.965	0.963	0.965	0.965
30	0.965	0.963	0.963	0.961	0.963	0.961	0.963	0.959	0.963	0.961	0.961	0.963	0.961	0.963	0.963	0.961	0.963	0.963	0.965	0.963
31	0.961	0.957	0.961	0.959	0.961	0.957	0.961	0.957	0.959	0.957	0.961	0.961	0.961	0.957	0.961	0.961	0.961	0.959	0.961	0.961
32	0.959	0.961	0.959	0.961	0.961	0.961	0.959	0.959	0.959	0.959	0.957	0.957	0.959	0.961	0.953	0.961	0.955	0.961	0.955	0.955
33	0.963	0.961	0.961	0.959	0.961	0.959	0.961	0.959	0.961	0.959	0.959	0.959	0.959	0.959	0.963	0.959	0.961	0.957	0.959	0.959
34	0.961	0.961	0.961	0.963	0.963	0.961	0.959	0.963	0.959	0.963	0.959	0.961	0.959	0.961	0.961	0.959	0.959	0.959	0.961	0.959
35	0.965	0.963	0.963	0.963	0.963	0.963	0.963	0.963	0.963	0.963	0.961	0.961	0.961	0.961	0.961	0.961	0.961	0.961	0.959	0.961
36	0.969	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.963	0.965	0.963	0.963	0.963	0.965	0.963	0.963	0.963	0.963	0.959	0.961
37	0.969	0.969	0.967	0.967	0.967	0.967	0.967	0.967	0.963	0.967	0.965	0.967	0.965	0.967	0.965	0.965	0.965	0.965	0.967	0.965
38	0.965	0.969	0.967	0.969	0.965	0.969	0.965	0.969	0.965	0.969	0.967	0.967	0.967	0.967	0.969	0.965	0.969	0.967	0.967	0.967
39	0.971	0.971	0.969	0.969	0.969	0.969	0.967	0.969	0.969	0.967	0.969	0.969	0.967	0.969	0.965	0.969	0.965	0.969	0.965	0.969
40	0.973	0.971	0.971	0.971	0.973	0.969	0.973	0.969	0.969	0.969	0.971	0.969	0.969	0.971	0.971	0.967	0.965	0.969	0.969	0.969
41	0.973	0.973	0.973	0.973	0.973	0.971	0.971	0.973	0.973	0.971	0.971	0.971	0.971	0.971	0.971	0.971	0.969	0.969	0.969	0.969
42	0.975	0.973	0.975	0.973	0.975	0.971	0.975	0.971	0.975	0.971	0.975	0.973	0.973	0.973	0.973	0.971	0.973	0.971	0.971	0.971
43	0.979	0.977	0.977	0.975	0.979	0.975	0.977	0.975	0.977	0.975	0.975	0.975	0.977	0.975	0.975	0.973	0.975	0.975	0.973	0.975
44	0.982	0.982	0.982	0.981	0.982	0.982	0.982	0.981	0.982	0.981	0.982	0.979	0.981	0.981	0.982	0.979	0.981	0.981	0.982	0.979
45	0.988	0.984	0.988	0.982	0.986	0.982	0.986	0.984	0.988	0.984	0.988	0.986	0.986	0.984	0.984	0.984	0.986	0.984	0.986	0.984
46	0.989	0.989	0.991	0.988	0.989	0.988	0.989	0.988	0.988	0.979	0.991	0.979	0.988	0.981	0.989	0.982	0.988	0.979	0.989	0.981
47	0.991	0.989	0.992	0.989	0.991	0.991	0.989	0.989	0.989	0.989	0.991	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989
48	0.991	0.992	0.991	0.991	0.989	0.992	0.989	0.989	0.991	0.992	0.989	0.991	0.989	0.992	0.989	0.989	0.991	0.988	0.989	0.989
49	0.994	0.992	0.992	0.994	0.994	0.992	0.992	0.992	0.988	0.989	0.989	0.991	0.991	0.991	0.989	0.991	0.989	0.991	0.989	0.989
50	0.991	0.992	0.992	0.991	0.992	0.992	0.991	0.991	0.991	0.992	0.991	0.991	0.991	0.991	0.989	0.989	0.989	0.991	0.991	0.991
51	0.991	0.991	0.991	0.992	0.991	0.992	0.992	0.994	0.992	0.992	0.991	0.992	0.991	0.992	0.991	0.992	0.991	0.991	0.989	0.991
52	0.981	0.986	0.986	0.989	0.988	0.992	0.991	0.992	0.991	0.991	0.992	0.991	0.991	0.992	0.991	0.991	0.991	0.991	0.989	0.989
53	0.981	0.984	0.986	0.988	0.989	0.989	0.991	0.991	0.988	0.991	0.989	0.992	0.989	0.991	0.991	0.991	0.988	0.989	0.988	0.991
54	0.982	0.986	0.986	0.989	0.989	0.991	0.991	0.991	0.992	0.992	0.991	0.992	0.991	0.991	0.992	0.992	0.991	0.991	0.989	0.989
55	0.982	0.986	0.986	0.989	0.989	0.989	0.989	0.992	0.989	0.991	0.991	0.992	0.991	0.991	0.991	0.991	0.991	0.989	0.989	0.988
56	0.984	0.986	0.989	0.988	0.989	0.989	0.991	0.988	0.989	0.989	0.991	0.988	0.991	0.988	0.991	0.988	0.989	0.986	0.988	0.984
57	0.982	0.984	0.982	0.984	0.984	0.984	0.982	0.984	0.982	0.984	0.984	0.984	0.984	0.984	0.982	0.984	0.982	0.986	0.981	0.984
58	0.982	0.982	0.982	0.981	0.984	0.981	0.982	0.981	0.984	0.981	0.975	0.982	0.979	0.982	0.981	0.977	0.979	0.977	0.979	0.975
59	0.981	0.979	0.975	0.981	0.982	0.979	0.982	0.977	0.981	0.977	0.979	0.977	0.977	0.975	0.977	0.971	0.977	0.973	0.975	0.977
60	0.989	0.984	0.982	0.979	0.981	0.981	0.984	0.975	0.981	0.977	0.977	0.975	0.977	0.973	0.977	0.969	0.975	0.973	0.979	0.975
61	0.996	0.989	0.984	0.981	0.982	0.981	0.982	0.979	0.981	0.977	0.979	0.975	0.977	0.975	0.977	0.975	0.977	0.975	0.977	0.975
62	0.996	0.992	0.991	0.984	0.984	0.979	0.979	0.975	0.977	0.975	0.977	0.975	0.975	0.979	0.975	0.975	0.975	0.975	0.979	0.977
63	0.991	0.991	0.994	0.992	0.986	0.979	0.977	0.973	0.973	0.971	0.973	0.969	0.973	0.969	0.973	0.973	0.973	0.971	0.973	0.971

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
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MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 122

IR SCAN TIME 15.08 SEC
INITIAL TEMP 545.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.965	0.965	0.965	0.965	0.967	0.965	0.965	0.963	0.965	0.963	0.965	0.965	0.965	0.963	0.963	0.963	0.963	0.963	0.961	0.961
30	0.965	0.963	0.965	0.961	0.965	0.963	0.965	0.963	0.965	0.963	0.967	0.963	0.961	0.961	0.963	0.961	0.959	0.959	0.959	0.957
31	0.963	0.959	0.961	0.959	0.961	0.959	0.961	0.963	0.963	0.961	0.961	0.961	0.961	0.959	0.959	0.959	0.961	0.957	0.959	0.957
32	0.955	0.961	0.953	0.961	0.957	0.961	0.957	0.959	0.957	0.961	0.961	0.961	0.959	0.963	0.959	0.959	0.961	0.959	0.957	0.957
33	0.959	0.959	0.959	0.959	0.959	0.961	0.959	0.959	0.959	0.957	0.959	0.957	0.959	0.955	0.957	0.953	0.957	0.953	0.957	0.955
34	0.961	0.959	0.957	0.957	0.959	0.959	0.957	0.959	0.957	0.959	0.957	0.957	0.957	0.957	0.957	0.957	0.959	0.957	0.957	0.959
35	0.959	0.961	0.959	0.959	0.959	0.961	0.961	0.961	0.959	0.957	0.959	0.959	0.959	0.957	0.959	0.957	0.959	0.959	0.959	0.961
36	0.963	0.961	0.963	0.961	0.963	0.961	0.961	0.961	0.961	0.961	0.961	0.961	0.959	0.961	0.961	0.961	0.959	0.963	0.961	0.959
37	0.965	0.969	0.965	0.965	0.963	0.965	0.963	0.965	0.963	0.963	0.963	0.963	0.963	0.961	0.963	0.963	0.963	0.963	0.963	0.963
38	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.963	0.965	0.965	0.965	0.965	0.963	0.965	0.963	0.965	0.963	0.965	0.963	0.965
39	0.965	0.967	0.963	0.965	0.965	0.965	0.963	0.967	0.965	0.967	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965
40	0.967	0.969	0.967	0.967	0.967	0.967	0.967	0.967	0.969	0.965	0.967	0.963	0.965	0.963	0.967	0.963	0.965	0.963	0.967	0.963
41	0.969	0.969	0.969	0.969	0.967	0.967	0.969	0.967	0.969	0.967	0.967	0.967	0.967	0.967	0.969	0.967	0.967	0.967	0.967	0.967
42	0.971	0.969	0.971	0.969	0.971	0.969	0.971	0.969	0.973	0.969	0.971	0.967	0.969	0.967	0.971	0.969	0.969	0.969	0.969	0.969
43	0.975	0.975	0.973	0.973	0.975	0.973	0.975	0.971	0.973	0.973	0.973	0.971	0.973	0.973	0.975	0.971	0.973	0.973	0.973	0.973
44	0.981	0.979	0.982	0.979	0.982	0.979	0.981	0.979	0.981	0.979	0.981	0.979	0.981	0.979	0.981	0.979	0.979	0.979	0.981	0.979
45	0.986	0.984	0.986	0.986	0.986	0.984	0.986	0.984	0.986	0.984	0.986	0.984	0.986	0.984	0.986	0.986	0.984	0.984	0.984	0.984
46	0.991	0.984	0.989	0.982	0.991	0.989	0.991	0.988	0.989	0.988	0.989	0.988	0.989	0.988	0.989	0.988	0.988	0.988	0.989	0.988
47	0.989	0.991	0.991	0.991	0.991	0.989	0.991	0.991	0.989	0.989	0.989	0.986	0.989	0.988	0.988	0.988	0.989	0.988	0.989	0.988
48	0.989	0.991	0.989	0.991	0.991	0.991	0.989	0.989	0.989	0.989	0.988	0.989	0.989	0.989	0.988	0.988	0.988	0.989	0.988	0.988
49	0.992	0.992	0.992	0.992	0.991	0.992	0.991	0.991	0.991	0.991	0.989	0.989	0.989	0.986	0.991	0.989	0.989	0.988	0.989	0.989
50	0.989	0.991	0.991	0.989	0.991	0.989	0.989	0.989	0.988	0.988	0.988	0.989	0.986	0.989	0.986	0.988	0.986	0.986	0.986	0.986
51	0.991	0.989	0.991	0.989	0.988	0.986	0.984	0.984	0.982	0.982	0.982	0.982	0.981	0.982	0.981	0.982	0.981	0.979	0.979	0.981
52	0.989	0.989	0.988	0.986	0.984	0.982	0.981	0.977	0.975	0.975	0.975	0.973	0.973	0.973	0.971	0.971	0.973	0.971	0.971	0.973
53	0.988	0.989	0.984	0.986	0.982	0.981	0.975	0.973	0.969	0.969	0.965	0.967	0.965	0.967	0.965	0.965	0.963	0.963	0.963	0.965
54	0.988	0.986	0.986	0.984	0.981	0.977	0.969	0.969	0.963	0.965	0.961	0.963	0.959	0.963	0.959	0.959	0.959	0.959	0.959	0.957
55	0.988	0.986	0.986	0.984	0.982	0.979	0.973	0.971	0.965	0.963	0.961	0.963	0.963	0.961	0.959	0.961	0.959	0.959	0.959	0.959
56	0.986	0.984	0.986	0.982	0.982	0.977	0.975	0.971	0.973	0.967	0.967	0.965	0.963	0.963	0.963	0.961	0.963	0.961	0.963	0.961
57	0.982	0.982	0.979	0.981	0.979	0.979	0.975	0.973	0.971	0.969	0.969	0.969	0.967	0.967	0.967	0.969	0.965	0.967	0.965	0.965
58	0.979	0.977	0.979	0.977	0.977	0.973	0.975	0.971	0.971	0.969	0.971	0.969	0.971	0.969	0.971	0.969	0.967	0.969	0.971	0.969
59	0.979	0.977	0.977	0.975	0.975	0.973	0.975	0.971	0.973	0.969	0.973	0.971	0.973	0.971	0.975	0.969	0.971	0.973	0.971	0.969
60	0.979	0.977	0.979	0.975	0.977	0.975	0.975	0.979	0.977	0.971	0.973	0.971	0.973	0.971	0.973	0.973	0.973	0.971	0.975	0.973
61	0.979	0.975	0.977	0.973	0.977	0.973	0.975	0.971	0.973	0.969	0.973	0.969	0.973	0.969	0.981	0.973	0.973	0.971	0.973	0.973
62	0.977	0.975	0.977	0.973	0.975	0.973	0.975	0.971	0.973	0.969	0.971	0.967	0.971	0.967	0.973	0.969	0.971	0.969	0.971	0.969
63	0.973	0.973	0.973	0.971	0.971	0.967	0.969	0.969	0.967	0.967	0.967	0.967	0.969	0.967	0.969	0.967	0.967	0.965	0.965	0.967

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 122

IR SCAN TIME 15.08 SEC
INITIAL TEMP 545.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.959	0.961	0.959	0.959	0.961	0.959	0.961	0.959	0.961	0.959
30	0.961	0.957	0.961	0.957	0.957	0.957	0.959	0.957	0.957	0.957
31	0.957	0.957	0.957	0.957	0.957	0.955	0.955	0.955	0.957	0.957
32	0.955	0.955	0.955	0.955	0.955	0.957	0.953	0.957	0.953	0.957
33	0.957	0.955	0.955	0.953	0.957	0.953	0.957	0.957	0.955	0.957
34	0.957	0.959	0.955	0.955	0.957	0.957	0.955	0.955	0.957	0.959
35	0.959	0.959	0.957	0.959	0.959	0.957	0.957	0.957	0.957	0.959
36	0.961	0.959	0.957	0.959	0.961	0.959	0.959	0.961	0.959	0.961
37	0.963	0.963	0.963	0.963	0.963	0.963	0.961	0.963	0.963	0.961
38	0.963	0.965	0.963	0.965	0.963	0.965	0.963	0.965	0.963	0.965
39	0.963	0.965	0.965	0.967	0.965	0.967	0.967	0.967	0.967	0.965
40	0.965	0.963	0.965	0.963	0.967	0.965	0.967	0.965	0.967	0.967
41	0.965	0.967	0.965	0.965	0.967	0.965	0.967	0.969	0.963	0.967
42	0.969	0.967	0.969	0.969	0.969	0.969	0.971	0.969	0.969	0.971
43	0.973	0.971	0.971	0.973	0.975	0.971	0.975	0.971	0.975	0.973
44	0.979	0.977	0.979	0.979	0.979	0.979	0.981	0.977	0.979	0.977
45	0.984	0.982	0.984	0.982	0.984	0.982	0.982	0.982	0.982	0.982
46	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.986	0.988	0.986
47	0.989	0.986	0.988	0.988	0.989	0.988	0.991	0.989	0.988	0.986
48	0.988	0.989	0.989	0.989	0.988	0.989	0.984	0.988	0.986	0.988
49	0.991	0.992	0.991	0.988	0.989	0.991	0.988	0.988	0.988	0.986
50	0.984	0.986	0.986	0.984	0.984	0.986	0.984	0.984	0.982	0.984
51	0.981	0.981	0.979	0.981	0.979	0.981	0.979	0.979	0.979	0.979
52	0.969	0.969	0.969	0.969	0.969	0.969	0.969	0.967	0.967	0.967
53	0.963	0.965	0.963	0.963	0.963	0.963	0.963	0.961	0.961	0.961
54	0.957	0.959	0.959	0.959	0.959	0.961	0.957	0.957	0.957	0.957
55	0.959	0.959	0.959	0.959	0.953	0.959	0.953	0.959	0.953	0.959
56	0.961	0.961	0.963	0.959	0.961	0.959	0.963	0.959	0.961	0.959
57	0.965	0.965	0.965	0.967	0.965	0.961	0.965	0.965	0.963	0.965
58	0.971	0.969	0.971	0.967	0.969	0.967	0.971	0.969	0.969	0.969
59	0.973	0.971	0.967	0.971	0.971	0.967	0.971	0.969	0.973	0.969
60	0.981	0.973	0.977	0.969	0.971	0.971	0.975	0.973	0.975	0.973
61	0.971	0.973	0.973	0.975	0.973	0.973	0.973	0.971	0.973	0.971
62	0.969	0.967	0.971	0.967	0.969	0.965	0.973	0.967	0.969	0.965
63	0.971	0.965	0.965	0.963	0.967	0.965	0.967	0.965	0.967	0.965

NASA/RI OH9U TRANSITIUN TEST
V41B-P4A
ARU, INC. AEDC DIVISION
A SVERDRUP CURP. CO.
VAF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 122

IR SCAN TIME 15.08 SEC
INITIAL TEMP 545.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.981	0.981	0.977	0.979	0.975	0.977	0.975	0.975	0.975	0.979	0.977	0.981	0.986	1.040	1.132	1.176	1.187	1.194	1.199	1.200
65	0.973	0.973	0.971	0.971	0.969	0.969	0.969	0.967	0.969	0.967	0.975	0.973	0.991	1.068	1.157	1.193	1.207	1.216	1.223	1.228
66	0.965	0.963	0.965	0.961	0.961	0.959	0.961	0.961	0.961	0.961	0.963	0.967	0.997	1.090	1.155	1.182	1.195	1.205	1.216	1.226
67	0.961	0.957	0.955	0.955	0.955	0.955	0.953	0.950	0.953	0.955	0.957	0.963	1.002	1.082	1.127	1.144	1.155	1.166	1.176	1.186
68	0.957	0.953	0.955	0.953	0.950	0.948	0.950	0.948	0.948	0.950	0.953	0.963	1.019	1.086	1.114	1.126	1.134	1.142	1.149	1.155
69	0.953	0.950	0.950	0.948	0.950	0.950	0.948	0.948	0.950	0.950	0.955	0.971	1.041	1.098	1.118	1.125	1.131	1.137	1.141	1.145
70	0.955	0.953	0.943	0.950	0.946	0.950	0.950	0.950	0.950	0.953	0.955	0.982	1.055	1.104	1.119	1.126	1.132	1.136	1.139	1.142
71	0.955	0.953	0.950	0.950	0.950	0.948	0.948	0.948	0.943	0.950	0.950	0.988	1.058	1.098	1.110	1.116	1.121	1.127	1.130	1.134
72	0.955	0.953	0.950	0.948	0.948	0.948	0.950	0.948	0.950	0.950	0.955	0.988	1.053	1.086	1.097	1.102	1.107	1.111	1.116	1.118
73	0.955	0.950	0.950	0.950	0.950	0.950	0.950	0.946	0.948	0.948	0.955	1.000	1.056	1.080	1.088	1.094	1.099	1.102	1.106	1.109
74	0.955	0.953	0.948	0.950	0.950	0.948	0.948	0.946	0.946	0.948	0.961	1.016	1.059	1.075	1.080	1.085	1.089	1.094	1.097	1.100
75	0.957	0.955	0.950	0.948	0.948	0.946	0.946	0.946	0.943	0.950	0.973	1.030	1.059	1.070	1.076	1.080	1.083	1.086	1.090	1.093
76	0.963	0.984	0.988	0.979	0.977	0.979	0.975	0.953	0.943	0.953	0.991	1.039	1.064	1.071	1.076	1.081	1.082	1.086	1.090	1.090
77	1.006	1.029	1.031	1.041	1.039	1.035	1.030	0.994	0.963	0.965	1.012	1.052	1.068	1.072	1.077	1.080	1.083	1.086	1.089	1.093
78	1.029	1.033	1.012	1.047	1.064	1.041	1.041	1.040	0.996	0.977	1.019	1.053	1.065	1.073	1.076	1.079	1.082	1.086	1.088	1.092
79	1.032	1.041	1.015	1.029	1.047	1.056	1.042	1.039	1.031	1.005	1.033	1.058	1.068	1.071	1.075	1.078	1.082	1.085	1.089	1.092
80	1.033	1.047	1.040	1.033	1.031	1.036	1.048	1.046	1.037	1.037	1.048	1.064	1.069	1.073	1.076	1.079	1.083	1.086	1.089	1.093
81	1.042	1.051	1.050	1.045	1.031	1.029	1.019	1.024	1.032	1.042	1.060	1.068	1.071	1.075	1.077	1.081	1.085	1.086	1.091	1.096
82	1.052	1.050	1.051	1.046	1.035	1.029	1.010	0.997	1.009	1.037	1.058	1.069	1.073	1.075	1.077	1.079	1.083	1.086	1.090	1.093
83	1.056	1.045	1.045	1.045	1.032	1.024	1.002	0.988	0.997	1.032	1.071	1.086	1.089	1.090	1.088	1.086	1.086	1.086	1.087	1.085
84	1.044	1.038	1.044	1.048	1.030	1.010	1.000	1.003	1.009	1.010	1.025	1.032	1.037	1.044	1.054	1.058	1.064	1.067	1.070	1.071
85	1.019	1.024	1.037	1.041	1.030	1.009	1.005	1.008	1.009	1.000	1.000	1.000	1.002	1.000	1.000	0.999	1.002	1.000	1.003	1.005
86	0.996	0.999	1.006	1.009	1.005	1.000	1.002	1.009	1.013	1.005	1.003	1.002	1.000	0.997	0.999	0.996	0.996	0.996	0.997	0.996
87	0.988	0.982	0.984	0.986	0.989	0.989	0.996	1.008	1.015	1.006	1.003	1.000	1.000	0.997	0.999	0.997	0.997	0.994	0.997	0.996
88	0.975	0.971	0.971	0.973	0.984	0.989	0.996	1.005	1.010	1.010	1.006	1.005	1.002	1.000	0.997	0.997	0.994	0.994	0.991	0.992
89	0.963	0.961	0.961	0.969	0.982	0.986	0.991	0.996	1.006	1.009	1.009	1.006	1.005	1.000	0.999	0.996	0.996	0.994	0.994	0.992
90	0.961	0.959	0.963	0.969	0.979	0.984	0.986	0.992	1.003	1.006	1.006	1.005	1.003	1.002	1.000	0.997	0.997	0.996	0.994	0.994
91	0.959	0.957	0.961	0.975	0.977	0.984	0.984	0.991	1.002	1.006	1.005	1.006	1.005	1.005	1.003	1.002	1.000	1.000	0.997	0.996
92	0.971	0.965	0.963	0.975	0.979	0.986	0.984	0.992	1.002	1.008	1.006	1.008	1.008	1.006	1.003	1.005	1.000	1.002	0.999	0.996
93	0.997	0.994	0.992	0.994	0.992	0.996	1.000	1.003	1.008	1.009	1.009	1.012	1.013	1.010	1.010	1.009	1.005	1.003	1.000	0.996
94	1.009	1.008	1.006	1.009	1.008	1.006	1.006	1.010	1.016	1.016	1.013	1.016	1.016	1.019	1.016	1.015	1.012	1.009	1.002	0.997
95	1.019	1.019	1.017	1.019	1.019	1.016	1.013	1.016	1.021	1.021	1.017	1.020	1.020	1.021	1.021	1.021	1.019	1.015	1.005	1.000
96	1.022	1.021	1.021	1.020	1.021	1.019	1.016	1.016	1.021	1.020	1.021	1.021	1.024	1.025	1.026	1.024	1.024	1.017	1.009	1.002
97	1.026	1.026	1.025	1.024	1.022	1.021	1.017	1.017	1.019	1.015	1.013	1.017	1.021	1.025	1.026	1.024	1.021	1.017	1.012	1.012
98	1.027	1.031	1.030	1.027	1.026	1.021	1.020	1.019	1.024	1.020	1.019	1.016	1.017	1.020	1.021	1.020	1.019	1.015	1.013	1.013

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 122

IR SCAN TIME 15.08 SEC
INITIAL TEMP 545.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	1.199	1.198	1.196	1.196	1.192	1.189	1.183	1.178	1.176	1.178	1.177	1.178	1.180	1.183	1.183	1.183	1.185	1.189	1.194	1.203
65	1.233	1.237	1.241	1.246	1.249	1.246	1.241	1.232	1.226	1.214	1.207	1.196	1.192	1.186	1.184	1.180	1.184	1.183	1.185	1.183
66	1.235	1.247	1.260	1.272	1.281	1.288	1.293	1.297	1.297	1.293	1.284	1.275	1.262	1.246	1.228	1.215	1.207	1.204	1.201	1.199
67	1.199	1.214	1.230	1.245	1.258	1.269	1.280	1.297	1.317	1.328	1.334	1.342	1.345	1.340	1.328	1.314	1.295	1.274	1.251	1.233
68	1.165	1.175	1.184	1.194	1.203	1.213	1.220	1.237	1.259	1.280	1.297	1.311	1.326	1.342	1.353	1.359	1.360	1.357	1.346	1.333
69	1.151	1.158	1.164	1.169	1.175	1.181	1.186	1.193	1.199	1.206	1.216	1.226	1.234	1.243	1.253	1.265	1.278	1.290	1.302	1.312
70	1.146	1.151	1.154	1.156	1.159	1.163	1.166	1.169	1.171	1.175	1.179	1.183	1.187	1.190	1.193	1.197	1.202	1.206	1.212	1.220
71	1.137	1.143	1.147	1.150	1.152	1.155	1.157	1.159	1.161	1.162	1.164	1.165	1.166	1.168	1.168	1.169	1.172	1.176	1.178	1.180
72	1.122	1.126	1.130	1.132	1.136	1.138	1.143	1.144	1.148	1.148	1.150	1.149	1.149	1.148	1.148	1.146	1.147	1.149	1.153	1.155
73	1.111	1.114	1.118	1.120	1.123	1.124	1.129	1.132	1.135	1.135	1.136	1.136	1.139	1.139	1.140	1.139	1.138	1.138	1.138	1.137
74	1.100	1.103	1.106	1.110	1.114	1.116	1.119	1.123	1.126	1.127	1.127	1.129	1.129	1.133	1.134	1.135	1.133	1.134	1.133	1.133
75	1.095	1.098	1.099	1.102	1.106	1.107	1.110	1.112	1.114	1.116	1.118	1.120	1.120	1.122	1.122	1.123	1.122	1.124	1.125	1.126
76	1.094	1.097	1.097	1.102	1.104	1.106	1.105	1.108	1.110	1.112	1.113	1.113	1.114	1.114	1.117	1.116	1.116	1.114	1.115	1.117
77	1.095	1.096	1.099	1.100	1.104	1.105	1.108	1.111	1.112	1.112	1.114	1.113	1.113	1.112	1.115	1.114	1.113	1.112	1.114	1.115
78	1.094	1.097	1.099	1.100	1.102	1.106	1.108	1.110	1.112	1.112	1.113	1.114	1.114	1.114	1.116	1.114	1.114	1.114	1.114	1.114
79	1.095	1.098	1.100	1.102	1.102	1.105	1.107	1.110	1.110	1.112	1.112	1.113	1.112	1.114	1.114	1.116	1.114	1.115	1.114	1.116
80	1.097	1.099	1.102	1.104	1.107	1.109	1.110	1.112	1.113	1.114	1.114	1.114	1.114	1.114	1.114	1.114	1.115	1.115	1.117	1.117
81	1.100	1.104	1.107	1.111	1.114	1.117	1.118	1.122	1.122	1.124	1.124	1.124	1.124	1.124	1.124	1.124	1.124	1.124	1.124	1.124
82	1.097	1.100	1.106	1.110	1.114	1.118	1.122	1.124	1.126	1.127	1.129	1.129	1.130	1.131	1.132	1.132	1.135	1.136	1.138	1.138
83	1.085	1.087	1.091	1.095	1.100	1.102	1.107	1.113	1.118	1.120	1.122	1.122	1.122	1.122	1.124	1.125	1.126	1.126	1.128	1.131
84	1.075	1.076	1.081	1.085	1.090	1.093	1.100	1.105	1.112	1.117	1.121	1.122	1.123	1.123	1.125	1.127	1.128	1.129	1.130	1.130
85	1.008	1.009	1.015	1.019	1.026	1.026	1.029	1.030	1.033	1.036	1.041	1.044	1.050	1.050	1.052	1.055	1.060	1.063	1.068	1.070
86	0.997	0.997	0.999	0.994	0.999	0.994	0.997	0.994	0.996	0.992	0.996	0.992	0.996	0.996	0.997	0.997	1.000	0.999	1.002	1.000
87	0.997	0.997	0.997	0.997	0.999	1.000	0.999	0.997	0.996	0.992	0.992	0.994	0.994	0.992	0.994	0.992	0.994	0.994	0.994	0.994
88	0.992	0.994	0.992	0.996	0.996	0.997	0.997	0.996	0.994	0.992	0.992	0.991	0.991	0.991	0.991	0.991	0.989	0.991	0.989	0.989
89	0.996	0.992	0.996	0.996	0.997	0.992	0.996	0.994	0.994	0.991	0.994	0.992	0.994	0.991	0.992	0.991	0.992	0.991	0.992	0.992
90	0.992	0.992	0.992	0.996	0.996	0.994	0.994	0.994	0.996	0.997	1.000	1.013	1.030	1.022	1.003	0.997	0.996	0.994	0.992	0.994
91	0.992	0.994	0.994	0.994	0.992	0.994	0.994	0.996	0.996	0.997	1.002	1.032	1.058	1.048	1.019	1.002	0.994	0.992	0.994	0.994
92	0.994	0.994	0.992	0.994	0.996	0.996	0.997	0.999	0.999	1.002	1.000	1.000	1.002	1.002	0.996	0.992	0.992	0.991	0.992	0.992
93	0.988	0.992	0.989	0.997	0.994	1.000	0.999	1.005	1.002	1.006	1.002	1.003	0.997	0.996	0.991	0.994	0.991	0.992	0.991	0.991
94	0.994	0.996	0.997	0.999	1.002	1.003	1.005	1.008	1.009	1.010	1.010	1.008	1.005	1.002	0.997	0.996	0.994	0.994	0.991	0.992
95	0.994	0.996	0.999	1.002	1.005	1.006	1.009	1.012	1.012	1.013	1.012	1.013	1.009	1.006	1.002	1.000	0.996	0.996	0.994	0.994
96	1.000	1.002	1.005	1.006	1.009	1.010	1.015	1.013	1.016	1.015	1.017	1.016	1.016	1.010	1.009	1.002	1.002	0.997	0.997	0.994
97	1.009	1.010	1.010	1.012	1.010	1.012	1.010	1.013	1.013	1.013	1.013	1.015	1.013	1.012	1.010	1.008	1.003	1.002	0.999	0.997
98	1.013	1.016	1.017	1.016	1.016	1.016	1.019	1.017	1.019	1.017	1.017	1.015	1.015	1.012	1.010	1.008	1.008	1.010	1.030	1.041

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 122

IR SCAN TIME 15.08 SEC
INITIAL TEMP 545.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	1.216	1.236	1.267	1.302	1.341	1.375	1.390	1.384	1.353	1.308	1.259	1.212	1.176	1.152	1.131	1.099	1.052	1.016	0.997	0.991
65	1.185	1.182	1.185	1.189	1.194	1.202	1.220	1.253	1.290	1.316	1.318	1.296	1.259	1.223	1.192	1.162	1.129	1.081	1.032	1.005
66	1.198	1.196	1.196	1.198	1.202	1.202	1.199	1.197	1.195	1.200	1.209	1.232	1.257	1.267	1.261	1.241	1.217	1.187	1.136	1.068
67	1.222	1.217	1.217	1.214	1.211	1.209	1.206	1.206	1.205	1.204	1.204	1.201	1.198	1.199	1.211	1.235	1.253	1.257	1.239	1.189
68	1.315	1.291	1.264	1.240	1.221	1.209	1.204	1.204	1.204	1.203	1.204	1.203	1.203	1.201	1.199	1.198	1.196	1.199	1.208	1.219
69	1.321	1.327	1.326	1.318	1.305	1.287	1.264	1.241	1.219	1.205	1.199	1.198	1.201	1.201	1.199	1.200	1.201	1.201	1.199	1.195
70	1.228	1.238	1.249	1.259	1.266	1.267	1.265	1.262	1.254	1.246	1.237	1.227	1.217	1.208	1.200	1.198	1.200	1.201	1.202	1.201
71	1.182	1.186	1.189	1.193	1.200	1.208	1.214	1.219	1.225	1.229	1.229	1.226	1.220	1.213	1.204	1.199	1.194	1.190	1.186	1.183
72	1.158	1.160	1.161	1.163	1.165	1.166	1.169	1.175	1.179	1.179	1.181	1.186	1.193	1.197	1.198	1.196	1.195	1.193	1.189	1.183
73	1.137	1.136	1.137	1.136	1.138	1.138	1.140	1.142	1.146	1.150	1.150	1.148	1.149	1.149	1.150	1.151	1.156	1.160	1.166	1.169
74	1.133	1.133	1.132	1.132	1.132	1.129	1.127	1.124	1.124	1.124	1.126	1.125	1.125	1.124	1.126	1.127	1.128	1.128	1.131	1.132
75	1.127	1.128	1.129	1.130	1.132	1.132	1.130	1.127	1.126	1.124	1.122	1.122	1.121	1.119	1.118	1.117	1.116	1.116	1.116	1.117
76	1.118	1.116	1.118	1.119	1.118	1.120	1.120	1.118	1.120	1.120	1.120	1.123	1.124	1.124	1.123	1.125	1.123	1.122	1.123	1.119
77	1.116	1.114	1.116	1.114	1.114	1.112	1.112	1.112	1.112	1.112	1.113	1.112	1.114	1.115	1.116	1.116	1.118	1.118	1.121	1.123
78	1.114	1.116	1.116	1.116	1.116	1.116	1.114	1.114	1.113	1.112	1.112	1.112	1.112	1.112	1.113	1.116	1.117	1.117	1.117	1.118
79	1.116	1.117	1.117	1.117	1.118	1.118	1.117	1.117	1.116	1.116	1.116	1.117	1.116	1.117	1.116	1.118	1.118	1.120	1.120	1.122
80	1.118	1.117	1.118	1.118	1.118	1.117	1.119	1.117	1.119	1.118	1.119	1.118	1.120	1.119	1.121	1.121	1.123	1.124	1.124	1.124
81	1.125	1.125	1.125	1.125	1.124	1.124	1.123	1.122	1.122	1.121	1.121	1.122	1.122	1.122	1.122	1.123	1.124	1.125	1.127	1.127
82	1.141	1.142	1.144	1.144	1.144	1.142	1.142	1.140	1.139	1.135	1.135	1.132	1.130	1.128	1.128	1.128	1.128	1.128	1.127	1.127
83	1.134	1.135	1.138	1.140	1.144	1.146	1.149	1.150	1.152	1.153	1.154	1.154	1.154	1.153	1.152	1.152	1.149	1.147	1.146	1.142
84	1.132	1.133	1.136	1.135	1.137	1.136	1.136	1.135	1.136	1.136	1.138	1.138	1.141	1.142	1.146	1.149	1.153	1.157	1.162	1.165
85	1.076	1.080	1.085	1.088	1.093	1.094	1.097	1.097	1.100	1.100	1.103	1.103	1.106	1.107	1.110	1.111	1.113	1.116	1.120	1.123
86	1.002	1.002	1.003	1.002	1.003	1.000	1.002	1.000	1.000	1.000	1.002	1.000	1.002	1.002	1.002	1.000	1.002	1.000	1.003	1.002
87	0.994	0.992	0.996	0.992	0.994	0.992	0.992	0.992	0.994	0.989	0.992	0.991	0.989	0.989	0.991	0.988	0.989	0.988	0.989	0.988
88	0.991	0.992	0.991	0.992	0.991	0.991	0.989	0.989	0.988	0.988	0.988	0.986	0.986	0.986	0.984	0.982	0.982	0.982	0.979	0.982
89	0.992	0.991	0.992	0.992	0.994	0.991	0.991	0.989	0.991	0.986	0.989	0.989	0.991	0.988	0.988	0.986	0.984	0.984	0.984	0.982
90	0.994	0.994	0.994	0.994	0.992	0.994	0.994	0.994	0.992	0.992	0.992	0.999	1.002	0.999	0.991	0.988	0.986	0.984	0.982	0.982
91	0.994	0.992	0.992	0.992	0.992	0.994	0.992	0.992	0.991	0.991	1.000	1.029	1.044	1.030	1.008	0.994	0.988	0.986	0.984	0.984
92	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.992	0.991	0.989	0.991	0.997	1.005	1.000	0.992	0.988	0.986	0.986	0.984	0.984
93	0.991	0.992	0.991	0.994	0.992	0.994	0.994	0.994	0.991	0.989	0.988	0.989	0.988	0.988	0.986	0.988	0.984	0.982	0.982	0.984
94	0.989	0.992	0.989	0.991	0.991	0.994	0.992	0.994	0.991	0.992	0.989	0.989	0.986	0.989	0.986	0.986	0.982	0.984	0.982	0.984
95	0.992	0.994	0.992	0.992	0.992	0.994	0.994	0.994	0.994	0.992	0.991	0.989	0.989	0.989	0.988	0.989	0.986	0.986	0.982	0.982
96	0.994	0.992	0.992	0.992	0.994	0.994	0.996	0.996	0.997	0.996	0.994	0.992	0.992	0.989	0.989	0.988	0.989	0.988	0.988	0.986
97	0.996	0.994	0.992	0.994	0.992	0.994	0.994	0.996	0.996	0.994	0.992	0.992	0.991	0.991	0.989	0.988	0.986	0.986	0.986	0.988
98	1.035	1.016	1.003	0.997	0.996	0.996	0.997	0.996	0.997	0.996	0.997	0.994	0.994	0.991	0.992	0.989	0.988	0.986	0.988	0.986

NASA/RI UH9U TRANSITION TEST
V41B-P4A
ARU, INC. AEDC DIVISION
A SVERDRUP CORP. CU.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 15.08 SEC
GROUP 122 INITIAL TEMP 545.7 DEG. R

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.989	0.991	0.991	0.992	0.991	0.986	0.977	0.969	0.967	0.967	0.965	0.965	0.965	0.965	0.965	0.965	0.967	0.967	0.965	0.965
65	0.996	0.991	0.991	0.991	0.991	0.991	0.989	0.979	0.969	0.963	0.963	0.961	0.961	0.961	0.961	0.961	0.961	0.959	0.961	0.961
66	1.020	1.002	0.991	0.991	0.989	0.991	0.991	0.988	0.977	0.965	0.959	0.957	0.953	0.955	0.955	0.955	0.953	0.955	0.953	0.955
67	1.113	1.047	1.013	0.997	0.986	0.989	0.984	0.989	0.982	0.979	0.957	0.953	0.946	0.946	0.943	0.946	0.941	0.946	0.941	0.948
68	1.204	1.157	1.085	1.027	1.000	0.992	0.988	0.986	0.986	0.986	0.979	0.961	0.950	0.946	0.943	0.941	0.941	0.938	0.941	0.938
69	1.187	1.176	1.136	1.071	1.021	0.999	0.989	0.988	0.986	0.986	0.986	0.982	0.965	0.950	0.943	0.938	0.935	0.938	0.938	0.938
70	1.198	1.194	1.184	1.153	1.091	1.031	1.002	0.991	0.986	0.986	0.984	0.986	0.979	0.969	0.955	0.943	0.938	0.941	0.935	0.938
71	1.178	1.175	1.172	1.167	1.152	1.109	1.048	1.009	0.991	0.984	0.982	0.984	0.982	0.979	0.973	0.959	0.946	0.938	0.938	0.935
72	1.178	1.173	1.168	1.165	1.161	1.153	1.125	1.073	1.022	0.997	0.986	0.982	0.982	0.981	0.981	0.975	0.965	0.948	0.941	0.938
73	1.173	1.174	1.177	1.178	1.177	1.175	1.169	1.148	1.100	1.046	1.012	0.991	0.984	0.981	0.981	0.981	0.979	0.969	0.957	0.946
74	1.131	1.132	1.133	1.136	1.138	1.142	1.144	1.149	1.139	1.104	1.047	1.006	0.984	0.981	0.977	0.979	0.977	0.981	0.975	0.963
75	1.117	1.120	1.120	1.120	1.120	1.122	1.121	1.120	1.116	1.111	1.092	1.050	1.008	0.988	0.981	0.979	0.979	0.979	0.979	0.979
76	1.119	1.119	1.118	1.118	1.118	1.118	1.118	1.116	1.116	1.115	1.114	1.100	1.067	1.020	0.996	0.982	0.979	0.981	0.981	0.982
77	1.125	1.127	1.129	1.130	1.133	1.132	1.131	1.130	1.129	1.126	1.124	1.119	1.110	1.079	1.033	1.000	0.986	0.975	0.975	0.977
78	1.120	1.120	1.122	1.124	1.125	1.126	1.129	1.133	1.135	1.136	1.137	1.139	1.139	1.135	1.116	1.073	1.024	0.997	0.982	0.977
79	1.123	1.124	1.125	1.125	1.124	1.124	1.125	1.127	1.127	1.127	1.126	1.128	1.129	1.131	1.132	1.124	1.091	1.040	1.002	0.984
80	1.125	1.126	1.127	1.127	1.129	1.132	1.133	1.132	1.135	1.134	1.133	1.132	1.132	1.131	1.132	1.130	1.124	1.102	1.058	1.013
81	1.125	1.127	1.127	1.129	1.130	1.131	1.131	1.133	1.133	1.135	1.135	1.136	1.135	1.137	1.136	1.139	1.140	1.139	1.120	1.082
82	1.127	1.128	1.129	1.129	1.129	1.129	1.131	1.130	1.132	1.133	1.136	1.138	1.141	1.140	1.142	1.143	1.145	1.146	1.143	1.130
83	1.141	1.138	1.136	1.134	1.134	1.132	1.133	1.132	1.134	1.134	1.136	1.136	1.141	1.143	1.147	1.149	1.153	1.154	1.154	1.153
84	1.167	1.168	1.168	1.168	1.167	1.165	1.163	1.159	1.157	1.154	1.153	1.151	1.150	1.150	1.153	1.156	1.159	1.160	1.160	1.159
85	1.129	1.133	1.140	1.147	1.157	1.167	1.176	1.184	1.191	1.196	1.200	1.201	1.197	1.191	1.187	1.183	1.176	1.169	1.165	1.164
86	1.003	1.002	1.005	1.006	1.010	1.013	1.021	1.025	1.030	1.033	1.041	1.048	1.051	1.051	1.055	1.058	1.058	1.055	1.053	1.054
87	0.989	0.986	0.988	0.988	0.991	0.989	0.991	0.991	0.991	0.989	0.989	0.992	0.997	1.000	1.000	0.999	0.997	0.997	0.997	0.996
88	0.977	0.982	0.979	0.982	0.979	0.982	0.979	0.982	0.979	0.984	0.981	0.982	0.982	0.988	0.986	0.988	0.989	0.991	0.991	0.989
89	0.982	0.982	0.984	0.982	0.984	0.982	0.982	0.981	0.982	0.981	0.981	0.979	0.979	0.979	0.982	0.986	0.988	0.986	0.986	0.988
90	0.979	0.982	0.982	0.981	0.982	0.982	0.982	0.982	0.981	0.982	0.986	0.986	0.981	0.981	0.979	0.986	0.986	0.986	0.981	0.982
91	0.982	0.982	0.982	0.982	0.981	0.981	0.979	0.982	0.982	1.002	1.025	1.029	1.008	0.992	0.982	0.981	0.979	0.981	0.979	0.982
92	0.981	0.981	0.981	0.981	0.981	0.982	0.982	0.981	0.982	0.989	1.000	1.000	0.992	0.984	0.981	0.981	0.979	0.979	0.979	0.979
93	0.982	0.982	0.981	0.984	0.982	0.982	0.981	0.981	0.981	0.981	0.981	0.981	0.977	0.979	0.977	0.979	0.977	0.979	0.979	0.981
94	0.982	0.982	0.981	0.982	0.982	0.982	0.982	0.981	0.977	0.982	0.981	0.982	0.982	0.982	0.981	0.981	0.981	0.984	0.982	0.984
95	0.981	0.982	0.979	0.982	0.979	0.982	0.979	0.982	0.979	0.981	0.979	0.984	0.982	0.982	0.982	0.984	0.984	0.984	0.984	0.986
96	0.986	0.982	0.984	0.982	0.982	0.982	0.984	0.982	0.984	0.982	0.982	0.981	0.982	0.979	0.984	0.982	0.986	0.986	0.989	0.986
97	0.984	0.984	0.984	0.986	0.984	0.984	0.982	0.984	0.982	0.984	0.984	0.984	0.984	0.984	0.988	0.997	0.999	0.997	0.994	0.992
98	0.986	0.984	0.986	0.986	0.988	0.986	0.988	0.984	0.986	0.984	0.986	0.982	0.986	0.984	0.988	0.992	1.000	0.999	1.000	0.997

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 122

IR SCAN TIME 15.08 SEC
INITIAL TEMP 545.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.967	0.969	0.969	0.967	0.965	0.965	0.965	0.965	0.965	0.965	0.963	0.963	0.963	0.963	0.963	0.961	0.961	0.961	0.961	0.963
65	0.961	0.961	0.963	0.961	0.961	0.959	0.959	0.959	0.961	0.957	0.959	0.959	0.957	0.957	0.957	0.959	0.955	0.957	0.957	0.955
66	0.953	0.955	0.953	0.950	0.953	0.950	0.953	0.950	0.953	0.948	0.950	0.950	0.950	0.953	0.948	0.950	0.948	0.950	0.950	0.950
67	0.946	0.948	0.946	0.946	0.946	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.941	0.943
68	0.941	0.941	0.938	0.938	0.938	0.938	0.935	0.938	0.935	0.938	0.935	0.935	0.935	0.935	0.935	0.938	0.933	0.941	0.938	0.938
69	0.938	0.938	0.938	0.938	0.938	0.935	0.938	0.935	0.938	0.935	0.935	0.935	0.933	0.933	0.933	0.935	0.935	0.933	0.933	0.935
70	0.938	0.935	0.938	0.935	0.935	0.935	0.935	0.933	0.933	0.935	0.935	0.935	0.935	0.933	0.933	0.933	0.933	0.933	0.933	0.933
71	0.935	0.938	0.935	0.935	0.935	0.935	0.938	0.935	0.935	0.933	0.933	0.933	0.935	0.933	0.933	0.935	0.933	0.933	0.933	0.933
72	0.935	0.933	0.938	0.933	0.933	0.933	0.935	0.933	0.933	0.933	0.935	0.935	0.933	0.933	0.935	0.930	0.933	0.933	0.933	0.930
73	0.941	0.938	0.935	0.938	0.938	0.938	0.935	0.938	0.938	0.935	0.935	0.935	0.935	0.933	0.935	0.933	0.933	0.933	0.935	0.935
74	0.950	0.941	0.938	0.935	0.935	0.935	0.935	0.938	0.935	0.935	0.935	0.935	0.935	0.935	0.933	0.933	0.933	0.933	0.933	0.933
75	0.969	0.961	0.943	0.941	0.933	0.935	0.933	0.935	0.933	0.935	0.930	0.935	0.933	0.933	0.933	0.935	0.935	0.935	0.933	0.935
76	0.979	0.979	0.969	0.959	0.950	0.938	0.941	0.935	0.935	0.933	0.935	0.938	0.935	0.935	0.935	0.941	0.933	0.938	0.935	0.930
77	0.981	0.979	0.981	0.977	0.973	0.961	0.953	0.943	0.938	0.938	0.938	0.935	0.933	0.935	0.935	0.935	0.935	0.935	0.935	0.933
78	0.973	0.975	0.977	0.979	0.977	0.977	0.969	0.963	0.957	0.950	0.941	0.938	0.938	0.938	0.938	0.935	0.935	0.935	0.935	0.933
79	0.975	0.973	0.973	0.975	0.975	0.977	0.975	0.977	0.973	0.971	0.965	0.959	0.953	0.946	0.943	0.941	0.941	0.938	0.938	0.938
80	0.986	0.977	0.975	0.975	0.979	0.977	0.979	0.977	0.979	0.977	0.979	0.975	0.975	0.969	0.967	0.961	0.957	0.955	0.950	0.946
81	1.030	0.997	0.981	0.975	0.975	0.979	0.979	0.981	0.979	0.979	0.979	0.981	0.979	0.979	0.979	0.977	0.977	0.973	0.969	0.969
82	1.098	1.048	1.006	0.982	0.977	0.973	0.975	0.971	0.975	0.971	0.973	0.973	0.979	0.981	0.981	0.979	0.979	0.975	0.977	0.975
83	1.145	1.118	1.069	1.019	0.992	0.979	0.975	0.973	0.973	0.971	0.973	0.973	0.975	0.979	0.979	0.971	0.981	0.967	0.977	0.969
84	1.158	1.151	1.130	1.085	1.032	0.999	0.984	0.975	0.973	0.973	0.975	0.975	0.979	0.977	0.979	0.979	0.981	0.979	0.981	0.979
85	1.160	1.155	1.147	1.126	1.086	1.033	0.999	0.979	0.977	0.973	0.977	0.977	0.981	0.979	0.981	0.979	0.979	0.977	0.979	0.977
86	1.052	1.050	1.045	1.039	1.029	1.009	0.996	0.986	0.989	0.989	0.988	0.982	0.979	0.975	0.975	0.973	0.975	0.975	0.977	0.975
87	0.994	0.991	0.989	0.988	0.984	0.981	0.982	0.982	0.989	0.989	0.989	0.979	0.975	0.969	0.969	0.971	0.971	0.971	0.971	0.969
88	0.988	0.988	0.982	0.982	0.979	0.981	0.975	0.977	0.973	0.977	0.975	0.973	0.973	0.973	0.971	0.971	0.971	0.971	0.971	0.971
89	0.988	0.988	0.982	0.979	0.977	0.973	0.975	0.973	0.973	0.969	0.973	0.971	0.973	0.971	0.973	0.971	0.973	0.971	0.973	0.971
90	0.986	0.988	0.982	0.979	0.973	0.973	0.973	0.973	0.971	0.969	0.969	0.969	0.971	0.971	0.967	0.971	0.967	0.971	0.967	0.971
91	0.981	0.979	0.977	0.975	0.971	0.971	0.971	0.969	0.969	0.969	0.969	0.969	0.969	0.969	0.969	0.967	0.969	0.969	0.971	0.971
92	0.979	0.979	0.975	0.973	0.973	0.971	0.973	0.971	0.969	0.971	0.969	0.971	0.969	0.973	0.969	0.971	0.973	0.973	0.973	0.973
93	0.979	0.979	0.975	0.975	0.971	0.975	0.973	0.973	0.973	0.971	0.971	0.971	0.971	0.971	0.971	0.973	0.971	0.971	0.973	0.975
94	0.984	0.984	0.981	0.979	0.975	0.975	0.973	0.975	0.973	0.975	0.973	0.973	0.973	0.973	0.971	0.973	0.973	0.973	0.973	0.973
95	0.986	0.986	0.982	0.981	0.977	0.977	0.975	0.979	0.973	0.977	0.975	0.975	0.975	0.975	0.973	0.973	0.973	0.975	0.973	0.975
96	0.988	0.986	0.986	0.981	0.981	0.977	0.979	0.973	0.977	0.977	0.979	0.975	0.977	0.975	0.977	0.973	0.975	0.975	0.975	0.973
97	0.994	0.997	0.996	0.989	0.982	0.981	0.979	0.979	0.977	0.979	0.979	0.979	0.975	0.979	0.973	0.977	0.973	0.975	0.971	0.975
98	0.997	0.997	0.996	0.991	0.989	0.984	0.988	0.986	0.984	0.984	0.986	0.984	0.984	0.981	0.981	0.979	0.981	0.977	0.979	0.975

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 122

IR SCAN TIME 15.08 SEC
INITIAL TEMP 545.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.961	0.961	0.959	0.959	0.959	0.961	0.959	0.961	0.961	0.961
65	0.957	0.955	0.955	0.953	0.955	0.953	0.957	0.955	0.955	0.955
66	0.948	0.948	0.948	0.948	0.950	0.948	0.946	0.946	0.948	0.948
67	0.941	0.941	0.941	0.941	0.941	0.938	0.941	0.941	0.941	0.941
68	0.938	0.938	0.936	0.938	0.935	0.938	0.938	0.938	0.935	0.935
69	0.927	0.935	0.927	0.933	0.930	0.933	0.927	0.933	0.927	0.933
70	0.933	0.933	0.933	0.933	0.933	0.933	0.933	0.930	0.930	0.933
71	0.933	0.933	0.933	0.933	0.933	0.933	0.930	0.930	0.930	0.930
72	0.930	0.930	0.930	0.927	0.933	0.933	0.933	0.927	0.933	0.930
73	0.933	0.933	0.933	0.930	0.933	0.933	0.927	0.930	0.933	0.933
74	0.933	0.933	0.933	0.933	0.933	0.933	0.933	0.933	0.933	0.933
75	0.935	0.935	0.933	0.933	0.933	0.933	0.930	0.933	0.933	0.933
76	0.933	0.935	0.933	0.935	0.933	0.930	0.935	0.927	0.933	0.930
77	0.935	0.933	0.933	0.933	0.933	0.933	0.933	0.933	0.935	0.933
78	0.933	0.935	0.933	0.935	0.935	0.935	0.935	0.933	0.933	0.933
79	0.941	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938
80	0.943	0.941	0.938	0.938	0.935	0.938	0.938	0.933	0.933	0.935
81	0.965	0.963	0.959	0.955	0.953	0.948	0.946	0.946	0.941	0.938
82	0.977	0.975	0.977	0.971	0.973	0.969	0.967	0.963	0.959	0.959
83	0.975	0.971	0.979	0.969	0.979	0.969	0.975	0.969	0.973	0.965
84	0.979	0.977	0.979	0.975	0.979	0.975	0.979	0.975	0.977	0.975
85	0.979	0.975	0.977	0.975	0.977	0.975	0.975	0.973	0.975	0.973
86	0.975	0.973	0.975	0.973	0.973	0.973	0.973	0.973	0.975	0.975
87	0.971	0.969	0.969	0.971	0.975	0.973	0.973	0.971	0.975	0.973
88	0.969	0.973	0.969	0.973	0.971	0.973	0.973	0.973	0.973	0.975
89	0.973	0.971	0.973	0.971	0.973	0.971	0.973	0.973	0.975	0.975
90	0.969	0.973	0.971	0.973	0.969	0.971	0.969	0.973	0.973	0.975
91	0.971	0.971	0.973	0.973	0.973	0.971	0.973	0.973	0.975	0.973
92	0.973	0.973	0.973	0.971	0.973	0.973	0.973	0.975	0.975	0.975
93	0.973	0.973	0.973	0.973	0.973	0.973	0.973	0.975	0.973	0.975
94	0.975	0.975	0.975	0.975	0.975	0.975	0.975	0.975	0.975	0.977
95	0.973	0.977	0.973	0.975	0.973	0.975	0.975	0.977	0.977	0.975
96	0.975	0.975	0.977	0.973	0.977	0.975	0.979	0.977	0.979	0.979
97	0.973	0.975	0.973	0.979	0.973	0.977	0.975	0.981	0.981	0.982
98	0.979	0.979	0.981	0.979	0.981	0.981	0.984	0.982	0.982	0.982

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 15.08 SEC
HREF = 0.206E-01

GROUP 122

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	0.006	0.007	0.006	0.005	0.005	0.005	0.004	0.005	0.003	0.004	0.003	0.001	0.004	0.005	0.003	0.002	0.003	0.003	0.003	0.001
30	0.006	0.006	0.006	0.005	0.005	0.004	0.005	0.004	0.004	0.003	0.004	0.003	0.004	0.003	0.004	0.002	0.003	0.002	0.002	0.002
31	0.006	0.006	0.006	0.005	0.006	0.003	0.006	0.004	0.004	0.003	0.004	0.003	0.003	0.002	0.003	0.002	0.003	0.001	0.002	0.002
32	0.006	0.006	0.005	0.005	0.005	0.005	0.004	0.003	0.003	0.003	0.002	0.003	0.003	0.002	0.002	0.001	0.003	0.004	0.003	0.005
33	0.005	0.006	0.006	0.004	0.004	0.003	0.004	0.002	0.003	0.003	0.003	0.001	0.002	0.002	0.003	0.003	0.004	0.005	0.005	0.005
34	0.005	0.005	0.004	0.003	0.003	0.002	0.002	0.001	0.001	0.002	0.002	0.003	0.003	0.005	0.003	0.005	0.005	0.004	0.005	0.003
35	0.003	0.003	0.003	0.003	0.003	0.002	0.000	0.003	0.001	0.003	0.002	0.004	0.002	0.004	0.003	0.005	0.003	0.001	0.001	0.001
36	0.003	0.003	0.003	0.002	0.003	0.003	0.003	0.003	0.003	0.004	0.003	0.003	0.004	0.003	0.000	0.000	0.000	0.000	0.000	0.000
37	0.003	0.005	0.004	0.004	0.003	0.004	0.003	0.004	0.003	0.004	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.005	0.005	0.005	0.005	0.004	0.005	0.004	0.004	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.003	0.006	0.005	0.005	0.005	0.005	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.006	0.005	0.006	0.005	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
41	0.006	0.006	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
42	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
43	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
44	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.008	0.020
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.014	0.055	0.094
46	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.001	0.025	0.076	0.119
47	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.005	0.035	0.092	0.133
48	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.043	0.102	0.143
49	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.013	0.053	0.111	0.145
50	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.000	0.021	0.079	0.129	0.153
51	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.034	0.098	0.141	0.163
52	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.052	0.116	0.150	0.167
53	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.006	0.066	0.123	0.151	0.167
54	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.015	0.077	0.124	0.142	0.154
55	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.026	0.089	0.130	0.146	0.154
56	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.037	0.098	0.132	0.147	0.155
57	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.052	0.110	0.138	0.150	0.158
58	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.010	0.072	0.122	0.143	0.154	0.161
59	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.018	0.076	0.116	0.132	0.145	0.154
60	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.022	0.065	0.087	0.098	0.109	0.119
61	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.001	0.031	0.059	0.072	0.078	0.083	0.088
62	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.004	0.038	0.065	0.072	0.077	0.079	0.082
63	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.013	0.059	0.087	0.094	0.095	0.095	0.094

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 15.08 SEC
GROUP 122 HREF = 0.206E-01

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	0.003	0.000	0.002	0.000	0.002	0.000	0.001	0.001	0.003	0.002	0.004	0.003	0.005	0.003	0.005	0.005	0.006	0.005	0.004	0.003
30	0.002	0.001	0.002	0.002	0.003	0.003	0.004	0.004	0.005	0.005	0.006	0.006	0.006	0.005	0.005	0.002	0.002	0.002	0.002	0.002
31	0.003	0.003	0.004	0.004	0.006	0.006	0.006	0.006	0.006	0.005	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.004	0.005	0.005	0.006	0.005	0.006	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.006	0.006	0.004	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
41	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
42	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
43	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
44	0.026	0.031	0.029	0.028	0.023	0.019	0.014	0.006	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.119	0.134	0.145	0.152	0.152	0.143	0.125	0.110	0.108	0.105	0.084	0.053	0.023	0.008	0.003	0.003	0.003	0.003	0.003	0.003
46	0.144	0.161	0.176	0.191	0.205	0.217	0.219	0.209	0.215	0.256	0.257	0.184	0.108	0.053	0.021	0.009	0.004	0.001	0.001	0.001
47	0.155	0.170	0.185	0.197	0.209	0.220	0.232	0.241	0.239	0.231	0.242	0.243	0.184	0.106	0.054	0.026	0.016	0.011	0.009	0.005
48	0.164	0.179	0.194	0.208	0.220	0.230	0.238	0.245	0.251	0.254	0.249	0.237	0.220	0.173	0.104	0.052	0.021	0.010	0.007	0.010
49	0.165	0.180	0.196	0.213	0.230	0.244	0.255	0.263	0.265	0.265	0.262	0.259	0.251	0.229	0.182	0.118	0.061	0.026	0.010	0.006
50	0.165	0.175	0.186	0.201	0.222	0.242	0.258	0.272	0.282	0.284	0.281	0.275	0.267	0.257	0.241	0.201	0.134	0.073	0.032	0.011
51	0.176	0.187	0.195	0.201	0.206	0.212	0.221	0.239	0.262	0.281	0.293	0.298	0.296	0.287	0.273	0.255	0.225	0.168	0.100	0.048
52	0.179	0.190	0.202	0.215	0.227	0.231	0.224	0.215	0.212	0.220	0.240	0.265	0.287	0.299	0.300	0.293	0.278	0.248	0.190	0.115
53	0.179	0.190	0.203	0.218	0.232	0.243	0.248	0.251	0.248	0.234	0.211	0.196	0.200	0.224	0.255	0.281	0.293	0.289	0.266	0.217
54	0.165	0.178	0.192	0.209	0.226	0.239	0.249	0.258	0.268	0.276	0.275	0.257	0.225	0.190	0.171	0.180	0.211	0.250	0.274	0.272
55	0.159	0.165	0.172	0.180	0.188	0.199	0.214	0.234	0.256	0.275	0.288	0.295	0.293	0.276	0.243	0.200	0.165	0.151	0.164	0.200
56	0.163	0.171	0.180	0.189	0.192	0.191	0.188	0.189	0.197	0.214	0.237	0.263	0.284	0.295	0.297	0.288	0.263	0.222	0.179	0.149
57	0.165	0.174	0.186	0.197	0.205	0.212	0.216	0.220	0.218	0.212	0.201	0.193	0.197	0.217	0.245	0.272	0.291	0.298	0.283	0.245
58	0.169	0.179	0.190	0.200	0.210	0.217	0.224	0.234	0.244	0.252	0.254	0.245	0.227	0.200	0.178	0.173	0.191	0.225	0.264	0.292
59	0.165	0.176	0.189	0.202	0.214	0.223	0.231	0.240	0.251	0.262	0.273	0.283	0.285	0.279	0.263	0.234	0.197	0.166	0.154	0.169
60	0.129	0.142	0.157	0.175	0.193	0.211	0.226	0.241	0.256	0.269	0.282	0.290	0.293	0.299	0.304	0.301	0.288	0.263	0.229	0.190
61	0.094	0.100	0.108	0.118	0.130	0.145	0.159	0.177	0.200	0.224	0.247	0.268	0.285	0.298	0.304	0.307	0.310	0.308	0.304	0.294
62	0.086	0.089	0.093	0.097	0.102	0.107	0.111	0.116	0.126	0.138	0.153	0.172	0.196	0.222	0.250	0.272	0.288	0.301	0.314	0.323
63	0.094	0.093	0.094	0.096	0.099	0.100	0.102	0.104	0.107	0.110	0.113	0.117	0.121	0.126	0.135	0.147	0.164	0.191	0.222	0.253

IR HEAT TRANSFER COEFFICIENT = H(.9TU)/HREF
IR SCAN TIME 15.08 SEC
HREF = 0.206E-01

GROUP 122

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
41	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
42	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
43	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
46	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
47	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
48	0.010	0.009	0.006	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
49	0.005	0.007	0.009	0.011	0.008	0.006	0.002	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
50	0.004	0.003	0.002	0.003	0.006	0.011	0.009	0.004	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
51	0.017	0.005	0.005	0.005	0.000	0.003	0.005	0.008	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
52	0.056	0.021	0.006	0.000	0.000	0.000	0.001	0.003	0.004	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
53	0.142	0.073	0.030	0.010	0.001	0.000	0.000	0.002	0.003	0.004	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
54	0.237	0.168	0.092	0.041	0.013	0.003	0.000	0.000	0.001	0.003	0.004	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
55	0.237	0.241	0.195	0.121	0.059	0.022	0.006	0.001	0.000	0.000	0.001	0.003	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
56	0.140	0.157	0.188	0.196	0.155	0.088	0.041	0.014	0.004	0.000	0.000	0.000	0.003	0.005	0.003	0.003	0.003	0.003	0.003	0.003
57	0.195	0.156	0.134	0.132	0.154	0.155	0.107	0.052	0.019	0.006	0.006	0.006	0.006	0.000	0.003	0.003	0.003	0.003	0.003	0.003
58	0.294	0.263	0.214	0.165	0.133	0.116	0.102	0.066	0.029	0.010	0.003	0.003	0.003	0.003	0.003	0.000	0.003	0.003	0.003	0.003
59	0.203	0.245	0.275	0.275	0.243	0.191	0.145	0.111	0.076	0.037	0.013	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
60	0.158	0.142	0.150	0.180	0.220	0.244	0.232	0.192	0.150	0.104	0.058	0.025	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
61	0.267	0.229	0.186	0.150	0.133	0.136	0.161	0.189	0.199	0.186	0.154	0.105	0.049	0.016	0.006	0.006	0.006	0.006	0.006	0.006
62	0.325	0.315	0.299	0.269	0.223	0.177	0.142	0.123	0.125	0.147	0.171	0.169	0.127	0.069	0.032	0.009	0.000	0.000	0.000	0.000
63	0.280	0.297	0.313	0.323	0.318	0.297	0.256	0.205	0.158	0.126	0.108	0.104	0.112	0.109	0.075	0.032	0.009	0.009	0.009	0.009

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 15.08 SEC
GROUP 122 HREF = 0.2066E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
41	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
42	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
43	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
46	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
47	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
48	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
49	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
50	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
51	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
52	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
53	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
54	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
55	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
56	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
57	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
58	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
59	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
60	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
61	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
62	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
63	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 15.08 SEC
HREF = 0.206E-01

GROUP 122

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
41	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
42	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
43	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
46	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
47	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
48	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
49	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
50	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
51	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
52	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
53	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
54	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
55	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
56	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
57	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
58	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
59	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
60	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
61	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
62	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
63	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 15.08 SEC
GROUP 122 HREF = 0.206E-01

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
41	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
42	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
43	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
46	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
47	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
48	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
49	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
50	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
51	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
52	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
53	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
54	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
55	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
56	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
57	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
58	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
59	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
60	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
61	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
62	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
63	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 15.08 SEC
HREF = 0.206E-01

GROUP 122

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.022	0.078	0.107	0.116	0.121	0.124	0.125
65	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.038	0.094	0.120	0.130	0.136	0.142	0.146
66	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.051	0.093	0.112	0.121	0.129	0.137	0.145
67	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.047	0.074	0.086	0.093	0.101	0.108	0.115
68	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.010	0.049	0.066	0.074	0.079	0.085	0.089	0.093
69	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.023	0.056	0.069	0.073	0.077	0.081	0.084	0.086
70	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.031	0.060	0.069	0.074	0.078	0.080	0.082	0.085
71	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.032	0.056	0.063	0.067	0.071	0.074	0.076	0.079
72	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.029	0.049	0.055	0.059	0.062	0.064	0.067	0.069
73	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.000	0.031	0.045	0.050	0.053	0.057	0.059	0.061	0.063
74	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.009	0.033	0.042	0.045	0.048	0.051	0.053	0.055	0.057
75	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.016	0.033	0.039	0.043	0.045	0.047	0.049	0.052	0.053
76	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.021	0.036	0.040	0.043	0.046	0.047	0.049	0.052	0.051
77	0.003	0.016	0.017	0.023	0.021	0.019	0.016	0.016	0.016	0.016	0.006	0.029	0.038	0.041	0.044	0.045	0.047	0.049	0.051	0.053
78	0.016	0.018	0.006	0.026	0.036	0.023	0.023	0.022	0.022	0.022	0.010	0.029	0.036	0.041	0.043	0.045	0.047	0.049	0.050	0.053
79	0.018	0.023	0.008	0.016	0.026	0.031	0.023	0.021	0.017	0.003	0.018	0.032	0.038	0.040	0.042	0.044	0.047	0.048	0.051	0.053
80	0.018	0.026	0.022	0.018	0.017	0.020	0.026	0.025	0.020	0.020	0.026	0.036	0.039	0.041	0.043	0.045	0.047	0.049	0.051	0.053
81	0.023	0.028	0.028	0.025	0.017	0.016	0.010	0.013	0.018	0.023	0.033	0.038	0.040	0.042	0.044	0.046	0.048	0.049	0.052	0.055
82	0.029	0.028	0.028	0.025	0.019	0.016	0.006	0.006	0.005	0.020	0.032	0.039	0.041	0.042	0.044	0.045	0.047	0.049	0.052	0.053
83	0.031	0.025	0.025	0.025	0.018	0.013	0.001	0.001	0.001	0.018	0.040	0.049	0.051	0.051	0.050	0.049	0.049	0.049	0.050	0.048
84	0.024	0.021	0.024	0.026	0.016	0.006	0.000	0.002	0.005	0.006	0.014	0.018	0.020	0.024	0.030	0.032	0.036	0.037	0.039	0.040
85	0.010	0.013	0.020	0.023	0.016	0.005	0.003	0.004	0.005	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.001	0.000	0.002	0.003
86	0.018	0.018	0.003	0.005	0.003	0.000	0.001	0.005	0.007	0.003	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
87	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.004	0.008	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.006	0.006	0.003	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
89	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.005	0.005	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.003	0.003	0.003	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000
91	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.003	0.003	0.003	0.003	0.002	0.001	0.000	0.000	0.000	0.000
92	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.001	0.004	0.003	0.004	0.004	0.003	0.002	0.003	0.000	0.001	0.001	0.001
93	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.004	0.005	0.005	0.006	0.007	0.006	0.006	0.005	0.003	0.002	0.000	0.000
94	0.005	0.004	0.004	0.005	0.004	0.003	0.003	0.006	0.009	0.009	0.007	0.009	0.009	0.010	0.009	0.008	0.006	0.005	0.001	0.001
95	0.010	0.010	0.009	0.010	0.010	0.009	0.007	0.009	0.011	0.011	0.009	0.011	0.011	0.011	0.011	0.011	0.010	0.008	0.003	0.000
96	0.012	0.011	0.011	0.011	0.011	0.010	0.009	0.009	0.011	0.011	0.011	0.011	0.013	0.014	0.014	0.013	0.013	0.009	0.005	0.001
97	0.014	0.014	0.014	0.013	0.012	0.011	0.009	0.009	0.010	0.008	0.007	0.009	0.011	0.014	0.014	0.013	0.011	0.009	0.006	0.006
98	0.015	0.017	0.016	0.015	0.014	0.011	0.011	0.010	0.013	0.011	0.010	0.009	0.009	0.011	0.011	0.011	0.010	0.008	0.007	0.007

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 15.08 SEC
GROUP 122 HREF = 0.206E-01

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	0.124	0.123	0.122	0.122	0.119	0.117	0.112	0.109	0.108	0.109	0.108	0.109	0.110	0.112	0.112	0.113	0.114	0.117	0.121	0.127
65	0.150	0.153	0.156	0.160	0.162	0.160	0.156	0.149	0.144	0.136	0.130	0.122	0.119	0.115	0.114	0.110	0.113	0.112	0.114	0.112
66	0.152	0.161	0.171	0.181	0.189	0.195	0.199	0.203	0.203	0.199	0.192	0.184	0.173	0.160	0.146	0.136	0.130	0.128	0.126	0.124
67	0.124	0.135	0.147	0.160	0.170	0.179	0.188	0.203	0.221	0.231	0.237	0.244	0.248	0.243	0.231	0.218	0.201	0.183	0.164	0.150
68	0.100	0.107	0.113	0.120	0.127	0.134	0.140	0.153	0.170	0.188	0.203	0.216	0.229	0.245	0.256	0.262	0.263	0.259	0.249	0.236
69	0.090	0.096	0.099	0.103	0.107	0.111	0.115	0.120	0.124	0.130	0.137	0.145	0.151	0.157	0.166	0.176	0.186	0.197	0.207	0.216
70	0.087	0.090	0.093	0.094	0.096	0.098	0.100	0.103	0.104	0.107	0.110	0.113	0.115	0.118	0.120	0.123	0.126	0.130	0.134	0.140
71	0.081	0.085	0.088	0.090	0.091	0.093	0.094	0.096	0.097	0.098	0.099	0.100	0.101	0.102	0.102	0.103	0.105	0.107	0.109	0.110
72	0.072	0.074	0.076	0.078	0.080	0.081	0.085	0.086	0.089	0.089	0.090	0.089	0.089	0.088	0.088	0.087	0.088	0.089	0.092	0.093
73	0.064	0.066	0.069	0.070	0.072	0.073	0.076	0.078	0.080	0.080	0.081	0.080	0.082	0.082	0.083	0.083	0.082	0.081	0.081	0.081
74	0.057	0.059	0.061	0.064	0.066	0.068	0.069	0.072	0.074	0.074	0.075	0.076	0.076	0.079	0.079	0.080	0.079	0.079	0.079	0.078
75	0.054	0.056	0.057	0.059	0.061	0.062	0.063	0.065	0.066	0.068	0.069	0.070	0.070	0.071	0.072	0.072	0.072	0.072	0.073	0.074
76	0.053	0.056	0.056	0.059	0.060	0.061	0.061	0.063	0.063	0.065	0.066	0.066	0.066	0.066	0.068	0.068	0.067	0.066	0.067	0.068
77	0.054	0.055	0.057	0.057	0.060	0.061	0.063	0.064	0.065	0.065	0.066	0.066	0.066	0.065	0.067	0.066	0.066	0.065	0.066	0.067
78	0.054	0.056	0.057	0.058	0.059	0.061	0.063	0.064	0.065	0.065	0.066	0.066	0.066	0.066	0.066	0.067	0.066	0.066	0.066	0.066
79	0.054	0.056	0.057	0.059	0.059	0.061	0.062	0.063	0.063	0.065	0.065	0.066	0.065	0.066	0.066	0.067	0.066	0.067	0.066	0.067
80	0.056	0.057	0.059	0.060	0.062	0.063	0.064	0.065	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.067	0.067	0.068	0.068
81	0.057	0.060	0.062	0.064	0.066	0.068	0.069	0.071	0.071	0.072	0.072	0.072	0.072	0.072	0.072	0.072	0.073	0.072	0.073	0.072
82	0.056	0.057	0.061	0.063	0.066	0.069	0.072	0.072	0.074	0.074	0.076	0.076	0.076	0.077	0.078	0.078	0.080	0.080	0.081	0.082
83	0.048	0.050	0.052	0.054	0.057	0.059	0.062	0.066	0.069	0.070	0.072	0.072	0.072	0.072	0.072	0.073	0.074	0.074	0.075	0.077
84	0.042	0.043	0.046	0.048	0.051	0.053	0.057	0.061	0.065	0.068	0.071	0.071	0.072	0.072	0.073	0.074	0.075	0.076	0.076	0.077
85	0.004	0.005	0.008	0.010	0.014	0.014	0.016	0.016	0.018	0.020	0.023	0.024	0.028	0.028	0.029	0.031	0.033	0.035	0.038	0.039
86	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000
87	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
89	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.016	0.012	0.002	0.002	0.002	0.002	0.002	0.002
91	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.018	0.032	0.026	0.010	0.001	0.001	0.001	0.001	0.001
92	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
93	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.001	0.003	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
94	0.001	0.001	0.001	0.001	0.001	0.002	0.003	0.004	0.005	0.006	0.006	0.004	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001
95	0.000	0.000	0.000	0.001	0.003	0.003	0.005	0.006	0.006	0.007	0.006	0.007	0.005	0.003	0.001	0.000	0.000	0.000	0.000	0.000
96	0.000	0.001	0.003	0.003	0.005	0.006	0.008	0.007	0.009	0.008	0.009	0.009	0.009	0.006	0.005	0.001	0.001	0.001	0.001	0.001
97	0.005	0.006	0.006	0.006	0.006	0.006	0.006	0.007	0.007	0.007	0.007	0.008	0.007	0.006	0.006	0.004	0.002	0.001	0.001	0.001
98	0.007	0.009	0.009	0.009	0.009	0.009	0.010	0.009	0.010	0.009	0.009	0.008	0.008	0.006	0.006	0.004	0.004	0.006	0.016	0.023

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME = 15.08 SEC
GROUP 122 HREF = 0.206E-01

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	0.137	0.152	0.177	0.207	0.243	0.277	0.294	0.287	0.256	0.213	0.170	0.134	0.107	0.091	0.077	0.057	0.029	0.009	0.009	0.009
65	0.114	0.112	0.114	0.117	0.120	0.126	0.140	0.165	0.196	0.220	0.222	0.202	0.171	0.142	0.119	0.098	0.076	0.046	0.018	0.003
66	0.123	0.122	0.122	0.124	0.126	0.127	0.124	0.123	0.121	0.125	0.132	0.149	0.169	0.178	0.172	0.156	0.138	0.116	0.080	0.038
67	0.141	0.138	0.137	0.136	0.133	0.131	0.129	0.129	0.129	0.128	0.128	0.125	0.124	0.124	0.133	0.151	0.166	0.169	0.155	0.117
68	0.219	0.197	0.175	0.155	0.141	0.132	0.128	0.128	0.128	0.127	0.128	0.127	0.127	0.125	0.124	0.124	0.122	0.124	0.131	0.139
69	0.225	0.231	0.229	0.221	0.210	0.194	0.175	0.156	0.139	0.129	0.124	0.124	0.125	0.126	0.124	0.125	0.126	0.126	0.124	0.121
70	0.146	0.154	0.163	0.171	0.176	0.177	0.176	0.173	0.167	0.160	0.153	0.145	0.137	0.131	0.125	0.123	0.125	0.126	0.126	0.125
71	0.112	0.115	0.117	0.120	0.125	0.131	0.135	0.139	0.144	0.147	0.147	0.144	0.140	0.134	0.128	0.124	0.120	0.117	0.115	0.113
72	0.095	0.097	0.097	0.098	0.100	0.101	0.103	0.107	0.110	0.110	0.111	0.115	0.120	0.123	0.124	0.122	0.121	0.120	0.117	0.113
73	0.081	0.080	0.081	0.080	0.081	0.081	0.083	0.084	0.087	0.090	0.090	0.089	0.089	0.089	0.090	0.090	0.094	0.097	0.100	0.103
74	0.078	0.079	0.078	0.078	0.078	0.076	0.075	0.073	0.072	0.072	0.074	0.074	0.073	0.073	0.074	0.074	0.075	0.075	0.077	0.078
75	0.075	0.075	0.076	0.077	0.078	0.078	0.076	0.074	0.074	0.073	0.072	0.072	0.071	0.069	0.069	0.068	0.068	0.068	0.067	0.068
76	0.069	0.068	0.069	0.069	0.069	0.070	0.070	0.069	0.070	0.070	0.070	0.072	0.073	0.073	0.072	0.073	0.072	0.071	0.072	0.069
77	0.067	0.066	0.067	0.066	0.066	0.065	0.065	0.065	0.065	0.065	0.066	0.065	0.066	0.067	0.067	0.068	0.069	0.069	0.071	0.072
78	0.066	0.068	0.068	0.067	0.067	0.067	0.066	0.066	0.066	0.065	0.065	0.065	0.065	0.065	0.065	0.066	0.067	0.068	0.068	0.069
79	0.068	0.068	0.068	0.068	0.069	0.069	0.068	0.068	0.068	0.068	0.068	0.068	0.067	0.068	0.068	0.069	0.069	0.070	0.070	0.072
80	0.069	0.068	0.069	0.069	0.069	0.068	0.069	0.068	0.069	0.069	0.069	0.069	0.070	0.069	0.071	0.071	0.072	0.072	0.072	0.073
81	0.073	0.073	0.073	0.073	0.073	0.072	0.072	0.072	0.072	0.071	0.071	0.072	0.071	0.071	0.072	0.072	0.073	0.073	0.074	0.074
82	0.084	0.085	0.086	0.086	0.086	0.084	0.084	0.083	0.082	0.080	0.080	0.078	0.076	0.075	0.075	0.075	0.075	0.075	0.075	0.074
83	0.079	0.080	0.082	0.083	0.086	0.087	0.089	0.090	0.091	0.092	0.093	0.093	0.092	0.092	0.091	0.091	0.089	0.088	0.087	0.085
84	0.078	0.079	0.080	0.080	0.081	0.080	0.081	0.080	0.080	0.080	0.081	0.081	0.084	0.084	0.087	0.089	0.092	0.095	0.098	0.100
85	0.043	0.045	0.048	0.050	0.053	0.054	0.055	0.056	0.057	0.058	0.059	0.059	0.061	0.062	0.064	0.064	0.066	0.067	0.070	0.072
86	0.001	0.001	0.002	0.001	0.002	0.000	0.001	0.000	0.000	0.000	0.001	0.000	0.001	0.001	0.001	0.000	0.001	0.000	0.002	0.001
87	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
89	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
91	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.016	0.024	0.016	0.004	0.004	0.004	0.004	0.004	0.004
92	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000
93	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
94	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
95	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
96	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
97	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
98	0.019	0.009	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 15.08 SEC
HREF = 0.206E-01

GROUP 122

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
65	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
66	0.011	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
67	0.066	0.026	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
68	0.128	0.094	0.046	0.015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
69	0.116	0.107	0.081	0.040	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
70	0.124	0.120	0.113	0.092	0.052	0.017	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
71	0.109	0.107	0.105	0.101	0.091	0.063	0.026	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
72	0.109	0.105	0.102	0.100	0.097	0.092	0.074	0.041	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
73	0.105	0.106	0.108	0.109	0.108	0.107	0.103	0.088	0.057	0.025	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
74	0.077	0.078	0.078	0.081	0.081	0.085	0.086	0.089	0.083	0.060	0.026	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
75	0.068	0.070	0.070	0.070	0.070	0.071	0.071	0.070	0.068	0.064	0.053	0.028	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
76	0.069	0.069	0.069	0.069	0.069	0.069	0.069	0.068	0.068	0.067	0.066	0.058	0.037	0.011	0.011	0.011	0.011	0.011	0.011	0.011
77	0.074	0.074	0.076	0.077	0.079	0.078	0.077	0.076	0.076	0.074	0.072	0.069	0.063	0.045	0.018	0.000	0.000	0.000	0.000	0.000
78	0.070	0.070	0.072	0.072	0.073	0.074	0.076	0.079	0.080	0.080	0.081	0.083	0.082	0.080	0.068	0.041	0.013	0.013	0.013	0.013
79	0.072	0.073	0.073	0.073	0.072	0.073	0.073	0.074	0.074	0.074	0.074	0.075	0.076	0.077	0.078	0.072	0.052	0.022	0.001	0.001
80	0.073	0.074	0.074	0.075	0.076	0.078	0.079	0.078	0.080	0.079	0.079	0.078	0.078	0.077	0.078	0.076	0.073	0.059	0.032	0.007
81	0.074	0.074	0.074	0.076	0.076	0.077	0.077	0.078	0.078	0.080	0.080	0.080	0.080	0.081	0.080	0.082	0.083	0.082	0.070	0.047
82	0.075	0.075	0.076	0.076	0.076	0.076	0.077	0.076	0.078	0.079	0.081	0.082	0.084	0.083	0.084	0.085	0.086	0.087	0.085	0.076
83	0.084	0.082	0.081	0.079	0.079	0.078	0.078	0.078	0.079	0.079	0.080	0.081	0.084	0.085	0.088	0.089	0.092	0.093	0.093	0.092
84	0.101	0.102	0.102	0.102	0.101	0.100	0.098	0.096	0.095	0.093	0.092	0.090	0.090	0.090	0.092	0.094	0.096	0.097	0.097	0.096
85	0.076	0.079	0.083	0.088	0.094	0.101	0.108	0.113	0.118	0.122	0.125	0.125	0.123	0.118	0.116	0.112	0.108	0.103	0.100	0.099
86	0.002	0.001	0.003	0.003	0.006	0.007	0.011	0.014	0.016	0.018	0.023	0.026	0.028	0.028	0.031	0.032	0.032	0.031	0.029	0.030
87	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
89	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
91	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.001	0.014	0.016	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
92	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
93	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
94	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
95	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
96	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
97	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
98	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.000	0.000	0.000	0.000

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 15.08 SEC
HREF = 0.206E-01

GROUP 122

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
65	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
66	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
67	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
68	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
69	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
70	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
71	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
72	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
73	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
74	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
75	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
76	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
77	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
78	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
79	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
80	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
81	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016
82	0.056	0.026	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
83	0.086	0.069	0.039	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
84	0.095	0.090	0.076	0.048	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
85	0.097	0.093	0.088	0.074	0.049	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
86	0.029	0.028	0.025	0.021	0.016	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
87	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
89	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
91	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
92	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
93	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
94	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
95	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
96	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
97	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
98	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME = 15.08 SEC
GROUP 122 HREF = 0.206E-01

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
65	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
66	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
67	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
68	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
69	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
70	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
71	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
72	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
73	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
74	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
75	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
76	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
77	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
78	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
79	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
80	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
81	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016
82	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
83	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
84	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
85	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
86	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
87	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
89	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
91	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
92	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
93	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
94	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
95	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
96	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
97	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
98	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

GROUP	* * * * TITLE TYPE	MODEL DESCRIPTION * * * * GAP	HEIGHT	ALPHA-SECTOR DEG	ALPHA-MODEL DEG	PCN1/2	HR	MIN	SEC
128	RSI AFT	0.02	0.015	-0.07	30.07	0.053	7	39	30

MACH	PO(PSIA)	TO(DEG R)	T-INF DEG R	P-INF PSIA	V-INF FT/SEC	RHO-INF SLUGS/FT3	MU-INF LB-SEC/FT2	RE/F FT-1	HREF BTU/FT2-SEC-R	INITIAL TEMP DEG R
7.90	105.59	1268.67	94.10	0.0117	3757.	0.105E-04	0.758E-07	0.519E+06	0.147E-01	534.7

IR CAMERA INFORMATION

MOUNTING LOCATION	260
F STOP	1.8
LENS-DEG	15
SENSITIVITY	200.
BLACK LEVEL VOLTAGE	0.6664
LINE SCAN PHI	90
MODEL EMISSIVITY	0.96
REF EMISSIVITY	0.94
WINDOW FACTOR	0.860

TIME RECORDS

LIFT OFF	0.00
CENTER LINE	1.99
IR SCAN TIME	20.18
DELTA TIME,SEC	19.06
PHOTO 1 TIME	0
PHOTO 2 TIME	0
PHOTO 3 TIME	0
PHOTO 4 TIME	0

REFERENCE TARGET INFORMATION

TCR5	502.11
TCR6	-228.49

DIGITAL DATA AREA PRINTOUT LOCATION

LINE 29 THROUGH 98
POINT 1 THROUGH 110

NASA/RI 0H90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 128

IR SCAN TIME 19.06 SEC
INITIAL TEMP 534.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	1.004	1.003	1.001	1.006	0.999	0.999	1.001	0.999	1.006	1.001	1.001	1.003	0.997	0.999	1.001	1.001	1.001	1.001	0.999	0.999
30	1.006	1.006	1.004	1.004	1.003	1.003	1.001	1.003	1.001	1.001	0.999	1.001	0.999	1.003	0.999	1.003	0.997	0.999	0.995	0.997
31	1.003	1.004	1.003	1.004	1.003	1.003	1.001	1.003	1.001	1.003	0.999	1.001	0.999	0.999	0.997	0.999	0.997	0.999	0.999	0.999
32	1.003	1.003	1.004	1.003	1.003	1.001	1.001	0.999	0.999	0.999	0.999	0.997	0.997	0.997	0.995	0.997	0.997	0.995	0.999	0.999
33	1.003	1.004	1.004	1.001	1.001	0.999	0.999	0.999	0.997	0.997	0.997	0.997	0.995	0.997	0.997	1.003	0.999	1.003	1.001	1.001
34	1.003	1.003	1.001	0.999	0.997	0.997	0.995	0.995	0.995	0.995	0.997	0.997	0.999	0.999	0.999	1.001	1.001	1.001	1.001	0.999
35	1.001	0.997	0.997	0.991	0.993	0.989	0.995	0.991	0.997	0.993	0.999	0.995	0.999	0.995	1.001	1.003	0.999	0.995	0.989	0.985
36	0.997	0.999	0.999	0.995	0.997	0.997	0.999	0.999	0.997	0.999	0.999	0.999	0.999	0.999	0.995	0.991	0.983	0.979	0.975	0.968
37	0.999	0.997	1.001	0.999	0.999	0.999	1.001	0.999	0.999	0.999	0.999	0.995	0.991	0.987	0.983	0.977	0.972	0.970	0.970	0.970
38	1.001	1.001	1.001	0.999	1.003	1.001	1.001	0.999	0.999	0.995	0.991	0.983	0.979	0.975	0.975	0.972	0.972	0.972	0.972	0.972
39	1.001	1.001	1.001	1.001	1.001	0.999	0.999	0.995	0.991	0.983	0.979	0.977	0.972	0.975	0.975	0.972	0.975	0.975	0.975	0.972
40	1.003	1.003	1.003	1.003	0.999	0.995	0.989	0.983	0.979	0.979	0.975	0.977	0.975	0.977	0.975	0.975	0.975	0.979	0.975	0.975
41	1.003	1.003	1.001	0.995	0.987	0.983	0.979	0.977	0.977	0.975	0.975	0.977	0.977	0.975	0.975	0.975	0.975	0.975	0.975	0.975
42	0.999	0.987	0.987	0.977	0.977	0.972	0.975	0.970	0.977	0.968	0.972	0.970	0.975	0.975	0.977	0.972	0.975	0.975	0.975	0.975
43	0.989	0.983	0.981	0.979	0.979	0.979	0.977	0.977	0.977	0.975	0.975	0.975	0.975	0.975	0.975	0.972	0.975	0.972	0.975	0.975
44	0.985	0.985	0.983	0.981	0.981	0.979	0.979	0.979	0.979	0.981	0.977	0.979	0.979	0.979	0.979	0.979	0.979	0.981	0.991	1.001
45	0.987	0.987	0.985	0.985	0.983	0.983	0.981	0.981	0.983	0.981	0.981	0.981	0.983	0.983	0.983	0.981	0.983	0.999	1.040	1.082
46	0.991	0.987	0.987	0.987	0.985	0.987	0.987	0.983	0.985	0.985	0.983	0.983	0.983	0.983	0.985	0.987	0.989	1.010	1.064	1.109
47	0.991	0.991	0.989	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.989	0.991	1.028	1.097	1.141
48	0.991	0.991	0.991	0.989	0.989	0.989	0.989	0.987	0.987	0.987	0.985	0.987	0.987	0.987	0.989	0.989	0.995	1.035	1.110	1.160
49	0.991	0.989	0.989	0.985	0.987	0.985	0.987	0.985	0.985	0.983	0.987	0.987	0.987	0.989	0.989	0.989	0.999	1.038	1.100	1.136
50	0.987	0.989	0.987	0.987	0.985	0.985	0.983	0.983	0.981	0.983	0.981	0.983	0.983	0.985	0.983	0.987	1.006	1.062	1.103	1.124
51	0.983	0.985	0.981	0.983	0.979	0.983	0.979	0.979	0.975	0.979	0.979	0.983	0.979	0.981	0.981	0.989	1.027	1.099	1.136	1.147
52	0.977	0.979	0.975	0.977	0.972	0.972	0.970	0.972	0.970	0.970	0.970	0.972	0.970	0.975	0.972	0.985	1.047	1.122	1.156	1.171
53	0.970	0.972	0.970	0.972	0.970	0.968	0.968	0.968	0.965	0.965	0.965	0.970	0.968	0.968	0.970	0.989	1.050	1.108	1.135	1.151
54	0.970	0.970	0.970	0.970	0.970	0.968	0.965	0.965	0.963	0.968	0.963	0.965	0.963	0.970	0.968	0.993	1.055	1.097	1.112	1.124
55	0.970	0.970	0.968	0.970	0.965	0.968	0.965	0.968	0.965	0.968	0.968	0.965	0.970	0.968	0.972	1.001	1.063	1.096	1.107	1.113
56	0.975	0.968	0.963	0.970	0.965	0.972	0.965	0.968	0.960	0.972	0.965	0.970	0.968	0.972	0.972	1.015	1.074	1.102	1.109	1.112
57	0.979	0.979	0.977	0.975	0.972	0.975	0.972	0.975	0.972	0.975	0.972	0.972	0.975	0.975	0.985	1.034	1.096	1.121	1.130	1.132
58	0.981	0.965	0.983	0.983	0.981	0.983	0.979	0.983	0.981	0.983	0.981	0.983	0.983	0.985	0.999	1.058	1.102	1.122	1.130	1.137
59	0.991	0.989	0.991	0.989	0.989	0.991	0.987	0.989	0.985	0.989	0.989	0.991	0.989	0.991	1.013	1.067	1.099	1.111	1.118	1.125
60	0.995	0.993	0.993	0.995	0.993	0.993	0.991	0.993	0.993	0.995	0.991	0.995	0.995	1.001	1.028	1.076	1.097	1.106	1.110	1.115
61	0.997	0.999	0.999	0.997	0.995	0.997	0.995	0.997	0.995	0.997	0.995	0.999	0.997	1.006	1.042	1.086	1.099	1.105	1.109	1.114
62	0.999	0.999	0.997	0.999	0.995	0.997	0.997	0.997	0.995	0.999	0.997	0.999	0.999	1.011	1.054	1.089	1.100	1.106	1.110	1.115
63	0.995	0.995	0.989	0.993	0.987	0.993	0.989	0.995	0.991	0.995	0.993	0.995	0.995	1.016	1.058	1.089	1.099	1.105	1.110	1.116

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 128

IR SCAN TIME 19.06 SEC
INITIAL TEMP 534.7 DEG. R

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	0.993	0.997	0.991	0.999	0.991	0.999	0.991	0.997	0.995	0.999	0.997	1.001	0.999	0.999	0.999	1.004	1.003	1.003	1.003	1.003
30	0.995	0.999	0.997	1.001	0.999	1.001	1.001	1.003	1.003	1.004	1.003	1.003	1.003	1.004	0.999	0.999	0.995	0.995	0.985	0.989
31	0.997	1.001	0.999	1.001	1.001	1.004	1.001	1.004	1.003	1.003	0.999	0.999	0.993	0.991	0.989	0.987	0.983	0.977	0.975	0.972
32	1.001	1.001	1.001	1.003	1.004	1.003	1.001	0.997	0.993	0.991	0.987	0.983	0.979	0.972	0.970	0.968	0.968	0.968	0.968	0.965
33	1.001	1.003	1.001	0.999	0.993	0.991	0.987	0.981	0.975	0.972	0.970	0.968	0.968	0.968	0.968	0.968	0.965	0.968	0.968	0.970
34	0.995	0.991	0.987	0.981	0.977	0.972	0.970	0.968	0.965	0.965	0.965	0.963	0.968	0.965	0.965	0.968	0.968	0.965	0.968	0.968
35	0.979	0.975	0.970	0.968	0.968	0.968	0.968	0.968	0.968	0.968	0.970	0.968	0.968	0.968	0.968	0.968	0.968	0.968	0.970	0.970
36	0.970	0.963	0.970	0.963	0.968	0.963	0.970	0.965	0.968	0.965	0.968	0.965	0.970	0.970	0.970	0.970	0.972	0.972	0.972	0.968
37	0.972	0.972	0.972	0.970	0.970	0.970	0.968	0.970	0.970	0.972	0.972	0.972	0.972	0.972	0.970	0.963	0.972	0.960	0.972	0.963
38	0.972	0.972	0.975	0.972	0.975	0.972	0.975	0.972	0.977	0.972	0.972	0.975	0.968	0.972	0.972	0.970	0.972	0.975	0.972	0.972
39	0.975	0.972	0.975	0.975	0.972	0.972	0.972	0.975	0.975	0.975	0.972	0.972	0.975	0.972	0.972	0.972	0.972	0.975	0.975	0.975
40	0.975	0.977	0.975	0.975	0.975	0.977	0.975	0.975	0.975	0.975	0.975	0.977	0.975	0.977	0.975	0.975	0.975	0.977	0.975	0.977
41	0.975	0.977	0.977	0.979	0.975	0.977	0.975	0.977	0.975	0.977	0.975	0.977	0.977	0.975	0.975	0.977	0.977	0.975	0.975	0.981
42	0.977	0.977	0.977	0.977	0.975	0.975	0.975	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.975	0.975	0.977	0.977	0.977	0.977
43	0.979	0.972	0.977	0.975	0.979	0.977	0.977	0.977	0.977	0.975	0.979	0.979	0.981	0.979	0.979	0.977	0.977	0.979	0.977	0.979
44	1.010	1.008	1.008	1.004	1.003	0.999	0.997	0.993	0.991	0.989	0.987	0.987	0.983	0.977	0.983	0.977	0.981	0.977	0.977	0.975
45	1.104	1.113	1.118	1.119	1.122	1.124	1.121	1.121	1.128	1.127	1.102	1.061	1.019	0.999	0.991	0.985	0.983	0.983	0.983	0.983
46	1.129	1.140	1.147	1.152	1.158	1.167	1.179	1.195	1.235	1.298	1.307	1.237	1.144	1.067	1.022	1.003	0.991	0.989	0.989	0.989
47	1.156	1.160	1.162	1.163	1.163	1.164	1.165	1.167	1.177	1.203	1.256	1.284	1.236	1.145	1.073	1.030	1.013	1.004	1.003	0.997
48	1.182	1.193	1.199	1.199	1.195	1.188	1.181	1.173	1.168	1.164	1.167	1.187	1.215	1.195	1.127	1.061	1.019	1.003	1.003	1.003
49	1.160	1.179	1.201	1.219	1.232	1.235	1.227	1.213	1.195	1.178	1.163	1.157	1.157	1.163	1.152	1.105	1.051	1.016	1.001	0.995
50	1.133	1.147	1.160	1.179	1.204	1.229	1.245	1.252	1.246	1.227	1.199	1.175	1.157	1.147	1.141	1.126	1.084	1.038	1.011	0.999
51	1.147	1.147	1.148	1.154	1.162	1.171	1.186	1.207	1.230	1.245	1.245	1.229	1.201	1.174	1.150	1.136	1.118	1.091	1.049	1.018
52	1.177	1.180	1.177	1.175	1.170	1.166	1.164	1.165	1.171	1.184	1.202	1.221	1.228	1.218	1.193	1.166	1.144	1.123	1.093	1.052
53	1.164	1.177	1.190	1.202	1.208	1.206	1.195	1.184	1.173	1.167	1.165	1.166	1.175	1.191	1.204	1.202	1.183	1.160	1.141	1.116
54	1.132	1.144	1.154	1.168	1.184	1.197	1.207	1.212	1.211	1.204	1.191	1.176	1.165	1.160	1.159	1.167	1.180	1.190	1.182	1.163
55	1.119	1.124	1.130	1.137	1.145	1.151	1.162	1.174	1.192	1.205	1.210	1.209	1.199	1.183	1.168	1.161	1.156	1.159	1.166	1.179
56	1.116	1.121	1.124	1.130	1.132	1.136	1.139	1.144	1.151	1.159	1.169	1.182	1.192	1.197	1.194	1.187	1.177	1.169	1.163	1.162
57	1.133	1.132	1.135	1.135	1.135	1.133	1.135	1.138	1.142	1.145	1.148	1.151	1.155	1.162	1.173	1.183	1.187	1.186	1.182	1.175
58	1.143	1.151	1.157	1.160	1.160	1.159	1.153	1.149	1.146	1.145	1.143	1.147	1.147	1.149	1.149	1.154	1.161	1.174	1.184	1.189
59	1.129	1.137	1.145	1.155	1.163	1.169	1.174	1.178	1.179	1.177	1.173	1.165	1.157	1.152	1.151	1.151	1.150	1.151	1.154	1.163
60	1.119	1.125	1.131	1.138	1.144	1.153	1.159	1.166	1.176	1.184	1.190	1.191	1.187	1.183	1.174	1.164	1.155	1.151	1.148	1.151
61	1.117	1.121	1.124	1.130	1.135	1.140	1.143	1.148	1.154	1.161	1.167	1.176	1.183	1.189	1.190	1.188	1.183	1.176	1.167	1.161
62	1.119	1.123	1.125	1.131	1.135	1.140	1.141	1.143	1.147	1.151	1.154	1.158	1.161	1.166	1.173	1.177	1.181	1.184	1.184	1.182
63	1.118	1.121	1.124	1.131	1.135	1.139	1.141	1.143	1.145	1.149	1.151	1.154	1.154	1.156	1.156	1.157	1.158	1.163	1.170	1.179

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 128

IR SCAN TIME 19.06 SEC
INITIAL TEMP 534.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	0.999	0.999	0.993	0.995	0.989	0.987	0.985	0.985	0.981	0.979	0.975	0.975	0.972	0.975	0.970	0.970	0.970	0.970	0.968	0.970
30	0.983	0.985	0.975	0.977	0.968	0.970	0.965	0.970	0.963	0.968	0.963	0.968	0.963	0.968	0.968	0.970	0.965	0.968	0.970	0.968
31	0.970	0.968	0.968	0.970	0.968	0.968	0.968	0.968	0.968	0.968	0.965	0.968	0.965	0.968	0.965	0.968	0.960	0.965	0.963	0.965
32	0.968	0.968	0.965	0.968	0.968	0.965	0.968	0.968	0.968	0.965	0.965	0.965	0.965	0.963	0.963	0.963	0.965	0.965	0.965	0.963
33	0.965	0.968	0.963	0.970	0.968	0.968	0.970	0.970	0.968	0.968	0.965	0.965	0.965	0.968	0.965	0.968	0.965	0.965	0.965	0.968
34	0.968	0.968	0.966	0.966	0.968	0.968	0.968	0.968	0.968	0.968	0.968	0.968	0.968	0.965	0.965	0.963	0.965	0.965	0.965	0.965
35	0.970	0.968	0.968	0.968	0.968	0.970	0.970	0.968	0.968	0.968	0.968	0.968	0.968	0.965	0.965	0.968	0.968	0.968	0.965	0.968
36	0.970	0.972	0.972	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.972	0.970	0.970	0.970	0.970	0.968	0.968	0.972
37	0.972	0.963	0.975	0.963	0.972	0.963	0.972	0.965	0.972	0.963	0.975	0.972	0.972	0.970	0.972	0.972	0.972	0.972	0.972	0.972
38	0.972	0.972	0.972	0.972	0.972	0.972	0.975	0.972	0.972	0.972	0.972	0.975	0.972	0.970	0.972	0.970	0.970	0.968	0.970	0.968
39	0.972	0.975	0.972	0.972	0.975	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.975	0.972	0.972	0.972	0.972	0.972
40	0.977	0.977	0.975	0.975	0.975	0.977	0.975	0.975	0.972	0.972	0.972	0.975	0.975	0.972	0.975	0.975	0.975	0.979	0.975	0.972
41	0.975	0.975	0.975	0.975	0.975	0.975	0.977	0.975	0.975	0.975	0.975	0.975	0.975	0.975	0.975	0.975	0.972	0.972	0.972	0.975
42	0.977	0.977	0.975	0.972	0.972	0.975	0.975	0.977	0.975	0.975	0.972	0.975	0.972	0.975	0.975	0.975	0.975	0.972	0.970	0.972
43	0.977	0.975	0.977	0.975	0.977	0.977	0.977	0.977	0.979	0.975	0.975	0.975	0.975	0.972	0.975	0.979	0.975	0.975	0.977	0.972
44	0.981	0.979	0.979	0.977	0.979	0.975	0.979	0.977	0.979	0.981	0.979	0.981	0.979	0.979	0.979	0.979	0.977	0.979	0.979	0.979
45	0.985	0.983	0.983	0.983	0.981	0.983	0.981	0.983	0.981	0.981	0.979	0.979	0.981	0.979	0.981	0.979	0.979	0.977	0.981	0.972
46	0.987	0.989	0.985	0.987	0.987	0.985	0.983	0.983	0.983	0.983	0.983	0.981	0.983	0.981	0.981	0.983	0.983	0.983	0.981	0.981
47	0.993	0.991	0.989	0.987	0.989	0.987	0.987	0.985	0.985	0.985	0.983	0.983	0.985	0.983	0.985	0.983	0.983	0.983	0.985	0.981
48	1.006	1.004	1.001	0.993	0.991	0.989	0.987	0.987	0.985	0.987	0.987	0.985	0.985	0.983	0.985	0.985	0.985	0.985	0.985	0.985
49	0.995	0.997	1.004	1.006	1.006	0.997	0.993	0.989	0.989	0.987	0.987	0.985	0.987	0.987	0.985	0.987	0.985	0.987	0.985	0.985
50	0.989	0.991	0.991	0.995	0.999	1.006	1.003	0.995	0.989	0.989	0.987	0.987	0.983	0.987	0.983	0.987	0.985	0.987	0.983	0.987
51	0.995	0.989	0.985	0.989	0.989	0.993	0.995	1.003	0.995	0.987	0.981	0.983	0.979	0.981	0.979	0.981	0.979	0.981	0.979	0.983
52	1.016	0.999	0.989	0.987	0.987	0.991	0.991	0.997	0.999	0.993	0.977	0.972	0.968	0.970	0.965	0.968	0.968	0.972	0.970	0.972
53	1.074	1.031	1.004	0.991	0.987	0.987	0.989	0.993	0.995	0.999	0.993	0.981	0.970	0.965	0.965	0.970	0.965	0.968	0.968	0.975
54	1.139	1.102	1.051	1.015	0.995	0.989	0.987	0.987	0.989	0.993	0.995	0.997	0.983	0.975	0.965	0.968	0.965	0.968	0.972	0.972
55	1.186	1.176	1.142	1.089	1.038	1.010	0.991	0.989	0.985	0.989	0.991	0.995	1.001	1.003	0.970	0.975	0.968	0.970	0.975	0.972
56	1.163	1.170	1.181	1.180	1.144	1.082	1.028	1.003	0.989	0.987	0.985	0.987	0.991	0.997	0.995	0.983	0.975	0.975	0.975	0.979
57	1.169	1.164	1.163	1.164	1.169	1.160	1.113	1.049	1.010	0.995	0.987	0.983	0.985	0.989	0.993	0.995	0.991	0.985	0.983	0.983
58	1.182	1.176	1.169	1.165	1.160	1.157	1.139	1.095	1.037	1.006	0.991	0.987	0.981	0.981	0.983	0.989	0.995	0.997	0.989	0.991
59	1.175	1.187	1.187	1.181	1.173	1.168	1.162	1.150	1.117	1.062	1.013	0.995	0.983	0.979	0.975	0.981	0.981	0.991	0.989	0.991
60	1.151	1.155	1.162	1.173	1.184	1.186	1.179	1.168	1.160	1.139	1.084	1.028	0.999	0.987	0.979	0.979	0.979	0.983	0.985	0.991
61	1.153	1.152	1.151	1.153	1.153	1.160	1.171	1.185	1.189	1.181	1.158	1.114	1.047	1.008	0.991	0.983	0.979	0.981	0.981	0.987
62	1.176	1.167	1.160	1.156	1.150	1.149	1.148	1.150	1.154	1.167	1.178	1.173	1.136	1.075	1.024	1.003	0.985	0.981	0.977	0.979
63	1.182	1.180	1.175	1.171	1.166	1.162	1.155	1.147	1.141	1.141	1.139	1.139	1.138	1.127	1.086	1.033	0.999	0.987	0.979	0.979

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 19.06 SEC
INITIAL TEMP 534.7 DEG. R

GROUP 128

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.968	0.968	0.970	0.970	0.968	0.970	0.968	0.968	0.968	0.968	0.968	0.970	0.968	0.968	0.968	0.970	0.968	0.970	0.968	0.972
30	0.968	0.970	0.968	0.970	0.965	0.968	0.968	0.968	0.965	0.968	0.968	0.965	0.970	0.970	0.968	0.970	0.968	0.970	0.968	0.972
31	0.957	0.965	0.960	0.965	0.963	0.965	0.963	0.965	0.960	0.965	0.957	0.968	0.965	0.968	0.965	0.968	0.965	0.968	0.965	0.965
32	0.963	0.963	0.963	0.965	0.963	0.963	0.963	0.963	0.963	0.963	0.963	0.963	0.963	0.955	0.965	0.957	0.965	0.957	0.965	0.957
33	0.965	0.965	0.965	0.968	0.963	0.965	0.963	0.965	0.963	0.965	0.965	0.965	0.965	0.965	0.963	0.965	0.965	0.965	0.963	0.965
34	0.965	0.965	0.965	0.965	0.965	0.965	0.963	0.963	0.963	0.963	0.965	0.963	0.968	0.965	0.963	0.963	0.965	0.963	0.965	0.963
35	0.965	0.963	0.968	0.968	0.965	0.965	0.965	0.965	0.968	0.963	0.965	0.965	0.965	0.965	0.965	0.963	0.965	0.965	0.968	0.965
36	0.970	0.970	0.968	0.970	0.968	0.968	0.963	0.968	0.968	0.970	0.968	0.968	0.968	0.968	0.970	0.968	0.968	0.968	0.968	0.968
37	0.972	0.970	0.970	0.972	0.970	0.970	0.972	0.970	0.972	0.970	0.972	0.970	0.972	0.972	0.972	0.970	0.970	0.970	0.968	0.970
38	0.970	0.970	0.972	0.968	0.970	0.968	0.970	0.968	0.972	0.972	0.972	0.970	0.972	0.970	0.970	0.970	0.970	0.970	0.972	0.970
39	0.972	0.972	0.970	0.972	0.972	0.970	0.972	0.970	0.970	0.972	0.972	0.970	0.970	0.965	0.970	0.968	0.972	0.972	0.968	0.968
40	0.975	0.977	0.972	0.972	0.972	0.975	0.972	0.972	0.972	0.975	0.972	0.972	0.972	0.972	0.972	0.972	0.975	0.972	0.970	0.970
41	0.972	0.972	0.972	0.975	0.972	0.972	0.970	0.972	0.975	0.975	0.972	0.975	0.972	0.975	0.972	0.972	0.972	0.972	0.970	0.975
42	0.972	0.972	0.972	0.975	0.972	0.975	0.972	0.975	0.972	0.972	0.972	0.972	0.972	0.972	0.970	0.972	0.972	0.972	0.972	0.970
43	0.972	0.961	0.975	0.975	0.975	0.972	0.975	0.975	0.975	0.972	0.975	0.972	0.975	0.975	0.975	0.972	0.972	0.975	0.972	0.972
44	0.979	0.979	0.979	0.979	0.979	0.979	0.977	0.977	0.977	0.979	0.977	0.979	0.975	0.977	0.979	0.977	0.977	0.975	0.977	0.977
45	0.981	0.981	0.979	0.979	0.979	0.979	0.979	0.981	0.981	0.981	0.979	0.981	0.979	0.981	0.981	0.981	0.979	0.979	0.981	0.979
46	0.981	0.981	0.981	0.983	0.981	0.983	0.981	0.981	0.979	0.970	0.985	0.972	0.981	0.972	0.983	0.972	0.983	0.972	0.983	0.972
47	0.983	0.983	0.983	0.983	0.981	0.981	0.981	0.981	0.983	0.981	0.983	0.983	0.983	0.983	0.983	0.983	0.981	0.981	0.981	0.983
48	0.983	0.983	0.985	0.983	0.985	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.985	0.983	0.983	0.981	0.983	0.983	0.983	0.983
49	0.985	0.985	0.983	0.985	0.985	0.987	0.985	0.983	0.985	0.983	0.983	0.983	0.985	0.983	0.985	0.983	0.985	0.983	0.985	0.983
50	0.985	0.987	0.985	0.987	0.983	0.987	0.983	0.985	0.985	0.985	0.983	0.983	0.983	0.985	0.983	0.987	0.983	0.985	0.985	0.985
51	0.981	0.983	0.983	0.985	0.983	0.987	0.985	0.985	0.985	0.985	0.985	0.987	0.983	0.987	0.983	0.985	0.983	0.985	0.983	0.983
52	0.977	0.979	0.979	0.985	0.979	0.985	0.983	0.983	0.983	0.967	0.983	0.985	0.983	0.985	0.983	0.985	0.983	0.985	0.985	0.985
53	0.975	0.979	0.979	0.981	0.981	0.983	0.983	0.985	0.979	0.965	0.981	0.985	0.981	0.985	0.981	0.985	0.981	0.983	0.983	0.983
54	0.977	0.979	0.981	0.983	0.983	0.985	0.983	0.983	0.983	0.985	0.985	0.987	0.985	0.987	0.985	0.985	0.985	0.987	0.983	0.983
55	0.979	0.981	0.983	0.983	0.985	0.985	0.987	0.987	0.985	0.987	0.981	0.989	0.987	0.987	0.989	0.987	0.987	0.983	0.985	0.983
56	0.979	0.985	0.985	0.987	0.987	0.987	0.987	0.989	0.987	0.989	0.989	0.989	0.987	0.989	0.987	0.989	0.985	0.989	0.987	0.987
57	0.987	0.989	0.989	0.989	0.989	0.991	0.989	0.989	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.989	0.991	0.991
58	0.989	0.991	0.989	0.991	0.991	0.993	0.991	0.993	0.991	0.993	0.989	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.989	0.991
59	0.987	0.991	0.989	0.995	0.991	0.995	0.991	0.993	0.991	0.991	0.991	0.991	0.991	0.991	0.989	0.991	0.991	0.991	0.989	0.993
60	0.991	0.991	0.991	0.991	0.993	0.993	0.989	0.993	0.987	0.993	0.987	0.991	0.987	0.993	0.987	0.991	0.989	0.991	0.989	0.993
61	0.987	0.991	0.991	0.995	0.993	0.993	0.991	0.993	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.989	0.991	0.993	0.993
62	0.961	0.987	0.987	0.993	0.991	0.993	0.989	0.991	0.989	0.991	0.991	0.991	0.989	0.991	0.989	0.991	0.991	0.991	0.993	0.993
63	0.977	0.979	0.983	0.989	0.989	0.991	0.987	0.987	0.987	0.987	0.985	0.987	0.987	0.989	0.987	0.989	0.987	0.989	0.989	0.991

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VAF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 128

IR SCAN TIME 19.06 SEC
INITIAL TEMP 534.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.975	0.972	0.970	0.972	0.970	0.970	0.970	0.972	0.970	0.970	0.970	0.972	0.968	0.970	0.970	0.970	0.968	0.970	0.968	0.968
30	0.968	0.970	0.970	0.970	0.970	0.972	0.970	0.970	0.970	0.968	0.970	0.968	0.968	0.970	0.968	0.970	0.968	0.968	0.968	0.965
31	0.965	0.968	0.965	0.970	0.965	0.965	0.968	0.968	0.968	0.968	0.965	0.968	0.968	0.968	0.968	0.968	0.965	0.965	0.965	0.968
32	0.963	0.955	0.965	0.957	0.965	0.960	0.965	0.960	0.963	0.965	0.965	0.963	0.968	0.965	0.963	0.965	0.963	0.963	0.963	0.965
33	0.963	0.963	0.965	0.968	0.965	0.963	0.963	0.965	0.963	0.963	0.963	0.965	0.960	0.963	0.957	0.963	0.957	0.963	0.957	0.963
34	0.968	0.963	0.963	0.963	0.965	0.963	0.963	0.963	0.965	0.965	0.963	0.963	0.963	0.963	0.965	0.963	0.965	0.963	0.963	0.963
35	0.965	0.963	0.965	0.963	0.965	0.965	0.963	0.963	0.963	0.963	0.965	0.963	0.963	0.963	0.965	0.963	0.965	0.963	0.965	0.963
36	0.968	0.968	0.968	0.965	0.965	0.965	0.965	0.968	0.965	0.968	0.968	0.968	0.968	0.965	0.968	0.965	0.968	0.965	0.968	0.968
37	0.968	0.970	0.970	0.970	0.970	0.970	0.968	0.968	0.972	0.968	0.970	0.968	0.970	0.968	0.970	0.968	0.968	0.968	0.968	0.968
38	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.968	0.970	0.970	0.970	0.968	0.968	0.970	0.970	0.970	0.972	0.968	0.970	0.970
39	0.970	0.965	0.970	0.965	0.970	0.965	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.968	0.970	0.970
40	0.970	0.975	0.970	0.972	0.970	0.972	0.972	0.970	0.975	0.970	0.968	0.970	0.968	0.970	0.965	0.968	0.965	0.972	0.968	0.970
41	0.970	0.972	0.972	0.972	0.970	0.970	0.972	0.972	0.972	0.970	0.970	0.972	0.970	0.972	0.972	0.972	0.972	0.972	0.970	0.970
42	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.970	0.972	0.972	0.970	0.970	0.972	0.972	0.972	0.972	0.970	0.970	0.972	0.970
43	0.975	0.972	0.972	0.975	0.975	0.972	0.972	0.970	0.970	0.975	0.972	0.975	0.972	0.972	0.972	0.972	0.975	0.972	0.972	0.972
44	0.983	0.977	0.977	0.979	0.977	0.977	0.977	0.975	0.975	0.977	0.981	0.977	0.977	0.977	0.977	0.977	0.975	0.977	0.977	0.977
45	0.979	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.979	0.981	0.979	0.981	0.981	0.981	0.981	0.979	0.979	0.979
46	0.983	0.977	0.985	0.975	0.985	0.983	0.983	0.983	0.983	0.981	0.983	0.983	0.983	0.981	0.983	0.981	0.983	0.981	0.983	0.981
47	0.983	0.983	0.983	0.983	0.985	0.983	0.983	0.985	0.983	0.981	0.981	0.981	0.983	0.979	0.981	0.983	0.983	0.981	0.983	0.981
48	0.983	0.985	0.983	0.983	0.985	0.983	0.983	0.985	0.983	0.981	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983
49	0.985	0.985	0.985	0.987	0.983	0.983	0.985	0.983	0.983	0.983	0.985	0.985	0.985	0.981	0.983	0.983	0.983	0.983	0.983	0.983
50	0.985	0.985	0.983	0.985	0.987	0.985	0.983	0.983	0.981	0.983	0.981	0.981	0.983	0.981	0.983	0.983	0.981	0.981	0.981	0.983
51	0.983	0.985	0.983	0.985	0.981	0.981	0.981	0.981	0.979	0.979	0.977	0.979	0.977	0.979	0.972	0.977	0.975	0.977	0.975	0.979
52	0.983	0.985	0.983	0.981	0.979	0.977	0.972	0.972	0.975	0.972	0.972	0.972	0.970	0.972	0.970	0.972	0.970	0.972	0.968	0.972
53	0.981	0.981	0.979	0.983	0.979	0.977	0.972	0.970	0.968	0.970	0.965	0.968	0.965	0.968	0.965	0.968	0.965	0.965	0.963	0.968
54	0.983	0.983	0.981	0.981	0.979	0.975	0.970	0.970	0.965	0.968	0.963	0.963	0.963	0.965	0.963	0.965	0.960	0.965	0.957	0.965
55	0.985	0.983	0.981	0.983	0.979	0.979	0.975	0.975	0.970	0.970	0.968	0.970	0.965	0.968	0.968	0.968	0.968	0.965	0.968	0.968
56	0.987	0.987	0.983	0.983	0.983	0.983	0.979	0.977	0.972	0.975	0.972	0.972	0.970	0.972	0.972	0.975	0.970	0.972	0.972	0.975
57	0.991	0.991	0.989	0.989	0.989	0.989	0.987	0.983	0.983	0.981	0.983	0.981	0.981	0.981	0.981	0.979	0.981	0.981	0.979	0.981
58	0.991	0.991	0.991	0.991	0.991	0.991	0.989	0.989	0.987	0.989	0.987	0.989	0.987	0.989	0.987	0.989	0.987	0.987	0.987	0.987
59	0.991	0.993	0.991	0.991	0.991	0.991	0.991	0.995	0.989	0.991	0.991	0.991	0.991	0.991	0.991	0.993	0.989	0.991	0.991	0.991
60	0.989	0.993	0.991	0.993	0.993	0.995	0.991	0.995	0.991	0.993	0.991	0.995	0.991	0.995	0.991	0.993	0.991	0.995	0.993	0.993
61	0.993	0.995	0.991	0.993	0.989	0.991	0.989	0.995	0.991	0.991	0.989	0.993	0.989	0.993	0.989	0.993	0.991	0.991	0.989	0.995
62	0.991	0.995	0.991	0.993	0.991	0.995	0.991	0.993	0.991	0.993	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991
63	0.987	0.991	0.989	0.991	0.987	0.989	0.991	0.991	0.989	0.989	0.989	0.989	0.989	0.989	0.987	0.987	0.989	0.991	0.987	0.989

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 128

IR SCAN TIME 19.06 SEC
INITIAL TEMP 534.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.968	0.968	0.965	0.968	0.968	0.968	0.965	0.968	0.968	0.968
30	0.963	0.968	0.963	0.965	0.965	0.968	0.963	0.965	0.965	0.968
31	0.965	0.965	0.965	0.965	0.963	0.963	0.965	0.965	0.963	0.965
32	0.965	0.963	0.963	0.963	0.965	0.963	0.963	0.963	0.965	0.963
33	0.960	0.963	0.957	0.965	0.957	0.963	0.957	0.965	0.963	0.963
34	0.963	0.963	0.963	0.963	0.963	0.963	0.963	0.963	0.963	0.957
35	0.965	0.963	0.965	0.963	0.963	0.963	0.965	0.965	0.963	0.963
36	0.968	0.965	0.968	0.965	0.965	0.968	0.965	0.965	0.968	0.968
37	0.970	0.968	0.970	0.970	0.970	0.970	0.968	0.968	0.970	0.968
38	0.970	0.970	0.970	0.968	0.970	0.968	0.970	0.970	0.970	0.968
39	0.968	0.970	0.970	0.970	0.972	0.970	0.970	0.972	0.970	0.972
40	0.970	0.970	0.968	0.972	0.968	0.972	0.972	0.972	0.972	0.972
41	0.970	0.972	0.972	0.970	0.970	0.970	0.970	0.970	0.968	0.972
42	0.970	0.972	0.972	0.972	0.968	0.970	0.970	0.972	0.972	0.975
43	0.975	0.972	0.972	0.972	0.972	0.972	0.975	0.975	0.972	0.975
44	0.975	0.977	0.977	0.979	0.977	0.977	0.977	0.977	0.977	0.977
45	0.981	0.979	0.979	0.979	0.981	0.979	0.979	0.979	0.981	0.979
46	0.985	0.983	0.983	0.983	0.983	0.985	0.983	0.981	0.983	0.983
47	0.983	0.979	0.983	0.981	0.983	0.983	0.983	0.983	0.983	0.983
48	0.983	0.983	0.983	0.983	0.983	0.981	0.983	0.981	0.983	0.979
49	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983
50	0.981	0.983	0.979	0.983	0.981	0.983	0.979	0.981	0.979	0.983
51	0.975	0.979	0.977	0.979	0.975	0.975	0.975	0.977	0.975	0.975
52	0.970	0.972	0.970	0.970	0.970	0.970	0.968	0.970	0.970	0.970
53	0.965	0.965	0.963	0.968	0.963	0.965	0.965	0.966	0.965	0.965
54	0.960	0.968	0.963	0.965	0.963	0.965	0.963	0.965	0.963	0.965
55	0.968	0.972	0.963	0.955	0.968	0.970	0.965	0.968	0.965	0.957
56	0.972	0.972	0.970	0.972	0.972	0.975	0.972	0.972	0.972	0.975
57	0.981	0.981	0.981	0.981	0.983	0.979	0.983	0.983	0.983	0.981
58	0.987	0.989	0.987	0.987	0.987	0.987	0.987	0.989	0.989	0.989
59	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.993	0.991	0.993
60	0.995	0.995	0.995	0.993	0.993	0.995	0.999	0.993	0.995	0.995
61	0.995	0.995	0.993	0.995	0.993	0.995	0.991	0.997	0.993	0.995
62	0.991	0.991	0.987	0.991	0.987	0.991	0.987	0.991	0.989	0.993
63	0.987	0.989	0.987	0.989	0.987	0.987	0.987	0.989	0.987	0.987

NASA/RI OH90 TRANSITION TEST
V416-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 128

IR SCAN TIME 19.06. SEC
INITIAL TEMP 534.7 DEG. R

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.989	0.987	0.989	0.989	0.987	0.987	0.987	0.985	0.985	0.987	0.989	0.987	0.993	1.013	1.063	1.087	1.095	1.100	1.105	1.109
65	0.981	0.983	0.979	0.981	0.979	0.981	0.979	0.979	0.977	0.979	0.979	0.983	0.987	1.024	1.068	1.089	1.096	1.100	1.105	1.110
66	0.975	0.972	0.970	0.970	0.970	0.968	0.970	0.968	0.968	0.970	0.970	0.975	0.987	1.040	1.080	1.091	1.099	1.101	1.105	1.109
67	0.965	0.965	0.965	0.963	0.963	0.963	0.960	0.960	0.963	0.963	0.963	0.965	0.995	1.052	1.085	1.095	1.100	1.105	1.110	1.114
68	0.960	0.963	0.957	0.957	0.957	0.957	0.957	0.955	0.957	0.957	0.963	0.968	1.010	1.063	1.088	1.096	1.101	1.105	1.111	1.113
69	0.960	0.957	0.955	0.957	0.957	0.957	0.955	0.955	0.957	0.957	0.957	0.970	1.024	1.069	1.087	1.093	1.099	1.104	1.106	1.110
70	0.963	0.952	0.965	0.952	0.960	0.957	0.957	0.955	0.957	0.957	0.960	0.975	1.028	1.067	1.080	1.086	1.090	1.093	1.097	1.099
71	0.960	0.957	0.957	0.955	0.957	0.955	0.957	0.952	0.957	0.952	0.957	0.975	1.031	1.061	1.072	1.077	1.080	1.084	1.087	1.088
72	0.960	0.960	0.957	0.963	0.957	0.960	0.955	0.957	0.957	0.957	0.957	0.983	1.035	1.062	1.068	1.073	1.076	1.080	1.082	1.085
73	0.963	0.963	0.957	0.957	0.957	0.955	0.957	0.955	0.955	0.955	0.960	0.995	1.040	1.057	1.066	1.067	1.072	1.076	1.079	1.080
74	0.963	0.957	0.957	0.957	0.955	0.957	0.952	0.957	0.955	0.957	0.957	0.965	1.011	1.045	1.059	1.062	1.067	1.068	1.074	1.075	1.078
75	0.963	0.963	0.957	0.957	0.955	0.957	0.955	0.957	0.955	0.957	0.975	1.022	1.049	1.057	1.061	1.065	1.066	1.072	1.074	1.076
76	0.965	0.972	0.972	0.968	0.968	0.970	0.965	0.957	0.957	0.960	0.985	1.034	1.052	1.061	1.063	1.066	1.068	1.072	1.073	1.076
77	0.985	0.995	0.989	1.003	1.003	1.006	1.006	0.985	0.963	0.968	1.001	1.042	1.055	1.062	1.063	1.068	1.069	1.073	1.074	1.078
78	1.001	1.003	0.989	1.013	1.021	1.015	1.016	1.028	0.995	0.981	1.010	1.046	1.054	1.062	1.062	1.067	1.067	1.072	1.072	1.077
79	1.013	1.022	1.006	1.010	1.018	1.024	1.021	1.031	1.035	1.013	1.030	1.051	1.057	1.062	1.063	1.067	1.071	1.073	1.075	1.080
80	1.027	1.034	1.030	1.021	1.013	1.013	1.024	1.027	1.034	1.041	1.044	1.055	1.059	1.062	1.064	1.066	1.069	1.072	1.075	1.078
81	1.038	1.040	1.040	1.034	1.019	1.013	1.004	1.013	1.027	1.041	1.049	1.057	1.059	1.062	1.063	1.067	1.068	1.072	1.075	1.080
82	1.038	1.042	1.038	1.037	1.022	1.016	1.004	0.995	1.004	1.024	1.050	1.047	1.061	1.062	1.065	1.064	1.068	1.071	1.074	1.078
83	1.034	1.031	1.034	1.031	1.018	1.010	0.991	0.987	0.995	1.019	1.050	1.062	1.065	1.065	1.066	1.067	1.068	1.069	1.069	1.069
84	1.025	1.025	1.031	1.034	1.022	1.008	1.003	1.008	1.008	1.008	1.015	1.018	1.019	1.021	1.025	1.028	1.034	1.040	1.040	1.046
85	1.010	1.016	1.024	1.025	1.018	1.004	1.006	1.008	1.008	0.999	0.999	1.001	1.004	1.003	1.004	1.003	1.003	1.001	1.003	1.004
86	0.997	0.997	1.003	1.003	1.001	0.999	1.004	1.013	1.011	1.003	0.999	0.997	0.999	0.999	0.999	1.001	1.003	1.003	1.001	1.003
87	0.989	0.991	0.987	0.991	0.993	0.995	1.001	1.011	1.013	1.003	1.001	0.997	0.995	0.995	0.995	0.995	0.995	0.997	0.997	0.999
88	0.979	0.979	0.979	0.983	0.991	0.997	1.001	1.006	1.011	1.006	1.003	1.001	0.999	0.999	0.997	0.997	0.995	0.995	0.995	0.995
89	0.972	0.968	0.970	0.981	0.991	0.995	0.999	1.003	1.008	1.003	1.003	1.003	1.003	0.999	0.999	0.997	0.997	0.997	0.999	0.997
90	0.970	0.968	0.972	0.983	0.991	0.995	0.995	1.001	1.006	1.006	1.001	1.003	1.003	1.003	0.999	0.999	0.997	0.999	0.995	0.997
91	0.968	0.968	0.970	0.985	0.989	0.995	0.993	0.999	1.006	1.006	1.001	1.003	0.999	1.003	1.003	1.004	1.001	1.001	0.999	0.999
92	0.981	0.979	0.972	0.987	0.989	0.997	0.993	1.001	1.003	1.006	1.003	1.001	1.001	1.004	1.004	1.004	1.001	1.003	0.999	0.999
93	1.001	1.001	0.999	1.003	1.004	1.006	1.008	1.013	1.010	1.006	1.004	1.008	1.008	1.008	1.006	1.010	1.004	1.003	0.999	0.997
94	1.011	1.011	1.013	1.013	1.013	1.013	1.013	1.019	1.016	1.010	1.010	1.011	1.011	1.016	1.013	1.013	1.011	1.010	1.003	0.999
95	1.018	1.018	1.018	1.021	1.019	1.019	1.018	1.022	1.019	1.018	1.013	1.016	1.016	1.019	1.019	1.019	1.008	1.011	1.006	1.001
96	1.021	1.019	1.022	1.019	1.021	1.019	1.021	1.019	1.018	1.019	1.013	1.016	1.022	1.021	1.021	1.022	1.019	1.016	1.010	1.004
97	1.022	1.022	1.022	1.022	1.022	1.022	1.021	1.022	1.021	1.016	1.011	1.016	1.018	1.022	1.022	1.022	1.019	1.018	1.011	1.013
98	1.022	1.024	1.025	1.025	1.024	1.021	1.022	1.021	1.022	1.019	1.018	1.016	1.018	1.018	1.019	1.016	1.018	1.016	1.015	1.015

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 19.06 SEC
INITIAL TEMP 534.7 DEG. R

GROUP 128

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
64	1.113	1.116	1.121	1.125	1.131	1.135	1.139	1.140	1.144	1.147	1.150	1.151	1.152	1.153	1.153	1.152	1.152	1.154	1.154	1.154
65	1.112	1.116	1.119	1.125	1.128	1.131	1.133	1.137	1.133	1.141	1.140	1.146	1.146	1.152	1.152	1.156	1.154	1.158	1.156	1.157
66	1.112	1.116	1.121	1.125	1.128	1.132	1.136	1.139	1.145	1.147	1.150	1.154	1.157	1.158	1.157	1.158	1.160	1.163	1.165	1.165
67	1.119	1.126	1.131	1.137	1.139	1.138	1.140	1.145	1.151	1.154	1.154	1.157	1.160	1.165	1.167	1.172	1.175	1.176	1.174	1.171
68	1.120	1.126	1.130	1.136	1.140	1.143	1.147	1.152	1.159	1.165	1.169	1.169	1.170	1.171	1.170	1.169	1.169	1.169	1.169	1.173
69	1.114	1.121	1.124	1.127	1.132	1.136	1.140	1.143	1.147	1.149	1.154	1.158	1.160	1.162	1.163	1.166	1.168	1.169	1.171	1.171
70	1.104	1.109	1.114	1.115	1.119	1.122	1.125	1.128	1.130	1.133	1.137	1.139	1.142	1.143	1.145	1.147	1.150	1.152	1.154	1.157
71	1.092	1.096	1.099	1.103	1.104	1.107	1.110	1.113	1.116	1.118	1.121	1.121	1.124	1.125	1.127	1.128	1.131	1.133	1.137	1.138
72	1.086	1.089	1.092	1.093	1.096	1.099	1.098	1.102	1.103	1.106	1.105	1.108	1.107	1.110	1.107	1.110	1.110	1.114	1.117	1.121
73	1.082	1.085	1.087	1.089	1.089	1.092	1.096	1.099	1.101	1.102	1.102	1.104	1.105	1.106	1.106	1.107	1.107	1.107	1.108	1.109
74	1.078	1.081	1.083	1.086	1.088	1.089	1.092	1.095	1.098	1.099	1.098	1.099	1.100	1.103	1.104	1.105	1.104	1.106	1.106	1.107
75	1.077	1.080	1.080	1.084	1.087	1.088	1.089	1.091	1.093	1.095	1.096	1.098	1.098	1.099	1.099	1.100	1.099	1.102	1.103	1.104
76	1.077	1.080	1.080	1.085	1.086	1.089	1.089	1.091	1.092	1.095	1.095	1.096	1.096	1.098	1.099	1.099	1.099	1.099	1.099	1.101
77	1.080	1.080	1.082	1.085	1.088	1.089	1.091	1.094	1.095	1.096	1.096	1.097	1.097	1.097	1.099	1.099	1.098	1.098	1.099	1.100
78	1.078	1.082	1.084	1.086	1.088	1.090	1.090	1.093	1.096	1.098	1.097	1.099	1.097	1.097	1.099	1.099	1.099	1.099	1.099	1.099
79	1.080	1.082	1.084	1.088	1.086	1.090	1.090	1.094	1.093	1.096	1.095	1.098	1.096	1.098	1.097	1.099	1.099	1.099	1.099	1.102
80	1.080	1.084	1.086	1.088	1.091	1.093	1.095	1.096	1.098	1.098	1.099	1.099	1.099	1.099	1.099	1.099	1.099	1.101	1.102	1.102
81	1.082	1.085	1.088	1.092	1.094	1.097	1.099	1.102	1.102	1.105	1.105	1.106	1.106	1.106	1.107	1.109	1.109	1.110	1.109	1.110
82	1.077	1.080	1.085	1.089	1.091	1.095	1.099	1.100	1.101	1.101	1.104	1.105	1.105	1.107	1.107	1.108	1.110	1.112	1.113	1.115
83	1.069	1.072	1.075	1.078	1.081	1.083	1.087	1.091	1.096	1.098	1.099	1.099	1.100	1.101	1.102	1.103	1.104	1.105	1.105	1.107
84	1.052	1.057	1.063	1.067	1.074	1.077	1.081	1.086	1.089	1.095	1.098	1.099	1.099	1.100	1.103	1.105	1.105	1.106	1.109	1.110
85	1.004	1.006	1.008	1.010	1.013	1.013	1.013	1.013	1.015	1.015	1.018	1.021	1.021	1.022	1.022	1.025	1.025	1.028	1.030	1.033
86	1.003	1.001	1.003	1.001	1.003	0.999	1.003	0.999	1.001	0.999	1.001	0.995	0.999	0.995	0.999	0.997	0.999	0.997	0.999	0.999
87	1.001	1.001	1.003	1.001	1.003	1.003	1.003	1.003	1.003	0.999	0.999	0.997	0.999	0.997	0.997	0.997	0.997	0.997	0.997	0.997
88	0.999	0.999	1.001	0.999	1.001	1.001	1.001	1.001	1.003	0.999	0.999	0.999	1.001	0.999	0.999	0.997	0.999	0.997	0.997	0.995
89	0.997	0.997	0.999	1.001	1.001	0.999	1.001	0.999	1.001	0.999	1.001	0.999	1.001	0.999	0.999	0.997	0.999	0.997	0.999	0.997
90	0.995	0.999	0.997	1.001	0.997	0.999	0.999	0.999	1.001	1.003	1.004	1.022	1.035	1.030	1.010	1.003	0.997	0.999	0.997	0.997
91	0.995	0.997	0.997	0.999	0.997	1.001	0.999	1.003	1.001	1.003	1.004	1.027	1.049	1.042	1.018	1.003	0.999	0.995	0.995	0.999
92	0.997	0.997	0.995	0.999	0.999	1.003	1.001	1.006	1.004	1.006	1.004	1.006	1.003	1.004	0.999	0.999	0.995	0.997	0.993	0.995
93	0.991	0.995	0.991	1.001	0.999	1.006	1.003	1.006	1.006	1.010	1.006	1.008	0.999	0.999	0.995	0.999	0.997	0.999	0.995	0.997
94	0.995	0.999	1.001	1.006	1.004	1.008	1.008	1.011	1.008	1.013	1.013	1.011	1.010	1.006	1.001	1.001	0.997	0.999	0.995	0.999
95	0.997	1.001	1.003	1.010	1.008	1.011	1.013	1.016	1.015	1.016	1.015	1.016	1.013	1.011	1.006	1.006	1.003	1.001	0.999	1.001
96	1.004	1.004	1.010	1.010	1.013	1.016	1.013	1.016	1.016	1.015	1.018	1.018	1.016	1.015	1.013	1.008	1.004	1.003	1.001	1.001
97	1.008	1.013	1.011	1.015	1.013	1.015	1.013	1.013	1.015	1.015	1.016	1.016	1.015	1.015	1.013	1.013	1.008	1.006	1.003	1.004
98	1.016	1.016	1.016	1.016	1.018	1.016	1.018	1.018	1.018	1.018	1.018	1.016	1.016	1.013	1.015	1.011	1.011	1.016	1.035	1.047

NASA/RI OH90 TRANSITION TEST
V41B-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 128

IR SCAN TIME 19.06 SEC
INITIAL TEMP 534.7 DEG. R

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	1.154	1.155	1.161	1.166	1.172	1.173	1.167	1.161	1.153	1.147	1.142	1.137	1.134	1.129	1.121	1.093	1.047	1.006	0.987	0.979
65	1.154	1.154	1.153	1.156	1.156	1.155	1.156	1.163	1.167	1.170	1.168	1.163	1.156	1.151	1.145	1.135	1.116	1.074	1.021	0.995
66	1.165	1.166	1.166	1.168	1.171	1.170	1.168	1.165	1.165	1.164	1.168	1.173	1.182	1.184	1.181	1.173	1.162	1.145	1.105	1.044
67	1.169	1.173	1.174	1.175	1.175	1.175	1.175	1.175	1.176	1.176	1.176	1.174	1.173	1.171	1.176	1.184	1.189	1.187	1.174	1.136
68	1.176	1.177	1.177	1.174	1.171	1.168	1.169	1.170	1.173	1.174	1.176	1.178	1.179	1.176	1.175	1.175	1.175	1.174	1.176	1.176
69	1.171	1.171	1.170	1.169	1.170	1.171	1.173	1.171	1.166	1.167	1.168	1.169	1.173	1.174	1.174	1.175	1.179	1.180	1.179	1.175
70	1.161	1.165	1.168	1.173	1.174	1.172	1.168	1.166	1.165	1.167	1.171	1.173	1.175	1.173	1.171	1.172	1.175	1.176	1.178	1.179
71	1.139	1.142	1.144	1.145	1.149	1.154	1.157	1.161	1.165	1.167	1.167	1.167	1.166	1.166	1.165	1.166	1.166	1.165	1.165	1.163
72	1.121	1.125	1.126	1.127	1.130	1.131	1.133	1.138	1.140	1.142	1.142	1.145	1.148	1.151	1.152	1.152	1.152	1.154	1.154	1.154
73	1.110	1.110	1.112	1.112	1.112	1.113	1.115	1.115	1.118	1.121	1.123	1.124	1.124	1.124	1.125	1.125	1.130	1.132	1.137	1.138
74	1.108	1.110	1.109	1.110	1.110	1.110	1.109	1.106	1.106	1.107	1.108	1.110	1.110	1.110	1.111	1.112	1.112	1.114	1.116	1.118
75	1.103	1.105	1.105	1.106	1.107	1.108	1.107	1.107	1.106	1.106	1.106	1.107	1.107	1.107	1.106	1.108	1.108	1.107	1.108	1.108
76	1.101	1.102	1.101	1.101	1.101	1.102	1.102	1.102	1.102	1.103	1.102	1.104	1.104	1.106	1.107	1.109	1.109	1.110	1.109	1.110
77	1.100	1.101	1.100	1.101	1.100	1.099	1.099	1.100	1.099	1.099	1.099	1.101	1.102	1.103	1.103	1.104	1.105	1.105	1.106	1.110
78	1.100	1.102	1.103	1.103	1.103	1.103	1.102	1.102	1.101	1.101	1.100	1.101	1.101	1.102	1.101	1.103	1.104	1.106	1.107	1.109
79	1.102	1.103	1.103	1.105	1.104	1.105	1.105	1.105	1.104	1.105	1.105	1.105	1.105	1.105	1.105	1.106	1.105	1.108	1.109	1.111
80	1.103	1.103	1.105	1.104	1.105	1.104	1.105	1.104	1.105	1.105	1.106	1.105	1.107	1.106	1.108	1.109	1.111	1.111	1.112	1.112
81	1.110	1.112	1.112	1.113	1.113	1.112	1.110	1.110	1.110	1.109	1.109	1.110	1.109	1.110	1.110	1.113	1.112	1.114	1.114	1.115
82	1.117	1.120	1.121	1.122	1.123	1.123	1.123	1.123	1.122	1.122	1.120	1.121	1.119	1.117	1.118	1.118	1.118	1.117	1.118	1.116
83	1.110	1.112	1.114	1.116	1.116	1.119	1.121	1.121	1.123	1.125	1.127	1.127	1.129	1.130	1.131	1.131	1.132	1.131	1.131	1.131
84	1.112	1.114	1.114	1.116	1.117	1.116	1.117	1.116	1.116	1.117	1.118	1.118	1.119	1.120	1.121	1.123	1.126	1.129	1.132	1.136
85	1.034	1.040	1.042	1.046	1.049	1.050	1.055	1.057	1.061	1.063	1.067	1.071	1.073	1.074	1.078	1.080	1.080	1.082	1.087	1.090
86	1.001	0.999	1.001	1.003	0.999	0.999	1.003	0.999	0.999	0.997	0.997	0.999	1.001	0.999	0.999	0.999	0.999	0.999	1.001	1.001
87	0.997	0.995	0.997	0.995	0.995	0.993	0.995	0.993	0.995	0.991	0.993	0.991	0.993	0.991	0.993	0.993	0.993	0.989	0.989	0.989
88	0.997	0.995	0.995	0.995	0.997	0.995	0.993	0.991	0.993	0.995	0.993	0.995	0.991	0.991	0.991	0.991	0.991	0.983	0.989	0.983
89	0.997	0.995	0.997	0.997	0.999	0.997	0.995	0.995	0.995	0.993	0.995	0.995	0.993	0.993	0.991	0.991	0.989	0.989	0.989	0.989
90	0.995	0.997	0.997	0.997	0.995	0.999	0.995	0.999	0.995	0.997	0.995	1.010	1.011	1.008	0.997	0.995	0.991	0.991	0.987	0.989
91	0.995	0.995	0.993	0.997	0.995	0.995	0.995	0.997	0.995	0.995	1.004	1.031	1.045	1.033	1.010	0.999	0.993	0.991	0.991	0.991
92	0.997	0.999	0.999	0.999	0.995	1.004	0.999	0.997	0.995	0.997	0.995	1.001	1.003	1.003	0.993	0.993	0.991	0.991	0.989	0.991
93	0.995	0.997	0.997	0.999	0.997	0.999	0.995	1.001	0.995	0.995	0.995	0.995	0.995	0.995	0.993	0.993	0.991	0.989	0.991	0.991
94	0.995	0.997	0.993	0.997	0.995	0.999	0.997	1.001	0.995	0.999	0.993	0.995	0.991	0.997	0.993	0.995	0.991	0.993	0.989	0.989
95	0.997	0.999	0.997	0.997	0.995	0.997	0.997	1.001	0.997	0.999	0.995	0.995	0.995	0.979	0.991	0.985	0.989	0.993	0.989	0.991
96	0.997	0.999	0.999	0.997	0.999	0.999	1.001	1.001	1.003	0.999	1.001	0.999	0.999	0.995	0.995	0.995	0.995	0.993	0.993	0.993
97	1.001	1.001	0.999	1.003	0.999	1.001	1.001	0.999	1.001	1.003	0.999	1.001	0.997	0.999	0.997	0.997	0.993	0.995	0.991	0.995
98	1.040	1.021	1.010	1.003	0.999	1.003	1.001	1.001	1.001	1.001	1.001	0.999	0.999	0.997	0.997	0.995	0.993	0.991	0.993	0.991

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 19.06 SEC
INITIAL TEMP 534.7 DEG. R

GROUP 128

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.975	0.972	0.975	0.979	0.983	0.985	0.985	0.983	0.983	0.979	0.981	0.979	0.981	0.983	0.981	0.983	0.985	0.985	0.985	0.985
65	0.981	0.979	0.975	0.975	0.977	0.983	0.983	0.983	0.977	0.977	0.975	0.972	0.972	0.975	0.975	0.977	0.975	0.975	0.975	0.977
66	1.004	0.985	0.979	0.975	0.975	0.972	0.979	0.983	0.979	0.972	0.968	0.968	0.965	0.965	0.968	0.963	0.965	0.968	0.968	0.968
67	1.075	1.019	0.989	0.977	0.977	0.970	0.972	0.970	0.979	0.975	0.965	0.957	0.957	0.952	0.957	0.955	0.957	0.952	0.957	0.957
68	1.157	1.110	1.049	1.003	0.983	0.975	0.975	0.975	0.975	0.975	0.977	0.965	0.957	0.952	0.952	0.952	0.952	0.952	0.952	0.952
69	1.169	1.157	1.117	1.055	1.006	0.983	0.972	0.972	0.970	0.972	0.972	0.977	0.965	0.952	0.952	0.949	0.949	0.946	0.940	0.946
70	1.176	1.174	1.166	1.138	1.077	1.018	0.989	0.977	0.975	0.972	0.972	0.975	0.975	0.970	0.957	0.949	0.946	0.946	0.946	0.946
71	1.162	1.159	1.156	1.154	1.138	1.093	1.033	0.995	0.979	0.972	0.970	0.972	0.972	0.972	0.968	0.957	0.952	0.946	0.946	0.946
72	1.153	1.151	1.149	1.149	1.147	1.142	1.113	1.062	1.011	0.987	0.975	0.972	0.972	0.972	0.970	0.970	0.963	0.955	0.946	0.949
73	1.139	1.141	1.142	1.143	1.143	1.143	1.140	1.123	1.077	1.027	0.999	0.979	0.972	0.970	0.972	0.975	0.972	0.968	0.957	0.949
74	1.118	1.119	1.118	1.122	1.122	1.127	1.125	1.127	1.113	1.083	1.030	0.997	0.975	0.975	0.968	0.972	0.965	0.972	0.970	0.963
75	1.108	1.110	1.110	1.111	1.112	1.114	1.114	1.114	1.111	1.106	1.068	1.046	1.003	0.985	0.975	0.975	0.970	0.972	0.970	0.972
76	1.109	1.110	1.109	1.110	1.112	1.113	1.111	1.112	1.110	1.111	1.109	1.098	1.063	1.019	0.991	0.981	0.975	0.975	0.972	0.975
77	1.110	1.113	1.114	1.117	1.118	1.119	1.118	1.119	1.118	1.118	1.116	1.116	1.107	1.080	1.035	1.003	0.985	0.979	0.975	0.975
78	1.110	1.111	1.112	1.114	1.114	1.115	1.116	1.120	1.121	1.121	1.121	1.124	1.123	1.121	1.105	1.067	1.021	0.997	0.979	0.975
79	1.112	1.114	1.114	1.115	1.114	1.116	1.117	1.118	1.118	1.118	1.118	1.120	1.121	1.121	1.121	1.117	1.089	1.044	1.001	0.987
80	1.114	1.114	1.114	1.116	1.119	1.121	1.121	1.121	1.123	1.123	1.122	1.122	1.122	1.122	1.124	1.125	1.124	1.107	1.066	1.021
81	1.114	1.115	1.115	1.118	1.118	1.119	1.119	1.121	1.121	1.123	1.124	1.126	1.126	1.127	1.127	1.131	1.134	1.135	1.122	1.091
82	1.115	1.118	1.115	1.118	1.118	1.119	1.119	1.119	1.121	1.122	1.123	1.127	1.128	1.131	1.131	1.134	1.135	1.139	1.137	1.130
83	1.130	1.128	1.127	1.125	1.124	1.124	1.122	1.122	1.123	1.124	1.124	1.126	1.128	1.131	1.135	1.137	1.141	1.143	1.144	1.144
84	1.139	1.141	1.143	1.145	1.147	1.147	1.147	1.147	1.147	1.145	1.145	1.144	1.143	1.143	1.144	1.145	1.147	1.147	1.147	1.147
85	1.095	1.098	1.101	1.105	1.111	1.119	1.126	1.132	1.137	1.142	1.149	1.155	1.155	1.152	1.152	1.151	1.148	1.143	1.140	1.139
86	0.999	0.999	0.999	1.001	1.003	1.006	1.010	1.013	1.013	1.011	1.016	1.021	1.025	1.028	1.028	1.031	1.031	1.033	1.033	1.031
87	0.989	0.989	0.989	0.989	0.989	0.989	0.991	0.991	0.991	0.991	0.993	0.995	0.995	0.999	1.001	1.001	1.001	1.001	0.999	0.999
88	0.987	0.983	0.987	0.983	0.987	0.983	0.989	0.983	0.987	0.985	0.989	0.983	0.991	0.991	0.991	0.991	0.993	0.995	0.995	0.995
89	0.989	0.989	0.989	0.987	0.987	0.987	0.985	0.987	0.987	0.987	0.987	0.989	0.987	0.987	0.991	0.995	0.999	0.993	0.993	0.991
90	0.987	0.991	0.987	0.989	0.989	0.989	0.989	0.989	0.991	0.995	0.999	0.999	0.991	0.991	0.989	0.993	0.995	0.995	0.991	0.995
91	0.989	0.991	0.991	0.991	0.991	0.991	0.989	0.991	0.993	1.011	1.033	1.035	1.016	1.001	0.991	0.991	0.987	0.991	0.989	0.991
92	0.989	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.997	1.003	1.006	1.001	0.995	0.991	0.991	0.991	0.991	0.991	0.991
93	0.989	0.991	0.989	0.991	0.989	0.991	0.991	0.991	0.989	0.991	0.991	0.993	0.989	0.989	0.989	0.989	0.987	0.991	0.991	0.991
94	0.989	0.989	0.989	0.991	0.989	0.991	0.987	0.989	0.989	0.991	0.989	0.989	0.991	0.991	0.989	0.991	0.991	0.991	0.989	0.995
95	0.987	0.989	0.983	0.989	0.983	0.985	0.987	0.989	0.985	0.989	0.987	0.989	0.989	0.991	0.989	0.993	0.989	0.995	0.995	0.993
96	0.991	0.991	0.991	0.991	0.987	0.991	0.987	0.991	0.989	0.991	0.991	0.991	0.989	0.987	0.989	0.991	0.993	0.991	0.993	0.993
97	0.991	0.993	0.991	0.993	0.991	0.991	0.991	0.995	0.991	0.993	0.991	0.993	0.991	0.991	0.995	1.006	1.010	1.010	1.003	1.003
98	0.991	0.991	0.993	0.991	0.993	0.991	0.993	0.991	0.991	0.991	0.991	0.989	0.991	0.991	0.993	0.999	1.003	1.003	1.004	1.001

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

GROUP 128

IR SCAN TIME 19.06 SEC
INITIAL TEMP 534.7 DEG. R

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.983	0.983	0.983	0.985	0.985	0.983	0.983	0.983	0.985	0.983	0.985	0.983	0.983	0.981	0.983	0.981	0.983	0.983	0.981	0.981
65	0.977	0.977	0.975	0.981	0.975	0.972	0.975	0.977	0.975	0.975	0.972	0.975	0.972	0.975	0.972	0.975	0.975	0.977	0.975	0.977
66	0.968	0.968	0.968	0.968	0.968	0.968	0.968	0.968	0.968	0.965	0.965	0.965	0.968	0.965	0.965	0.965	0.968	0.968	0.965	0.965
67	0.963	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957
68	0.952	0.946	0.952	0.949	0.952	0.946	0.949	0.946	0.949	0.949	0.952	0.949	0.952	0.949	0.949	0.949	0.949	0.952	0.952	0.957
69	0.949	0.943	0.949	0.946	0.946	0.946	0.946	0.946	0.946	0.952	0.946	0.946	0.949	0.946	0.946	0.946	0.946	0.946	0.943	0.934
70	0.946	0.946	0.949	0.946	0.943	0.946	0.946	0.943	0.946	0.946	0.946	0.943	0.946	0.946	0.946	0.946	0.946	0.946	0.946	0.943
71	0.946	0.946	0.946	0.946	0.946	0.946	0.946	0.946	0.946	0.946	0.949	0.946	0.946	0.943	0.946	0.943	0.949	0.946	0.946	0.946
72	0.946	0.949	0.946	0.949	0.946	0.949	0.940	0.949	0.943	0.949	0.946	0.946	0.946	0.946	0.946	0.946	0.946	0.946	0.946	0.946
73	0.949	0.946	0.946	0.946	0.946	0.946	0.946	0.946	0.946	0.946	0.946	0.946	0.946	0.946	0.946	0.946	0.946	0.943	0.946	0.943
74	0.955	0.952	0.949	0.949	0.946	0.949	0.946	0.946	0.946	0.952	0.946	0.946	0.946	0.949	0.946	0.946	0.949	0.949	0.946	0.949
75	0.965	0.963	0.949	0.952	0.943	0.949	0.943	0.949	0.943	0.946	0.943	0.949	0.943	0.946	0.943	0.949	0.946	0.949	0.946	0.949
76	0.975	0.977	0.972	0.965	0.955	0.952	0.949	0.949	0.949	0.952	0.946	0.955	0.946	0.949	0.946	0.949	0.946	0.952	0.940	0.949
77	0.972	0.975	0.975	0.979	0.972	0.968	0.957	0.955	0.949	0.952	0.949	0.952	0.946	0.949	0.949	0.952	0.946	0.949	0.946	0.952
78	0.972	0.975	0.975	0.975	0.975	0.977	0.975	0.970	0.963	0.957	0.952	0.952	0.949	0.952	0.952	0.952	0.949	0.952	0.949	0.952
79	0.977	0.975	0.972	0.972	0.972	0.975	0.972	0.977	0.975	0.975	0.972	0.968	0.963	0.957	0.955	0.957	0.952	0.952	0.952	0.949
80	0.991	0.979	0.975	0.972	0.972	0.975	0.975	0.975	0.975	0.975	0.975	0.975	0.972	0.972	0.972	0.970	0.965	0.963	0.957	0.957
81	1.041	1.006	0.987	0.981	0.979	0.977	0.977	0.979	0.979	0.979	0.977	0.979	0.977	0.979	0.975	0.977	0.975	0.975	0.975	0.975
82	1.108	1.063	1.018	0.991	0.981	0.977	0.972	0.979	0.975	0.979	0.972	0.979	0.979	0.979	0.979	0.977	0.975	0.975	0.977	0.977
83	1.140	1.124	1.082	1.033	0.999	0.985	0.977	0.975	0.975	0.975	0.975	0.975	0.975	0.977	0.975	0.965	0.977	0.965	0.975	0.968
84	1.148	1.145	1.134	1.100	1.052	1.011	0.991	0.981	0.977	0.977	0.975	0.979	0.979	0.979	0.977	0.979	0.979	0.979	0.981	0.979
85	1.137	1.134	1.129	1.117	1.088	1.040	1.006	0.989	0.985	0.983	0.983	0.981	0.981	0.979	0.981	0.981	0.981	0.981	0.983	0.983
86	1.033	1.031	1.026	1.025	1.019	1.011	1.003	0.999	0.999	1.003	0.999	0.991	0.985	0.983	0.981	0.981	0.983	0.985	0.985	0.987
87	0.999	0.999	0.995	0.997	0.993	0.991	0.989	0.991	0.995	0.995	0.993	0.989	0.985	0.981	0.981	0.981	0.983	0.983	0.985	0.989
88	0.993	0.995	0.995	0.991	0.989	0.989	0.989	0.987	0.987	0.987	0.987	0.983	0.985	0.983	0.985	0.983	0.985	0.987	0.987	0.987
89	0.999	0.999	0.995	0.989	0.987	0.985	0.985	0.983	0.983	0.983	0.983	0.985	0.985	0.983	0.987	0.985	0.987	0.987	0.987	0.989
90	0.993	0.997	0.991	0.991	0.987	0.987	0.987	0.987	0.983	0.987	0.981	0.983	0.983	0.985	0.981	0.985	0.981	0.987	0.985	0.989
91	0.989	0.991	0.987	0.987	0.985	0.985	0.985	0.987	0.983	0.983	0.983	0.985	0.981	0.983	0.983	0.975	0.989	0.991	0.987	0.989
92	0.991	0.993	0.987	0.987	0.983	0.983	0.983	0.983	0.981	0.985	0.983	0.983	0.983	0.985	0.983	0.987	0.987	0.991	0.991	0.993
93	0.989	0.989	0.987	0.987	0.985	0.985	0.983	0.985	0.983	0.983	0.983	0.985	0.983	0.987	0.985	0.987	0.987	0.989	0.991	0.991
94	0.991	0.993	0.989	0.987	0.985	0.987	0.983	0.987	0.983	0.985	0.983	0.985	0.985	0.985	0.985	0.987	0.987	0.989	0.991	0.991
95	0.991	0.993	0.991	0.989	0.987	0.987	0.985	0.987	0.987	0.987	0.987	0.989	0.987	0.989	0.987	0.989	0.987	0.989	0.989	0.989
96	0.993	0.991	0.991	0.987	0.987	0.985	0.985	0.985	0.985	0.989	0.989	0.987	0.989	0.989	0.987	0.987	0.987	0.989	0.989	0.989
97	1.001	1.011	1.006	1.001	0.995	0.989	0.991	0.991	0.991	0.991	0.991	0.991	0.985	0.991	0.985	0.991	0.987	0.991	0.987	0.991
98	1.003	1.003	1.003	0.997	0.993	0.995	0.991	0.995	0.991	0.995	0.993	0.995	0.993	0.993	0.991	0.991	0.991	0.991	0.993	0.993

IR TEMPERATURE RECORD -- TWALL/INITIAL TEMP

IR SCAN TIME 19.06 SEC
GROUP 128 INITIAL TEMP 534.7 DEG. R

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.981	0.981	0.981	0.981	0.983	0.983	0.983	0.983	0.981	0.979
65	0.975	0.972	0.975	0.975	0.975	0.972	0.972	0.975	0.975	0.975
66	0.968	0.963	0.968	0.965	0.965	0.965	0.965	0.965	0.968	0.965
67	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957
68	0.955	0.952	0.952	0.952	0.952	0.952	0.952	0.952	0.957	0.952
69	0.946	0.940	0.946	0.937	0.949	0.940	0.946	0.940	0.949	0.943
70	0.949	0.946	0.946	0.946	0.949	0.946	0.949	0.946	0.943	0.943
71	0.946	0.943	0.949	0.946	0.946	0.946	0.946	0.943	0.949	0.946
72	0.943	0.949	0.946	0.946	0.943	0.949	0.943	0.949	0.943	0.949
73	0.946	0.943	0.946	0.943	0.946	0.943	0.946	0.946	0.949	0.946
74	0.946	0.949	0.946	0.949	0.946	0.949	0.946	0.949	0.946	0.949
75	0.946	0.949	0.946	0.949	0.946	0.949	0.946	0.949	0.946	0.949
76	0.943	0.949	0.940	0.946	0.943	0.952	0.943	0.949	0.946	0.949
77	0.949	0.952	0.946	0.952	0.949	0.952	0.946	0.949	0.949	0.949
78	0.949	0.952	0.946	0.952	0.946	0.952	0.946	0.949	0.949	0.952
79	0.949	0.952	0.946	0.952	0.952	0.955	0.949	0.952	0.952	0.952
80	0.955	0.952	0.952	0.952	0.952	0.949	0.952	0.949	0.949	0.949
81	0.970	0.970	0.968	0.968	0.965	0.963	0.957	0.963	0.960	0.957
82	0.979	0.975	0.972	0.975	0.975	0.975	0.975	0.970	0.970	0.968
83	0.977	0.968	0.977	0.965	0.977	0.968	0.975	0.970	0.975	0.968
84	0.979	0.981	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.977
85	0.983	0.981	0.981	0.981	0.981	0.981	0.981	0.979	0.979	0.979
86	0.987	0.985	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987
87	0.987	0.987	0.983	0.989	0.989	0.989	0.991	0.991	0.991	0.991
88	0.987	0.989	0.987	0.987	0.989	0.989	0.991	0.991	0.989	0.989
89	0.989	0.989	0.987	0.987	0.987	0.989	0.989	0.989	0.989	0.989
90	0.987	0.991	0.987	0.991	0.987	0.991	0.985	0.989	0.987	0.991
91	0.991	0.991	0.991	0.991	0.991	0.991	0.989	0.991	0.987	0.991
92	0.991	0.991	0.991	0.991	0.991	0.993	0.991	0.991	0.991	0.993
93	0.989	0.991	0.991	0.993	0.991	0.993	0.991	0.991	0.991	0.993
94	0.991	0.995	0.991	0.991	0.993	0.993	0.991	0.993	0.991	0.993
95	0.989	0.991	0.991	0.991	0.991	0.991	0.989	0.993	0.991	0.991
96	0.989	0.989	0.989	0.991	0.991	0.993	0.993	0.993	0.993	0.993
97	0.989	0.991	0.989	0.995	0.991	0.995	0.991	0.999	0.995	0.999
98	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995

NASA/RI OH90 TRANSITION TEST
V418-P4A
ARO, INC. AEDC DIVISION
A SVERDRUP CORP. CO.
VKF ARNOLD AF STATION
50 INCH HYPERSONIC TUNNEL B

MAR 10,1978

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 19.06 SEC
HREF = 0.147E-01

GROUP 128

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
29	0.003	0.002	0.001	0.004	0.004	0.004	0.001	0.001	0.004	0.001	0.001	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001
30	0.004	0.004	0.003	0.003	0.002	0.002	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002
31	0.002	0.003	0.002	0.003	0.002	0.002	0.001	0.002	0.001	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
32	0.002	0.002	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.002	0.003	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.001	0.002
34	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002
36	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
37	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
40	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
41	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
42	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
43	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
44	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
45	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.026	0.056
46	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.006	0.043	0.076
47	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.019	0.067	0.101
48	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.023	0.077	0.116
49	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.025	0.070	0.097
50	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.042	0.072	0.087
51	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.018	0.068	0.097	0.106
52	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.032	0.086	0.113	0.126
53	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.033	0.075	0.096	0.109
54	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.037	0.067	0.079	0.087
55	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.001	0.042	0.066	0.075	0.079
56	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.009	0.050	0.071	0.076	0.079
57	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.023	0.066	0.086	0.092	0.094
58	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.039	0.071	0.086	0.092	0.098
59	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.046	0.068	0.078	0.083	0.089
60	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.001	0.019	0.052	0.067	0.074	0.077	0.081
61	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.004	0.028	0.059	0.068	0.074	0.076	0.080
62	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.007	0.036	0.061	0.070	0.074	0.077	0.081
63	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.011	0.039	0.062	0.068	0.074	0.077	0.082

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 19.06 SEC
HREF = 0.147E-01

GROUP 128

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
29	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.002	0.002	0.002	0.002
30	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.002	0.002	0.003	0.002	0.002	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003
31	0.001	0.001	0.001	0.001	0.001	0.003	0.001	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
32	0.001	0.001	0.001	0.002	0.003	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
36	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
40	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
41	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
42	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
43	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
44	0.006	0.005	0.005	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
45	0.072	0.079	0.083	0.084	0.086	0.087	0.086	0.086	0.091	0.090	0.071	0.041	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
46	0.091	0.100	0.106	0.110	0.115	0.122	0.132	0.146	0.182	0.244	0.255	0.184	0.104	0.046	0.015	0.002	0.002	0.002	0.002	0.002
47	0.113	0.117	0.118	0.119	0.119	0.120	0.120	0.123	0.131	0.153	0.202	0.230	0.183	0.104	0.049	0.020	0.008	0.003	0.002	0.002
48	0.135	0.144	0.150	0.149	0.146	0.140	0.134	0.127	0.123	0.120	0.122	0.139	0.164	0.146	0.090	0.041	0.013	0.002	0.002	0.002
49	0.116	0.132	0.152	0.167	0.179	0.182	0.175	0.162	0.146	0.131	0.119	0.114	0.114	0.119	0.110	0.073	0.034	0.011	0.001	0.001
50	0.095	0.106	0.116	0.132	0.154	0.176	0.191	0.199	0.192	0.174	0.150	0.129	0.114	0.106	0.101	0.089	0.057	0.025	0.007	0.007
51	0.106	0.106	0.107	0.112	0.118	0.126	0.138	0.157	0.177	0.192	0.192	0.176	0.152	0.128	0.108	0.097	0.083	0.063	0.032	0.012
52	0.131	0.133	0.131	0.129	0.125	0.122	0.120	0.121	0.126	0.136	0.152	0.169	0.176	0.166	0.144	0.122	0.104	0.087	0.064	0.035
53	0.120	0.131	0.142	0.152	0.158	0.155	0.146	0.136	0.127	0.122	0.120	0.121	0.129	0.143	0.154	0.152	0.136	0.117	0.101	0.082
54	0.094	0.104	0.112	0.123	0.136	0.148	0.157	0.161	0.160	0.154	0.143	0.130	0.120	0.117	0.116	0.122	0.133	0.141	0.135	0.119
55	0.084	0.088	0.093	0.098	0.104	0.109	0.118	0.128	0.143	0.154	0.159	0.159	0.150	0.136	0.123	0.117	0.113	0.115	0.122	0.132
56	0.082	0.085	0.088	0.093	0.094	0.097	0.099	0.104	0.109	0.116	0.124	0.135	0.143	0.148	0.145	0.139	0.131	0.124	0.119	0.118
57	0.095	0.094	0.096	0.096	0.096	0.095	0.096	0.099	0.102	0.105	0.107	0.109	0.112	0.118	0.127	0.136	0.139	0.138	0.135	0.129
58	0.102	0.109	0.114	0.117	0.117	0.115	0.111	0.108	0.105	0.105	0.103	0.106	0.106	0.108	0.108	0.112	0.117	0.128	0.137	0.140
59	0.091	0.098	0.105	0.112	0.119	0.124	0.128	0.131	0.132	0.131	0.127	0.121	0.114	0.110	0.109	0.109	0.108	0.109	0.111	0.119
60	0.084	0.089	0.093	0.099	0.104	0.111	0.116	0.122	0.130	0.136	0.141	0.142	0.139	0.136	0.128	0.120	0.112	0.109	0.107	0.109
61	0.082	0.086	0.088	0.092	0.096	0.100	0.102	0.107	0.111	0.117	0.122	0.130	0.136	0.141	0.142	0.140	0.136	0.130	0.122	0.117
62	0.084	0.087	0.089	0.093	0.096	0.100	0.101	0.103	0.106	0.109	0.111	0.115	0.117	0.121	0.127	0.131	0.134	0.136	0.137	0.135
63	0.083	0.086	0.088	0.093	0.096	0.100	0.101	0.103	0.105	0.108	0.109	0.112	0.112	0.113	0.113	0.114	0.115	0.119	0.124	0.132

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 19.06 SEC
GROUP 128 HREF = 0.147E-01

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
29	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
30	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
31	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
32	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
36	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
40	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
41	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
42	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
43	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
44	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
45	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
46	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
47	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
48	0.004	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
49	0.001	0.001	0.003	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
50	0.007	0.007	0.007	0.007	0.007	0.004	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
51	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
52	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
53	0.050	0.021	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
54	0.100	0.071	0.034	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
55	0.139	0.130	0.102	0.062	0.025	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002
56	0.119	0.124	0.134	0.133	0.104	0.056	0.019	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
57	0.124	0.120	0.119	0.120	0.124	0.116	0.079	0.032	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
58	0.135	0.130	0.124	0.121	0.116	0.114	0.099	0.066	0.024	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
59	0.129	0.139	0.140	0.134	0.127	0.123	0.118	0.108	0.082	0.042	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
60	0.109	0.112	0.118	0.127	0.137	0.138	0.132	0.123	0.117	0.099	0.057	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019
61	0.111	0.110	0.109	0.111	0.111	0.117	0.126	0.138	0.140	0.134	0.115	0.080	0.032	0.005	0.005	0.005	0.005	0.005	0.005	0.005
62	0.130	0.123	0.117	0.113	0.108	0.107	0.107	0.108	0.112	0.122	0.131	0.127	0.097	0.051	0.016	0.002	0.002	0.002	0.002	0.002
63	0.135	0.133	0.129	0.126	0.121	0.118	0.112	0.106	0.101	0.101	0.099	0.100	0.099	0.090	0.059	0.022	0.022	0.022	0.022	0.022

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 19.06 SEC
GROUP 128 HREF = 0.147E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
29	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
30	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
31	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
32	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
36	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
40	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
41	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
42	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
43	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
44	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
45	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
46	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
47	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
48	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
49	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
50	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
51	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
52	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
53	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
54	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
55	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
56	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
57	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
58	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
59	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
60	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019
61	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
62	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
63	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 19.06 SEC
GROUP 128 HREF = 0.147E-01

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
29	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
30	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
31	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
32	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
36	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
40	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
41	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
42	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
43	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
44	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
45	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
46	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
47	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
48	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
49	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
50	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
51	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
52	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
53	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
54	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
55	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
56	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
57	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
58	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
59	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
60	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019
61	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
62	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
63	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 19.06 SEC
HREF = 0.147E-01

GROUP 128

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
29	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
30	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
31	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
32	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
35	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
36	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
37	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
38	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
39	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
40	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
41	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
42	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
43	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
44	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
45	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
46	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
47	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
48	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
49	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
50	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
51	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
52	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
53	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
54	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
55	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
56	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
57	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
58	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
59	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
60	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019
61	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
62	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
63	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME 19.06 SEC
GROUP 128 HREF = 0.147E-01

*** POINT ***

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
64	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.008	0.042	0.060	0.066	0.070	0.073	0.076
65	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.016	0.046	0.061	0.066	0.070	0.074	0.077
66	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.026	0.055	0.063	0.068	0.070	0.074	0.076
67	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.035	0.058	0.066	0.070	0.074	0.077	0.080
68	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.006	0.042	0.060	0.066	0.070	0.074	0.078	0.079
69	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.016	0.047	0.060	0.064	0.068	0.072	0.074	0.077
70	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.019	0.046	0.055	0.059	0.062	0.064	0.067	0.069
71	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.021	0.041	0.049	0.052	0.055	0.057	0.060	0.060
72	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.023	0.042	0.046	0.049	0.052	0.055	0.056	0.058
73	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.026	0.038	0.045	0.046	0.049	0.052	0.054	0.055
74	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.007	0.030	0.040	0.042	0.046	0.046	0.050	0.051	0.053
75	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.015	0.032	0.038	0.041	0.044	0.045	0.049	0.050	0.052
76	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.023	0.035	0.041	0.042	0.045	0.046	0.049	0.049	0.052
77	0.013	0.013	0.013	0.002	0.002	0.004	0.004	0.004	0.004	0.004	0.001	0.028	0.037	0.042	0.042	0.046	0.047	0.049	0.050	0.053
78	0.001	0.002	0.002	0.008	0.014	0.009	0.011	0.019	0.019	0.019	0.006	0.031	0.036	0.042	0.042	0.046	0.046	0.049	0.049	0.052
79	0.008	0.015	0.004	0.006	0.012	0.016	0.014	0.021	0.023	0.008	0.020	0.034	0.038	0.042	0.042	0.046	0.048	0.049	0.051	0.055
80	0.018	0.023	0.020	0.014	0.008	0.008	0.016	0.018	0.023	0.027	0.029	0.037	0.040	0.042	0.043	0.045	0.047	0.049	0.051	0.053
81	0.025	0.026	0.026	0.023	0.013	0.008	0.003	0.008	0.018	0.027	0.032	0.038	0.040	0.042	0.042	0.046	0.046	0.049	0.051	0.055
82	0.025	0.028	0.025	0.024	0.015	0.011	0.003	0.003	0.003	0.016	0.033	0.032	0.041	0.042	0.044	0.043	0.046	0.048	0.050	0.053
83	0.023	0.021	0.023	0.021	0.012	0.006	0.006	0.006	0.006	0.013	0.033	0.042	0.044	0.044	0.045	0.046	0.046	0.047	0.047	0.047
84	0.017	0.017	0.021	0.023	0.015	0.005	0.002	0.005	0.005	0.005	0.009	0.012	0.013	0.014	0.017	0.019	0.023	0.026	0.026	0.031
85	0.006	0.011	0.016	0.017	0.012	0.003	0.004	0.005	0.005	0.005	0.005	0.001	0.003	0.002	0.003	0.002	0.002	0.001	0.002	0.003
86	0.004	0.004	0.002	0.002	0.001	0.001	0.003	0.008	0.007	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.002	0.002	0.001	0.002
87	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.007	0.008	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
88	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.005	0.007	0.004	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
89	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.005	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
90	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.004	0.004	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
91	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.004	0.004	0.001	0.002	0.002	0.002	0.002	0.003	0.001	0.001	0.001	0.001
92	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.004	0.002	0.001	0.001	0.003	0.003	0.003	0.001	0.002	0.002	0.002
93	0.001	0.001	0.001	0.002	0.003	0.004	0.005	0.008	0.006	0.004	0.003	0.005	0.005	0.005	0.004	0.006	0.003	0.002	0.002	0.002
94	0.007	0.007	0.008	0.008	0.008	0.008	0.008	0.013	0.011	0.006	0.006	0.007	0.007	0.011	0.008	0.008	0.007	0.006	0.002	0.002
95	0.012	0.012	0.012	0.014	0.013	0.013	0.012	0.015	0.013	0.012	0.008	0.011	0.011	0.013	0.013	0.013	0.005	0.007	0.004	0.001
96	0.014	0.013	0.015	0.013	0.014	0.013	0.014	0.013	0.012	0.013	0.008	0.011	0.015	0.014	0.014	0.015	0.013	0.011	0.006	0.003
97	0.015	0.015	0.015	0.015	0.015	0.015	0.014	0.015	0.014	0.011	0.007	0.011	0.012	0.015	0.015	0.015	0.013	0.012	0.007	0.008
98	0.015	0.016	0.017	0.017	0.016	0.014	0.015	0.014	0.015	0.013	0.012	0.011	0.012	0.012	0.013	0.011	0.012	0.011	0.009	0.009

IR HEAT TRANSFER COEFFICIENT = H(,9TO)/HREF
IR SCAN TIME 19.06 SEC
GROUP 128 HREF = 0.147E-01

*** POINT ***

LINE	21	22	23	24	25	26	27	28	29	30.	31	32	33	34	35	36	37	38	39	40
64	0.079	0.082	0.085	0.089	0.093	0.096	0.099	0.100	0.104	0.106	0.108	0.109	0.110	0.111	0.111	0.110	0.110	0.111	0.112	0.112
65	0.079	0.082	0.084	0.089	0.091	0.093	0.095	0.098	0.095	0.101	0.100	0.105	0.105	0.110	0.110	0.113	0.112	0.115	0.113	0.114
66	0.079	0.082	0.086	0.089	0.091	0.094	0.097	0.100	0.104	0.106	0.108	0.112	0.114	0.115	0.114	0.115	0.116	0.119	0.120	0.121
67	0.084	0.089	0.093	0.098	0.099	0.099	0.100	0.105	0.109	0.111	0.112	0.114	0.117	0.120	0.123	0.126	0.129	0.130	0.128	0.126
68	0.084	0.089	0.093	0.097	0.100	0.102	0.106	0.110	0.116	0.121	0.124	0.124	0.124	0.125	0.125	0.124	0.124	0.124	0.124	0.127
69	0.080	0.085	0.088	0.090	0.094	0.097	0.100	0.102	0.106	0.108	0.112	0.115	0.117	0.118	0.119	0.121	0.123	0.124	0.125	0.125
70	0.072	0.076	0.080	0.081	0.084	0.086	0.089	0.091	0.093	0.095	0.098	0.100	0.102	0.103	0.104	0.106	0.108	0.110	0.112	0.114
71	0.064	0.066	0.069	0.072	0.072	0.075	0.077	0.079	0.082	0.083	0.085	0.086	0.087	0.089	0.090	0.091	0.093	0.095	0.098	0.099
72	0.059	0.062	0.064	0.064	0.066	0.068	0.068	0.071	0.072	0.074	0.073	0.075	0.075	0.077	0.075	0.077	0.077	0.080	0.082	0.085
73	0.056	0.058	0.060	0.062	0.062	0.064	0.066	0.069	0.070	0.071	0.071	0.072	0.073	0.074	0.074	0.075	0.075	0.075	0.075	0.076
74	0.053	0.055	0.057	0.059	0.060	0.062	0.064	0.066	0.068	0.068	0.068	0.069	0.070	0.072	0.072	0.073	0.072	0.074	0.074	0.075
75	0.052	0.055	0.055	0.057	0.060	0.060	0.061	0.063	0.064	0.066	0.066	0.068	0.068	0.069	0.069	0.070	0.069	0.071	0.072	0.072
76	0.052	0.055	0.055	0.058	0.059	0.062	0.062	0.063	0.064	0.066	0.066	0.066	0.066	0.068	0.068	0.069	0.068	0.068	0.069	0.070
77	0.055	0.055	0.056	0.058	0.060	0.062	0.063	0.065	0.066	0.066	0.066	0.067	0.067	0.067	0.068	0.069	0.068	0.068	0.068	0.070
78	0.053	0.056	0.057	0.059	0.060	0.062	0.062	0.064	0.066	0.068	0.067	0.068	0.067	0.067	0.068	0.069	0.068	0.068	0.068	0.069
79	0.055	0.056	0.057	0.060	0.059	0.062	0.062	0.065	0.064	0.066	0.066	0.068	0.066	0.068	0.067	0.069	0.068	0.068	0.068	0.071
80	0.055	0.057	0.059	0.060	0.063	0.064	0.066	0.066	0.068	0.068	0.068	0.068	0.068	0.068	0.069	0.069	0.069	0.070	0.071	0.071
81	0.056	0.058	0.060	0.064	0.065	0.067	0.069	0.071	0.071	0.073	0.073	0.074	0.074	0.074	0.075	0.076	0.076	0.077	0.076	0.077
82	0.052	0.055	0.058	0.061	0.063	0.066	0.069	0.070	0.070	0.070	0.072	0.074	0.074	0.075	0.075	0.075	0.077	0.079	0.079	0.081
83	0.047	0.049	0.051	0.053	0.055	0.057	0.060	0.063	0.066	0.068	0.069	0.069	0.070	0.070	0.071	0.072	0.072	0.073	0.074	0.075
84	0.035	0.038	0.042	0.046	0.050	0.052	0.055	0.059	0.062	0.066	0.068	0.069	0.069	0.070	0.072	0.073	0.074	0.074	0.076	0.077
85	0.003	0.004	0.005	0.006	0.008	0.008	0.008	0.008	0.009	0.009	0.012	0.014	0.014	0.015	0.015	0.017	0.017	0.019	0.020	0.022
86	0.002	0.001	0.002	0.001	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
87	0.001	0.001	0.002	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
88	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
89	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
90	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.003	0.015	0.023	0.020	0.006	0.002	0.002	0.002	0.002	0.002
91	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.002	0.003	0.018	0.032	0.028	0.012	0.002	0.002	0.002	0.002	0.002
92	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.004	0.003	0.004	0.003	0.004	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003
93	0.002	0.002	0.002	0.001	0.001	0.004	0.002	0.004	0.004	0.006	0.004	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
94	0.002	0.002	0.001	0.004	0.003	0.005	0.005	0.007	0.005	0.008	0.008	0.007	0.006	0.004	0.001	0.001	0.001	0.001	0.001	0.001
95	0.001	0.001	0.002	0.006	0.005	0.007	0.008	0.011	0.009	0.011	0.009	0.011	0.008	0.007	0.004	0.004	0.002	0.001	0.001	0.001
96	0.003	0.003	0.006	0.006	0.008	0.011	0.008	0.011	0.011	0.009	0.012	0.012	0.011	0.009	0.008	0.005	0.003	0.002	0.001	0.001
97	0.005	0.008	0.007	0.009	0.008	0.009	0.008	0.008	0.009	0.009	0.011	0.011	0.009	0.009	0.008	0.008	0.005	0.004	0.002	0.003
98	0.011	0.011	0.011	0.011	0.012	0.011	0.012	0.012	0.012	0.012	0.012	0.011	0.011	0.008	0.009	0.007	0.007	0.011	0.023	0.032

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 19.06 SEC
GROUP 128 HREF = 0.147E-01

*** POINT ***

LINE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
64	0.112	0.112	0.117	0.121	0.126	0.127	0.122	0.117	0.111	0.106	0.102	0.098	0.095	0.091	0.085	0.064	0.032	0.004	0.004	0.004
65	0.111	0.112	0.111	0.113	0.113	0.112	0.113	0.119	0.123	0.125	0.123	0.119	0.113	0.109	0.104	0.096	0.082	0.050	0.014	0.014
66	0.121	0.122	0.122	0.123	0.125	0.125	0.123	0.121	0.120	0.120	0.123	0.127	0.135	0.137	0.134	0.127	0.118	0.105	0.073	0.029
67	0.124	0.127	0.128	0.129	0.129	0.129	0.129	0.129	0.130	0.130	0.130	0.128	0.127	0.126	0.130	0.137	0.141	0.140	0.128	0.097
68	0.130	0.131	0.131	0.128	0.126	0.123	0.124	0.124	0.127	0.128	0.130	0.131	0.132	0.130	0.129	0.129	0.129	0.128	0.130	0.130
69	0.125	0.126	0.124	0.124	0.124	0.126	0.127	0.126	0.122	0.122	0.123	0.124	0.127	0.128	0.128	0.129	0.132	0.133	0.132	0.129
70	0.117	0.120	0.123	0.127	0.128	0.126	0.123	0.122	0.121	0.123	0.125	0.127	0.129	0.127	0.126	0.126	0.129	0.130	0.131	0.132
71	0.100	0.102	0.104	0.105	0.108	0.111	0.114	0.117	0.120	0.123	0.122	0.122	0.121	0.121	0.121	0.121	0.121	0.121	0.121	0.119
72	0.086	0.089	0.089	0.090	0.092	0.093	0.095	0.099	0.100	0.102	0.102	0.105	0.107	0.109	0.110	0.110	0.110	0.112	0.111	0.111
73	0.077	0.077	0.079	0.079	0.079	0.079	0.081	0.081	0.083	0.086	0.087	0.087	0.088	0.088	0.089	0.089	0.092	0.094	0.098	0.099
74	0.075	0.077	0.076	0.077	0.077	0.077	0.076	0.074	0.074	0.075	0.075	0.077	0.077	0.077	0.078	0.079	0.079	0.080	0.082	0.083
75	0.072	0.073	0.073	0.074	0.075	0.075	0.075	0.075	0.074	0.074	0.074	0.075	0.075	0.075	0.074	0.075	0.075	0.075	0.075	0.075
76	0.070	0.071	0.070	0.070	0.070	0.071	0.071	0.071	0.071	0.072	0.071	0.072	0.072	0.074	0.075	0.076	0.076	0.077	0.076	0.077
77	0.070	0.070	0.070	0.070	0.070	0.069	0.069	0.070	0.069	0.069	0.069	0.070	0.071	0.072	0.072	0.072	0.073	0.073	0.074	0.077
78	0.070	0.071	0.072	0.072	0.072	0.072	0.071	0.071	0.070	0.070	0.070	0.070	0.070	0.071	0.070	0.072	0.072	0.074	0.075	0.076
79	0.071	0.072	0.072	0.074	0.072	0.073	0.073	0.074	0.072	0.074	0.073	0.074	0.073	0.073	0.073	0.074	0.074	0.075	0.076	0.078
80	0.072	0.072	0.073	0.072	0.073	0.072	0.073	0.072	0.073	0.074	0.074	0.074	0.075	0.074	0.075	0.076	0.078	0.078	0.079	0.079
81	0.077	0.079	0.079	0.079	0.079	0.079	0.077	0.077	0.077	0.076	0.076	0.077	0.076	0.077	0.077	0.079	0.079	0.080	0.080	0.081
82	0.082	0.084	0.086	0.086	0.087	0.087	0.087	0.087	0.086	0.086	0.084	0.086	0.084	0.082	0.083	0.083	0.083	0.082	0.083	0.082
83	0.077	0.079	0.080	0.082	0.082	0.084	0.085	0.086	0.087	0.089	0.090	0.090	0.091	0.092	0.093	0.093	0.094	0.093	0.093	0.093
84	0.079	0.080	0.080	0.082	0.082	0.083	0.082	0.082	0.082	0.082	0.083	0.083	0.084	0.084	0.086	0.087	0.089	0.091	0.094	0.097
85	0.023	0.026	0.028	0.031	0.032	0.033	0.037	0.038	0.041	0.042	0.046	0.048	0.049	0.050	0.053	0.055	0.055	0.056	0.060	0.062
86	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
87	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
88	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
89	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
90	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.006	0.007	0.005	0.005	0.005	0.005	0.005	0.005	0.005
91	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.021	0.030	0.022	0.006	0.006	0.006	0.006	0.006	0.006
92	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
93	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
94	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
95	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
96	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
97	0.001	0.001	0.001	0.002	0.002	0.001	0.001	0.001	0.001	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
98	0.026	0.014	0.006	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 19.06 SEC
GROUP 128 HREF = 0.147E-01

*** POINT ***

LINE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
64	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
65	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
66	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
67	0.051	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
68	0.114	0.077	0.032	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
69	0.124	0.114	0.082	0.037	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
70	0.130	0.128	0.122	0.099	0.052	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
71	0.118	0.116	0.115	0.111	0.099	0.064	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022
72	0.111	0.109	0.108	0.107	0.106	0.102	0.079	0.042	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
73	0.100	0.101	0.102	0.103	0.103	0.103	0.100	0.087	0.052	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
74	0.083	0.084	0.083	0.086	0.086	0.090	0.089	0.090	0.079	0.057	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020
75	0.075	0.077	0.077	0.078	0.079	0.080	0.080	0.080	0.078	0.074	0.060	0.031	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
76	0.076	0.077	0.076	0.077	0.079	0.079	0.078	0.079	0.077	0.078	0.076	0.068	0.042	0.013	0.013	0.013	0.013	0.013	0.013	0.013
77	0.077	0.079	0.080	0.082	0.083	0.084	0.083	0.084	0.083	0.083	0.082	0.082	0.075	0.055	0.023	0.002	0.002	0.002	0.002	0.002
78	0.077	0.078	0.079	0.080	0.080	0.081	0.082	0.084	0.085	0.086	0.086	0.087	0.087	0.086	0.074	0.046	0.014	0.014	0.014	0.014
79	0.079	0.080	0.080	0.081	0.080	0.082	0.082	0.083	0.083	0.083	0.083	0.084	0.085	0.086	0.086	0.082	0.061	0.029	0.001	0.001
80	0.080	0.080	0.080	0.082	0.084	0.085	0.085	0.086	0.087	0.087	0.086	0.086	0.086	0.086	0.087	0.089	0.088	0.075	0.046	0.014
81	0.080	0.081	0.081	0.083	0.083	0.084	0.084	0.085	0.086	0.087	0.087	0.089	0.089	0.090	0.090	0.093	0.095	0.096	0.086	0.063
82	0.081	0.083	0.081	0.083	0.083	0.084	0.084	0.084	0.085	0.086	0.087	0.090	0.091	0.093	0.093	0.095	0.096	0.099	0.098	0.093
83	0.092	0.091	0.090	0.089	0.087	0.087	0.086	0.086	0.087	0.087	0.088	0.089	0.091	0.093	0.096	0.098	0.101	0.103	0.104	0.104
84	0.099	0.101	0.103	0.104	0.106	0.106	0.106	0.106	0.106	0.105	0.105	0.104	0.103	0.103	0.104	0.105	0.106	0.106	0.106	0.106
85	0.066	0.068	0.070	0.073	0.078	0.084	0.089	0.094	0.098	0.102	0.107	0.112	0.112	0.110	0.110	0.109	0.107	0.102	0.100	0.099
86	0.001	0.001	0.001	0.001	0.002	0.004	0.006	0.008	0.008	0.007	0.011	0.014	0.017	0.019	0.019	0.021	0.021	0.022	0.022	0.021
87	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001
88	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
89	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
90	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
91	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.007	0.022	0.023	0.011	0.001	0.001	0.001	0.001	0.001	0.001	0.001
92	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.005	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
93	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
94	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
95	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
96	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
97	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.004	0.006	0.006	0.002	0.002
98	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.003	0.001

IR HEAT TRANSFER COEFFICIENT - H(.9TO)/HREF
IR SCAN TIME 19.06 SEC
HREF = 0.147E-01

GROUP 128

*** POINT ***

LINE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
64	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
65	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
66	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
67	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
68	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
69	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
70	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
71	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022
72	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
73	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
74	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020
75	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
76	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
77	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
78	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
79	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
80	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
81	0.027	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
82	0.075	0.042	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
83	0.100	0.087	0.056	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022
84	0.107	0.104	0.095	0.070	0.035	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
85	0.098	0.095	0.091	0.082	0.060	0.026	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
86	0.022	0.021	0.019	0.017	0.013	0.007	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
87	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
88	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
89	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
90	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
91	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
92	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
93	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
94	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
95	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
96	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
97	0.001	0.007	0.004	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
98	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002

IR HEAT TRANSFER COEFFICIENT = H(.9TO)/HREF
IR SCAN TIME = 19.06 SEC
HREF = 0.147E-01

GROUP 128

*** POINT ***

LINE	101	102	103	104	105	106	107	108	109	110
64	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
65	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
66	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
67	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
68	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
69	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
70	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
71	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022
72	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
73	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
74	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020
75	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
76	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
77	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
78	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
79	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
80	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
81	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
82	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
83	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022
84	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
85	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
86	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
87	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
88	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
89	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
90	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
91	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
92	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
93	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
94	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
95	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
96	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
97	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
98	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002

APPENDIX C

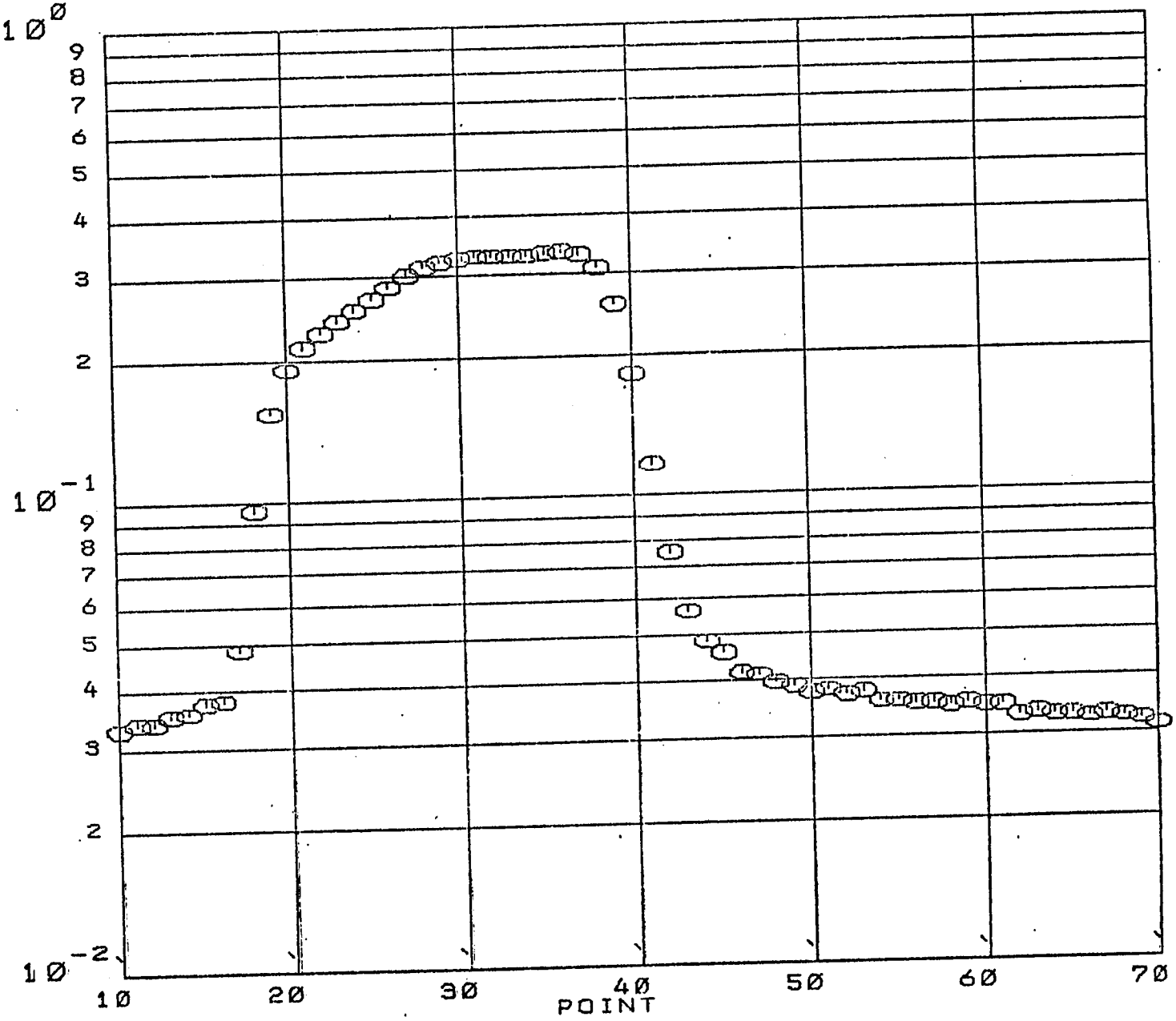
SOURCE DATA: IR DATA PLOTS

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

GROUP 2

NASA/RI 0H90

RE/FT 2.48
ALPHA 29.99
LINE 51



H(.9TO)
/HAFA

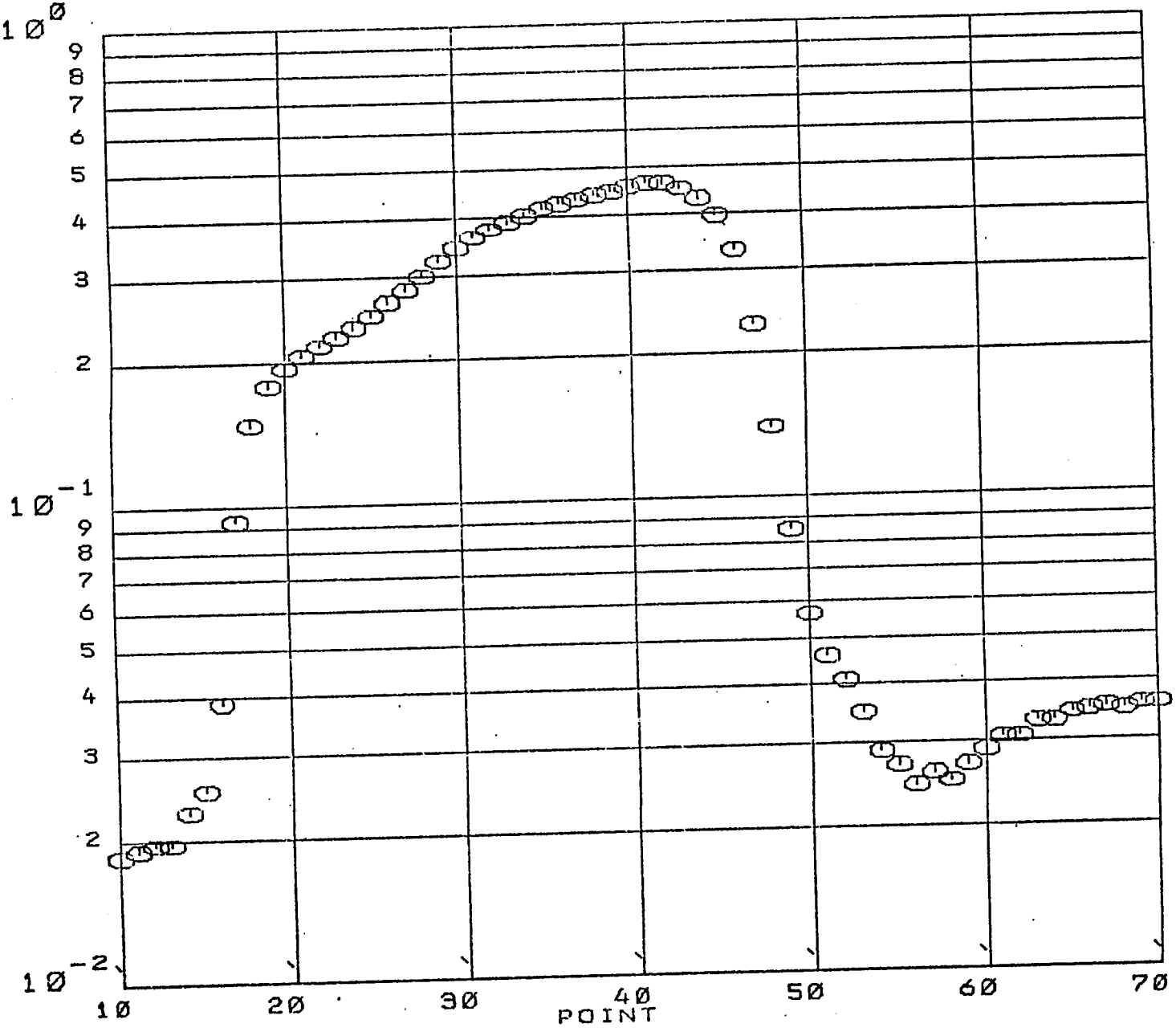
C-1

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 8 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 2.48
ALPHA 29.99
LINE 56

GROUP 2



H(.9TO)
/HAFA

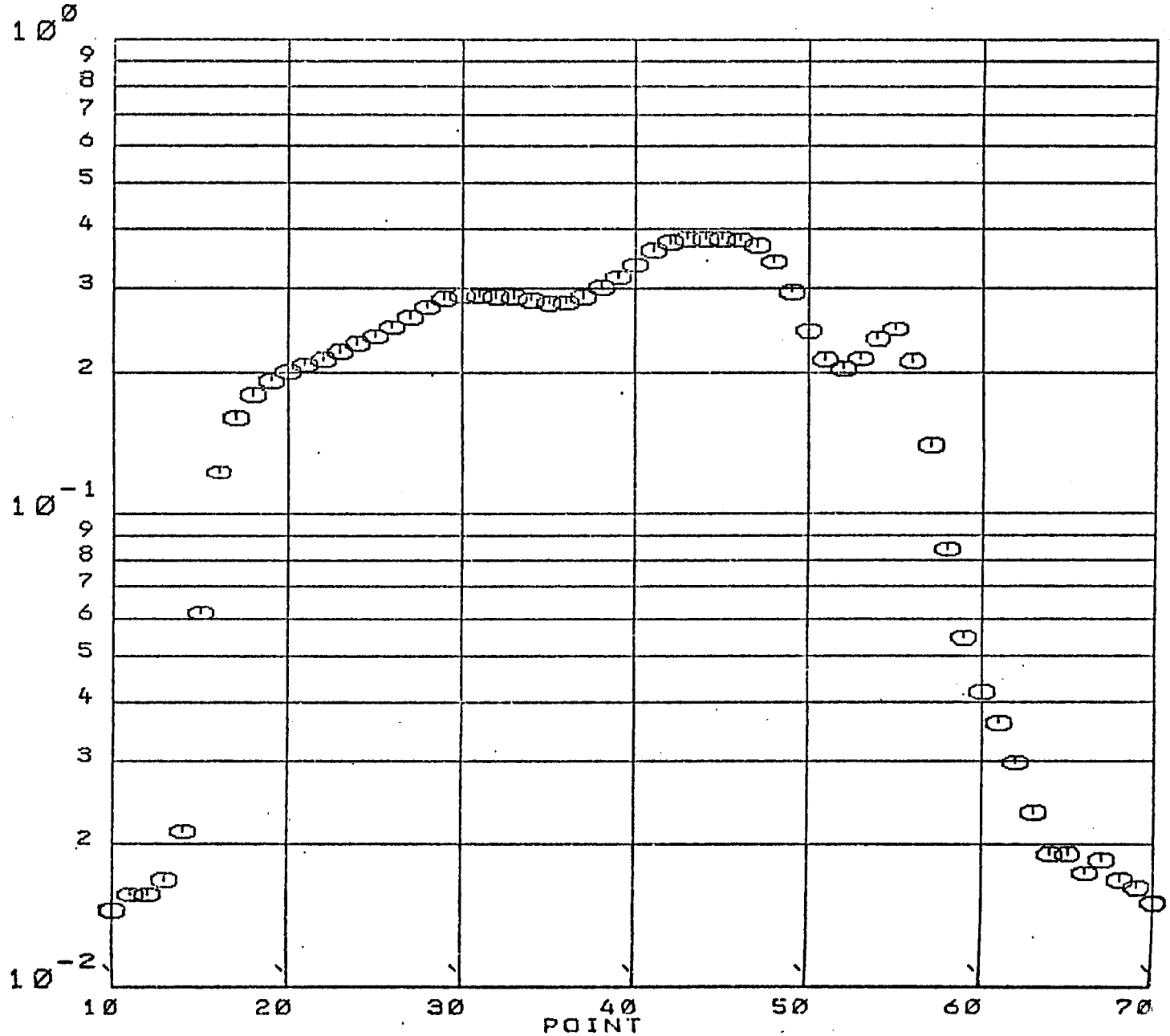
C-2

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 2.48
ALPHA 29.99
LINE 63

GROUP 2



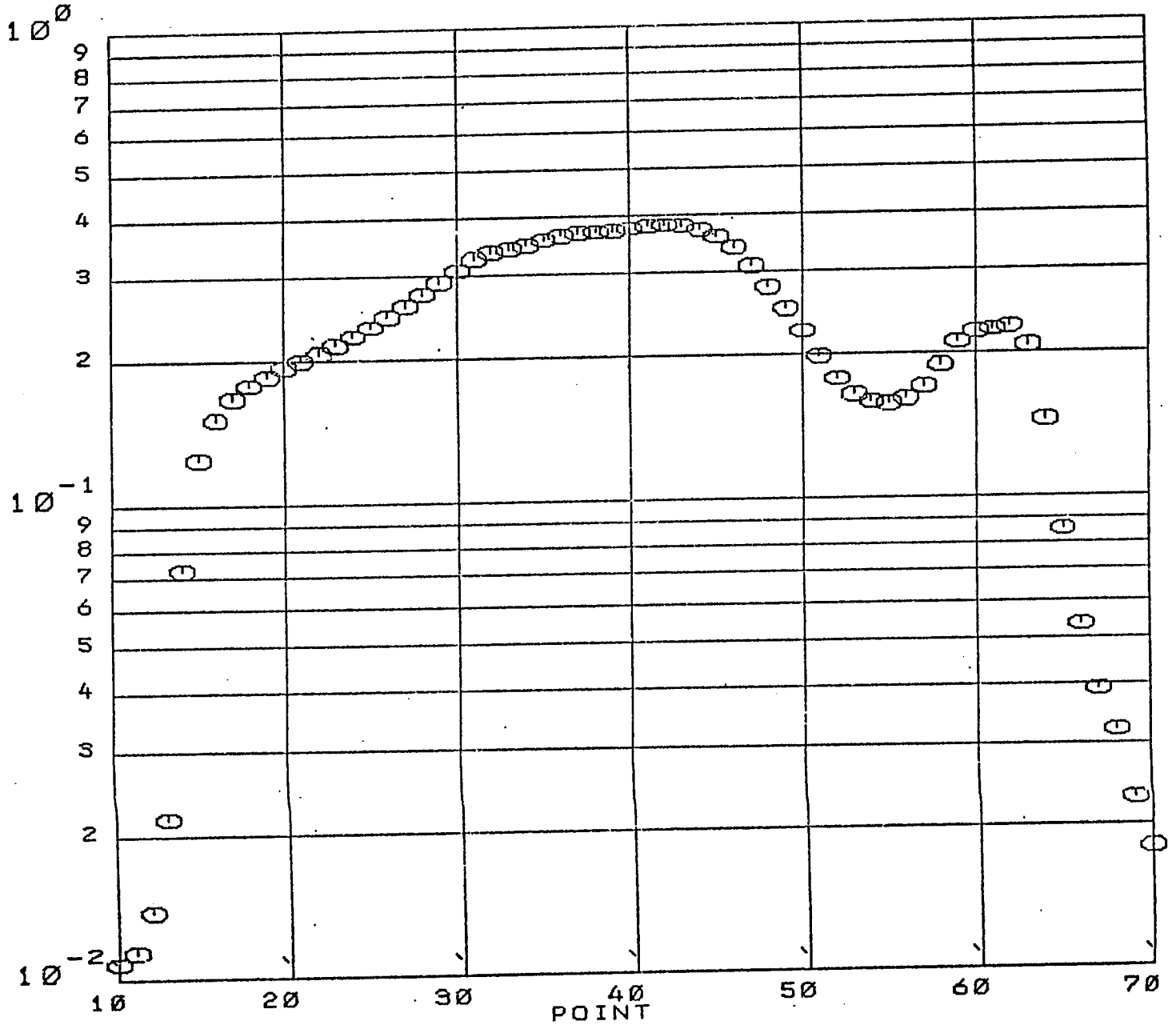
H(.9TO)
/HAFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 2.48
ALPHA 29.99
LINE 68

GROUP 2



H(.9TO)
/HAFR

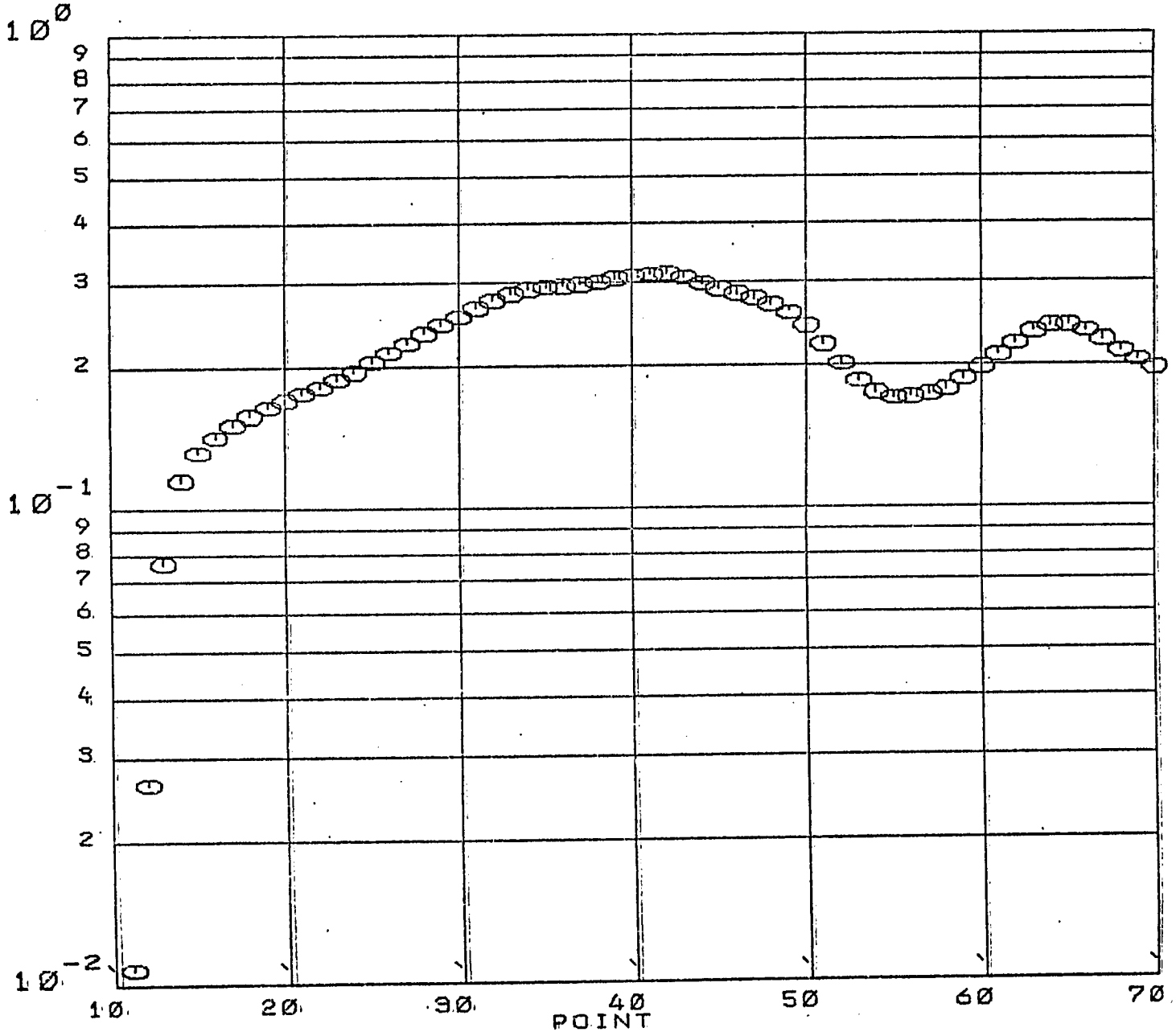
C-4 250

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

AE/FT 2.48
ALPHA 29.99
LINE 74

GROUP 2



H(.9TO)
/HRFR

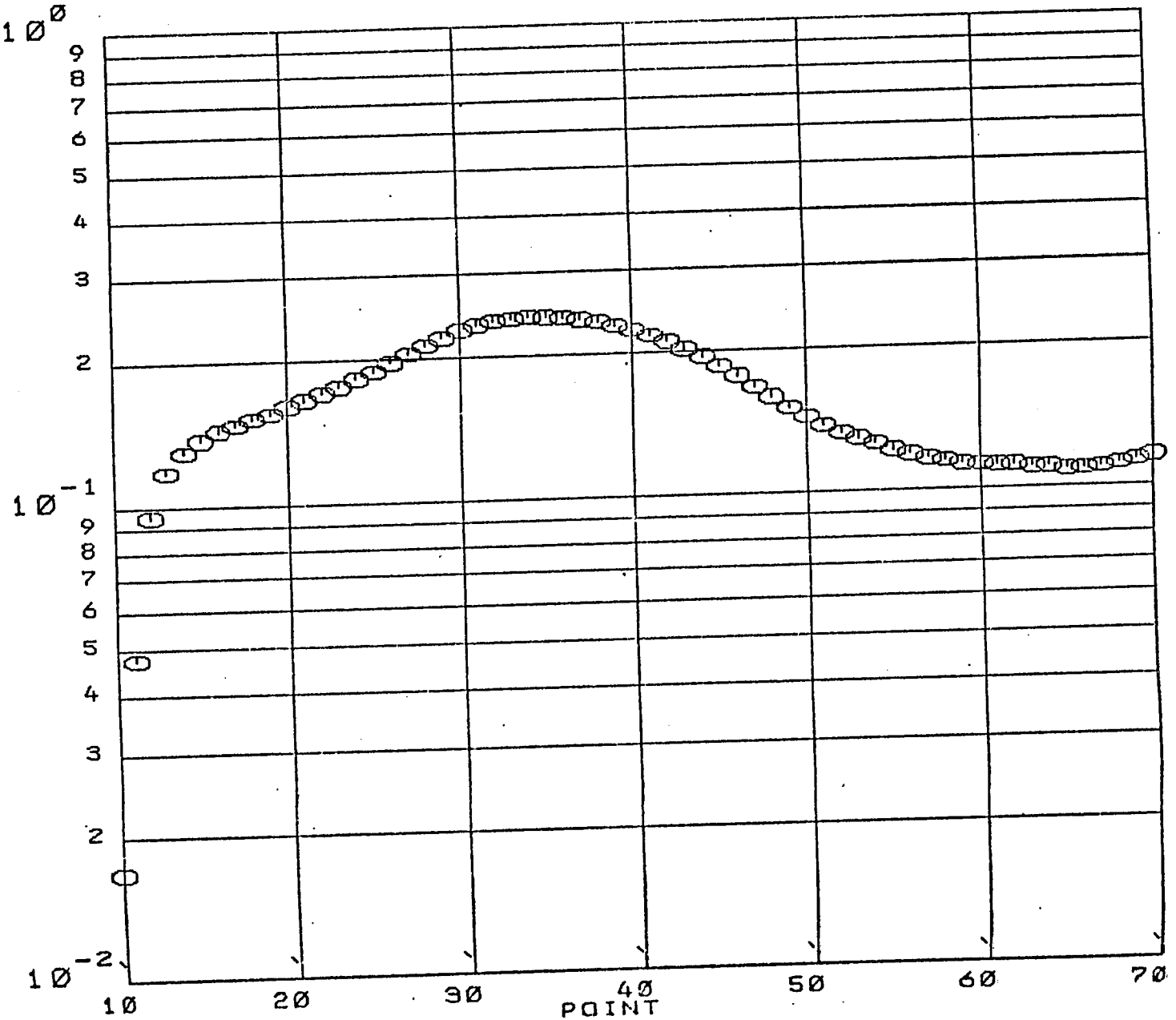
C-5 251

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

GROUP 2

NASA/AI OH90

RE/FT 2.48
ALPHA 29.99
LINE 80



H(.9TO)
/HAFA

252.

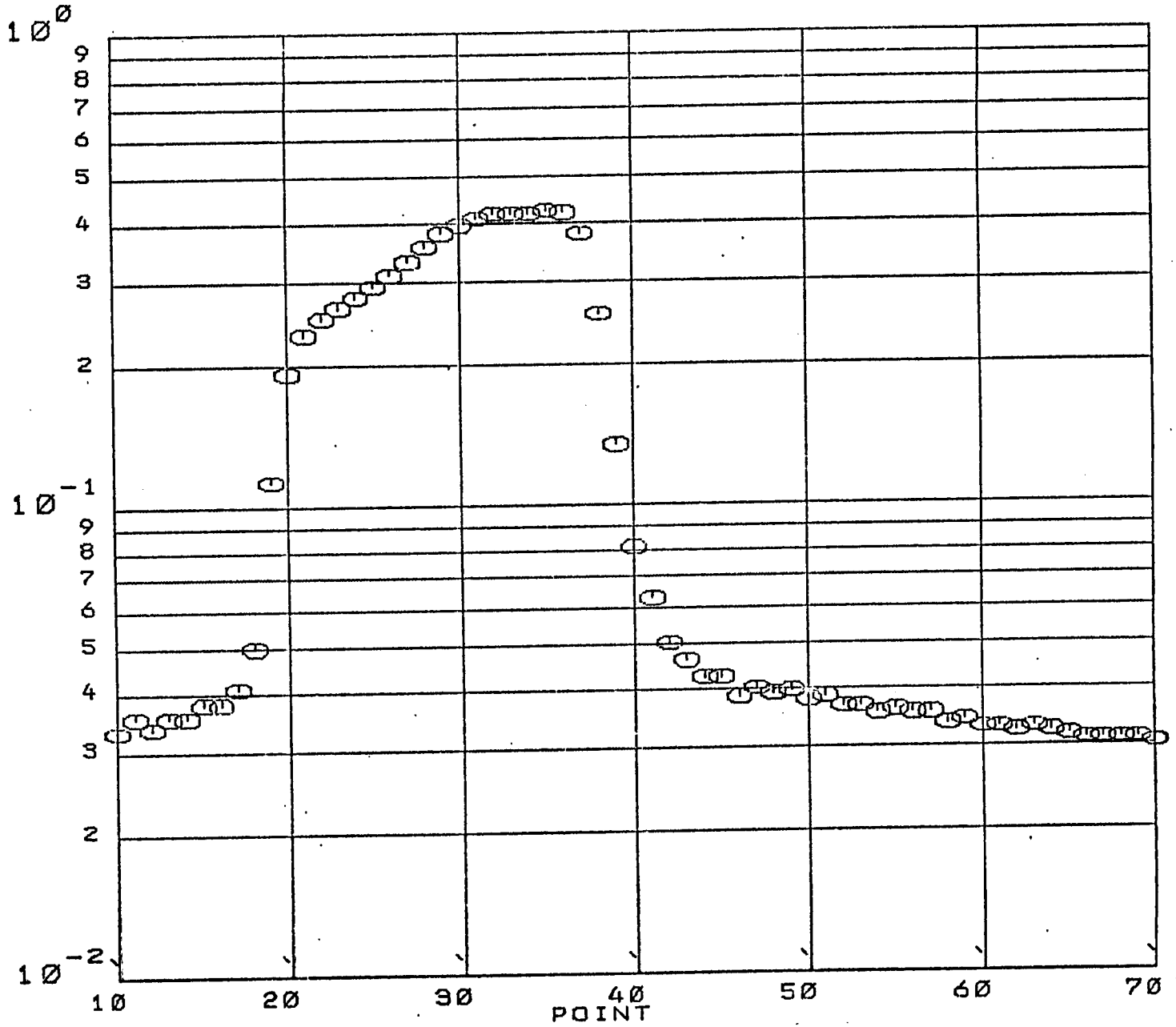
C-6

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

RE/FT 2.48
ALPHA 40.10
LINE 51

GROUP 4



H(.9TO)
/HAFA

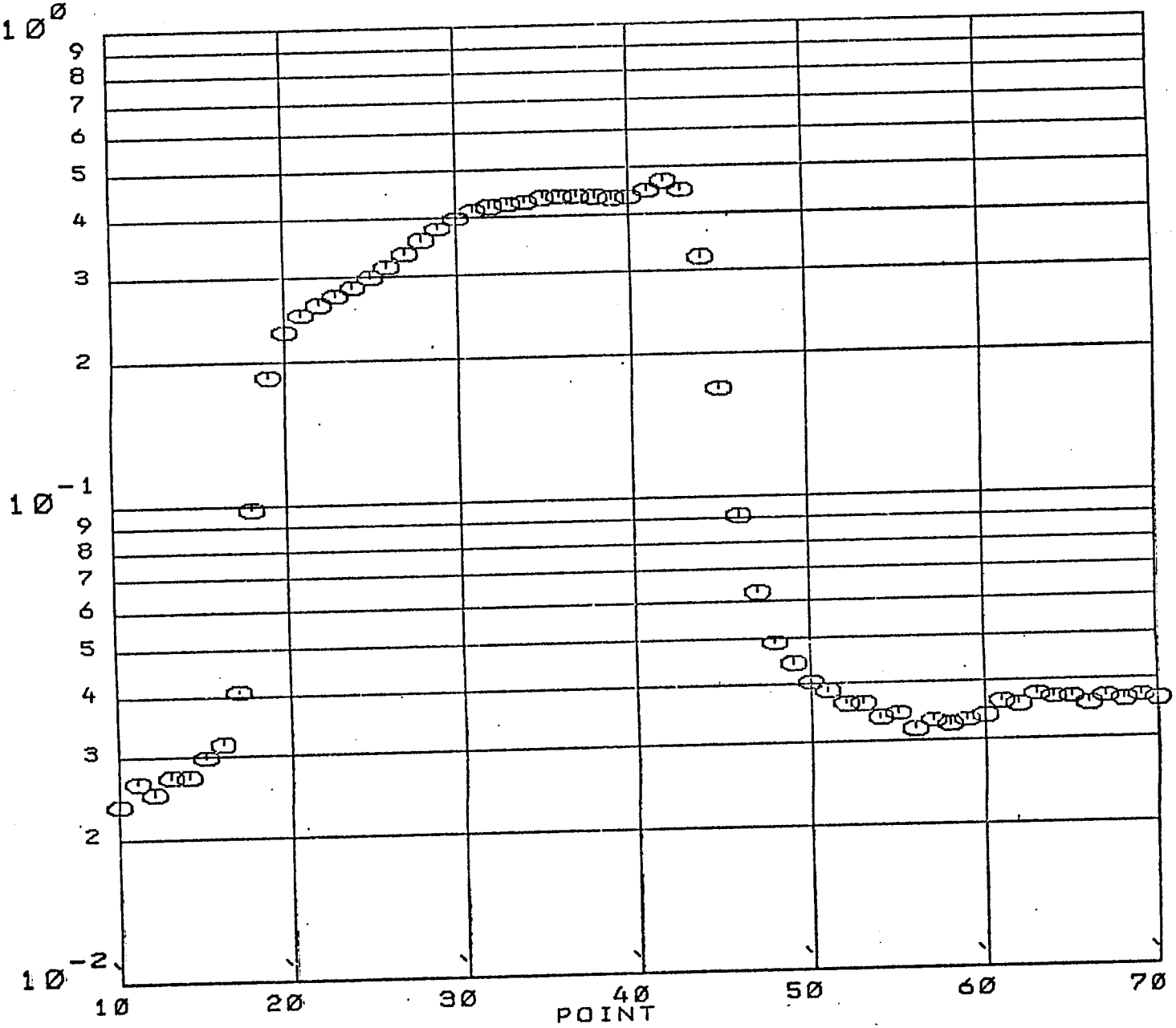
253

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 2.48
ALPHA 40.10
LINE 56

GROUP 4



H(.9TO)
/HAFA

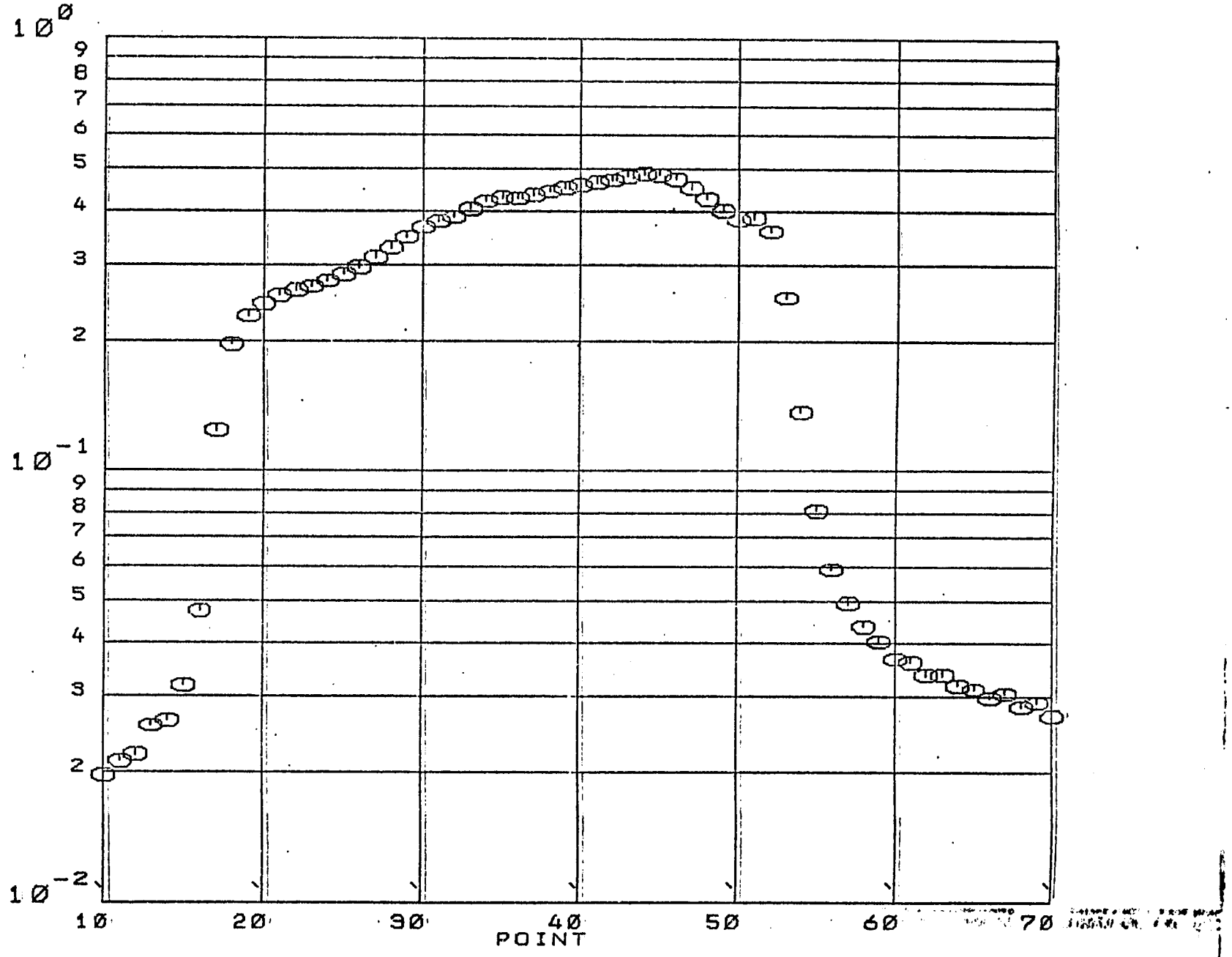
C-8 254.

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI 0H90

RE/FT 2.48
ALPHA 40.10
LINE 63

GROUP 4



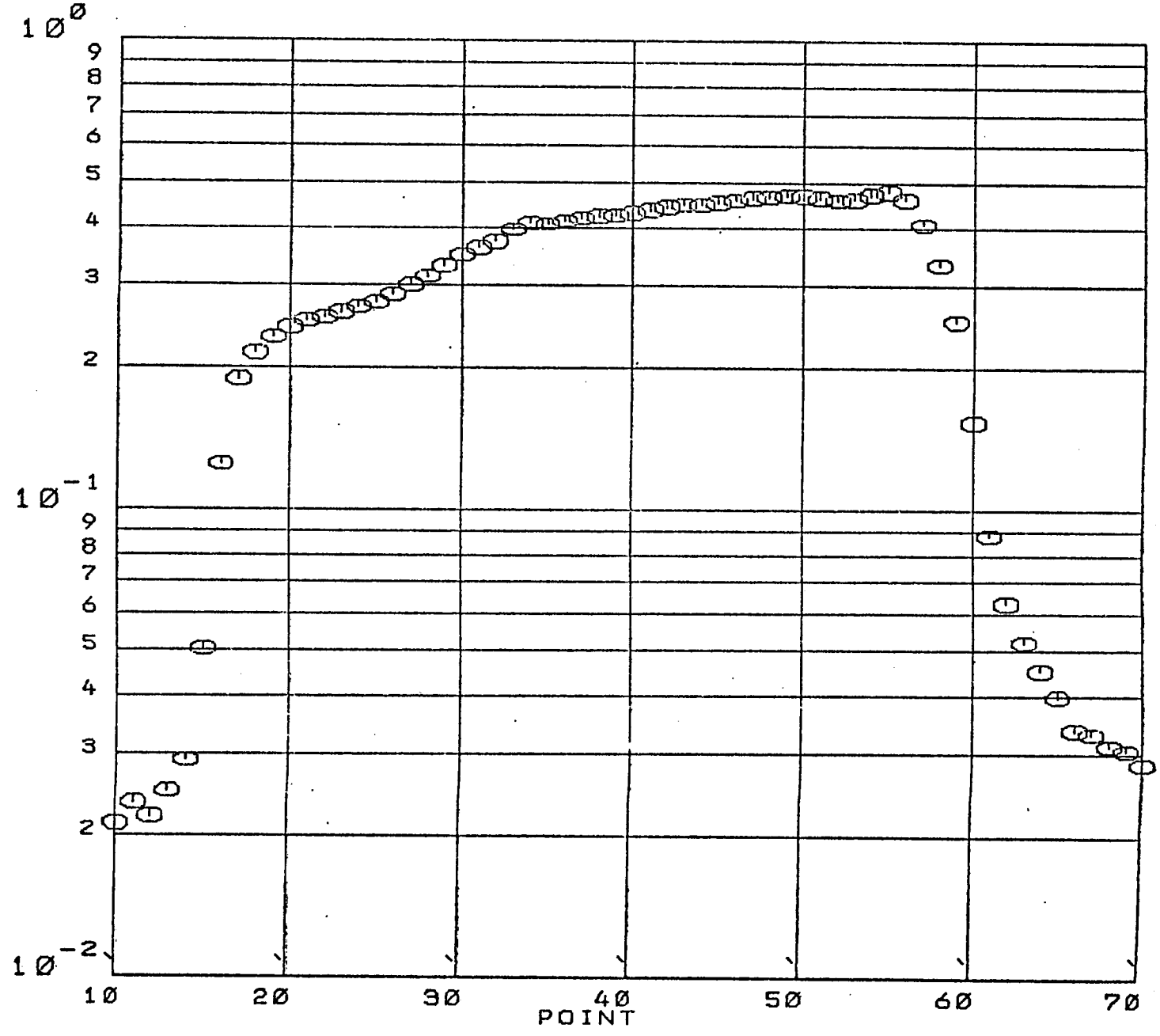
H(.9TO)
/HAFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 2.48
ALPHA 40.10
LINE 68

GROUP 4



H(.9TO)
/HAFR

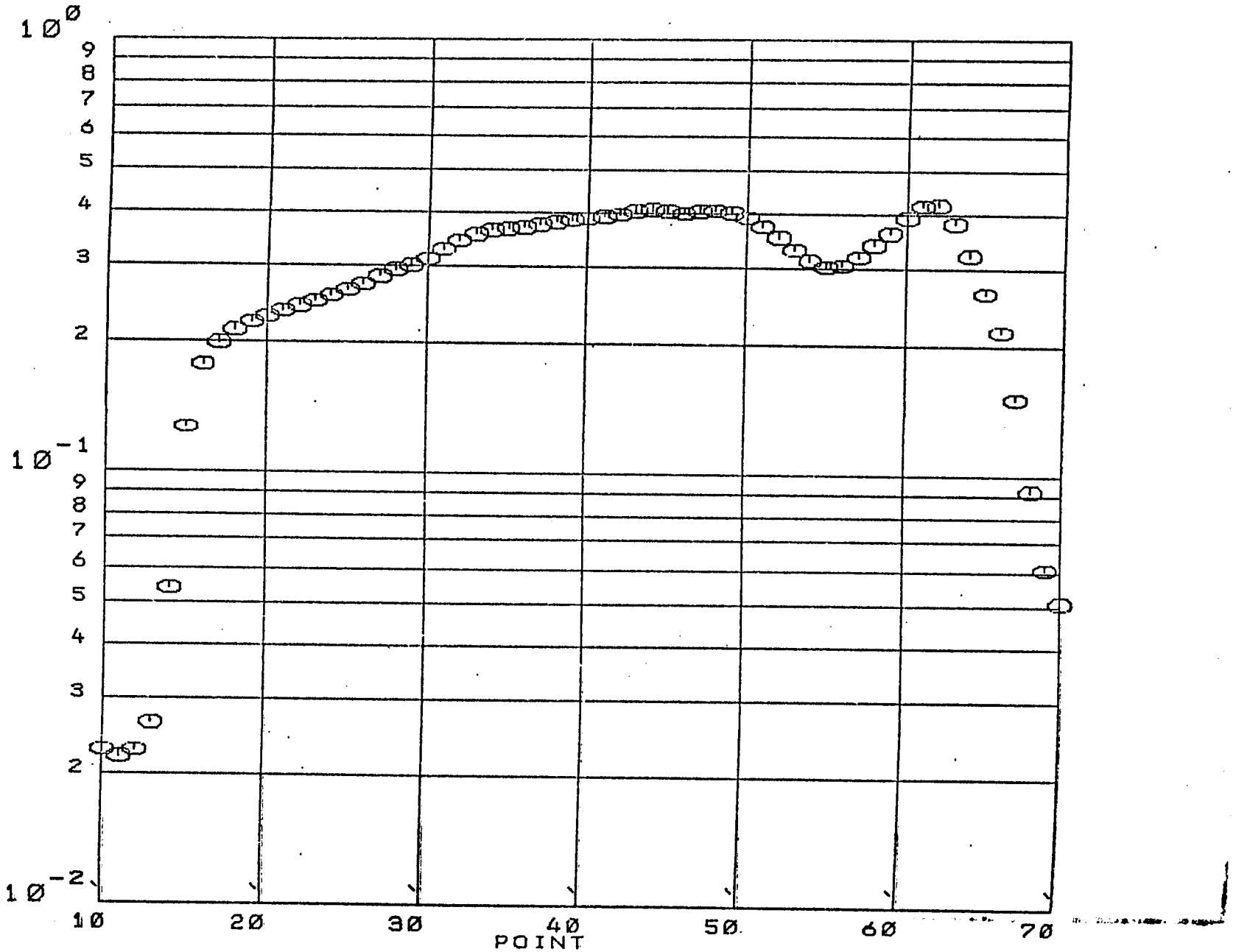
C-10
-56

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

RE/FT 2.48
ALPHA 40.10
LINE 74

GROUP 4



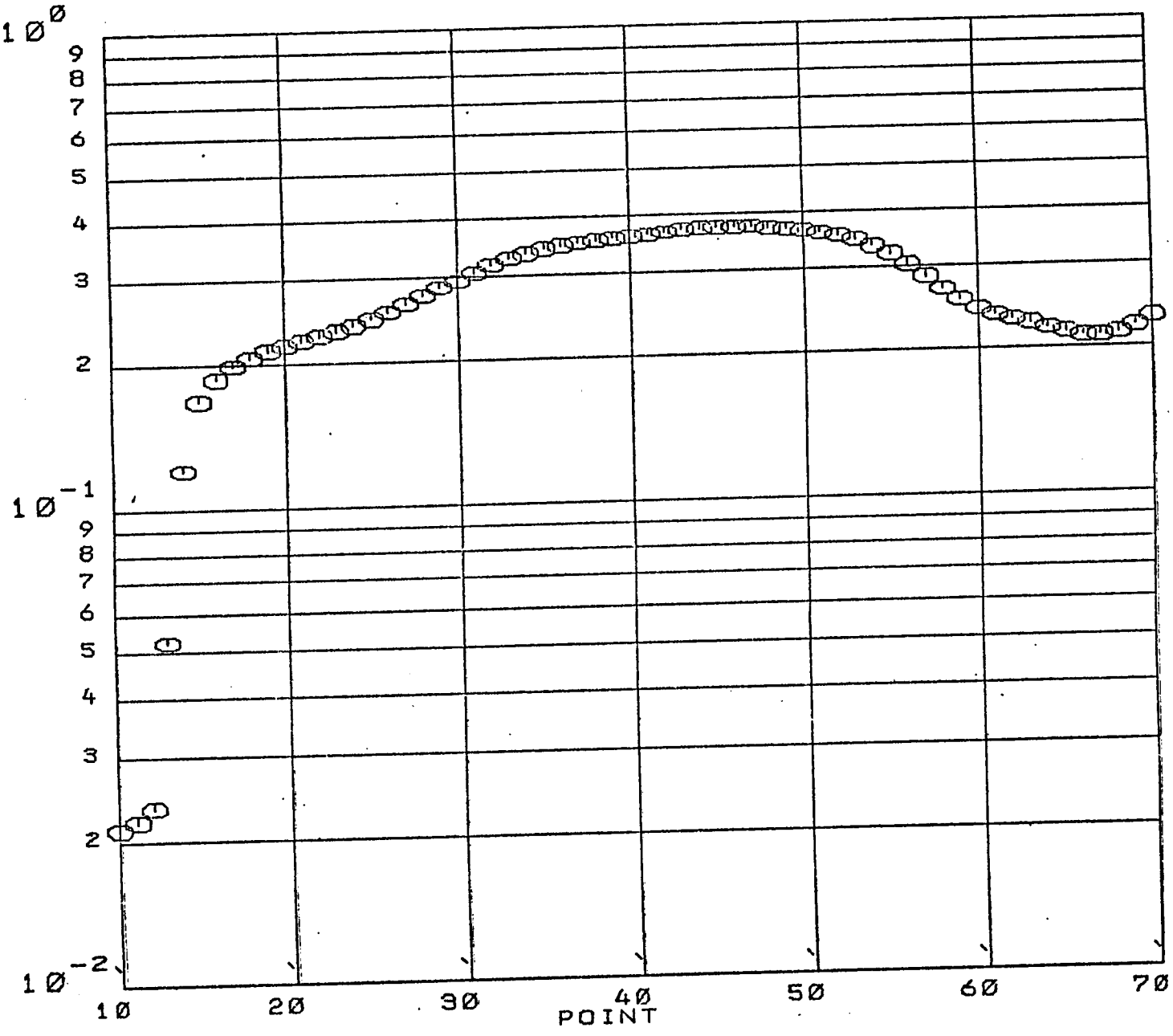
C-11 257

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

RE/FT 2.48
ALPHA 40.10
LINE 80

GROUP 4



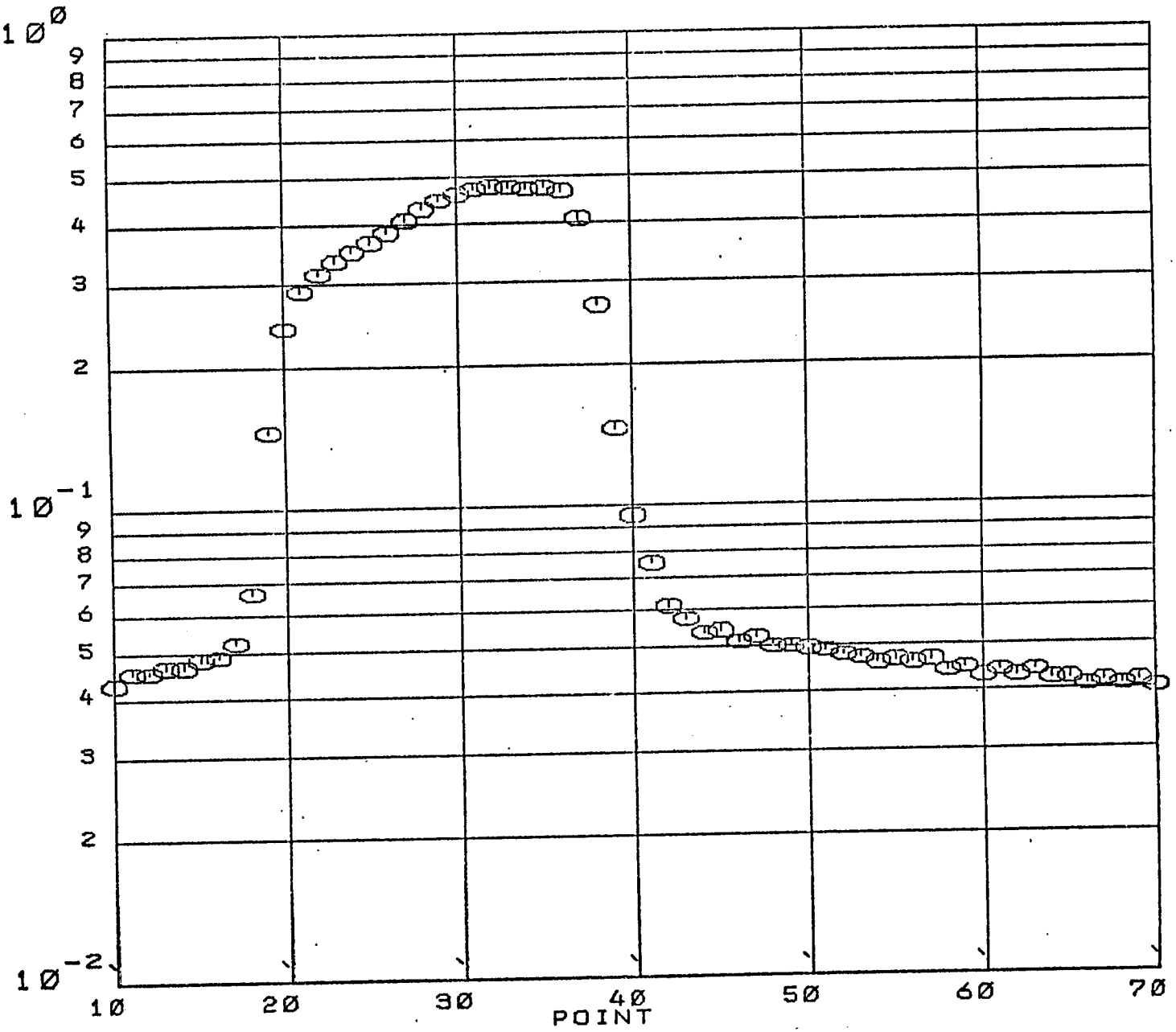
H(.9TO)
/HAFR

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH9Ø

RE/FT 3.51
ALPHA 4Ø.1Ø
LINE 51

GROUP 7



H(.9TO)
/HAFA

259.

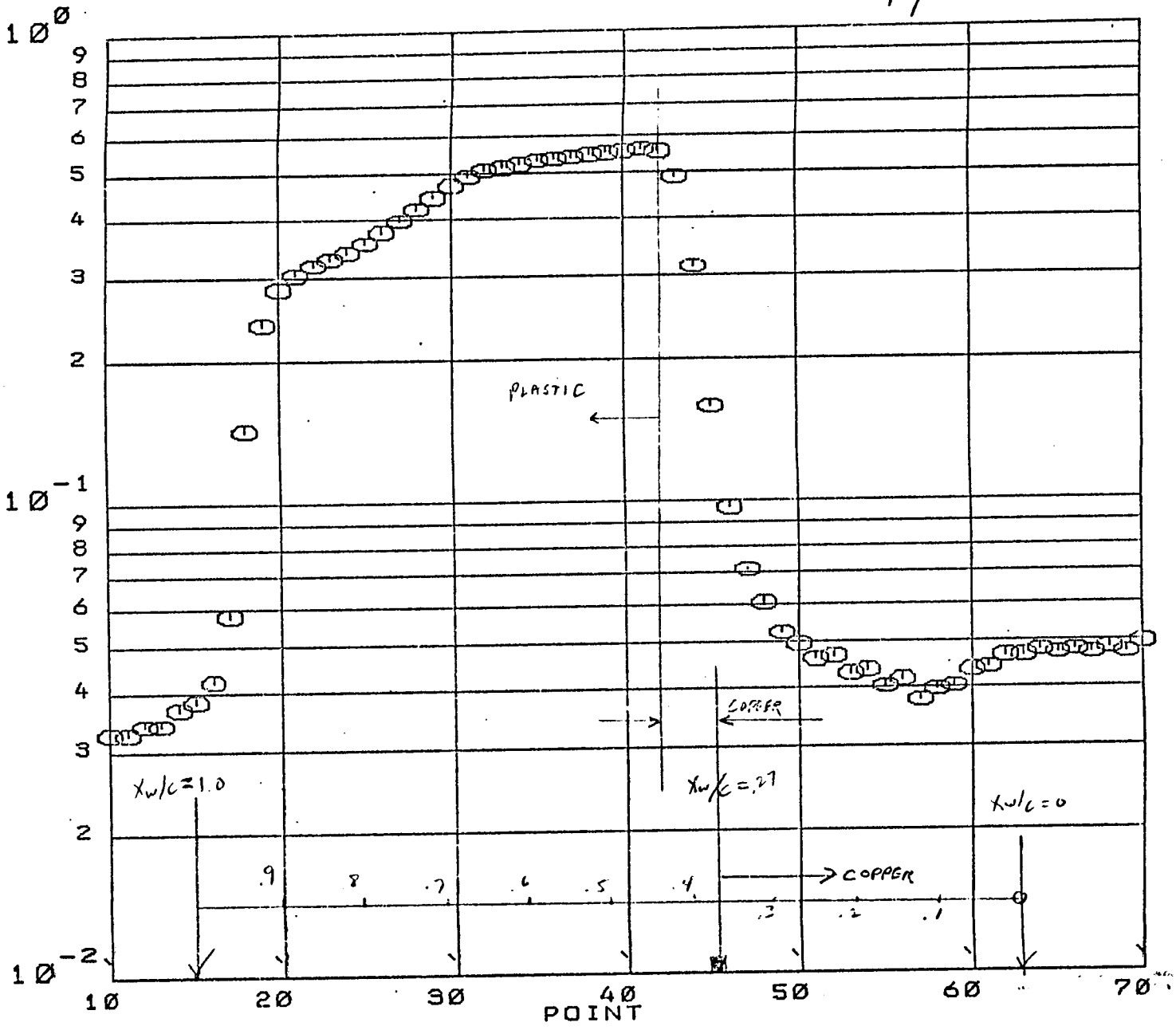
ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

GROUP 7

NASA/AI 0H90

RE/FT 3.51
ALPHA 40.00 40.0°
LINE 56

Y/B/2 = 0.8



H(.9TO)
/HRFR

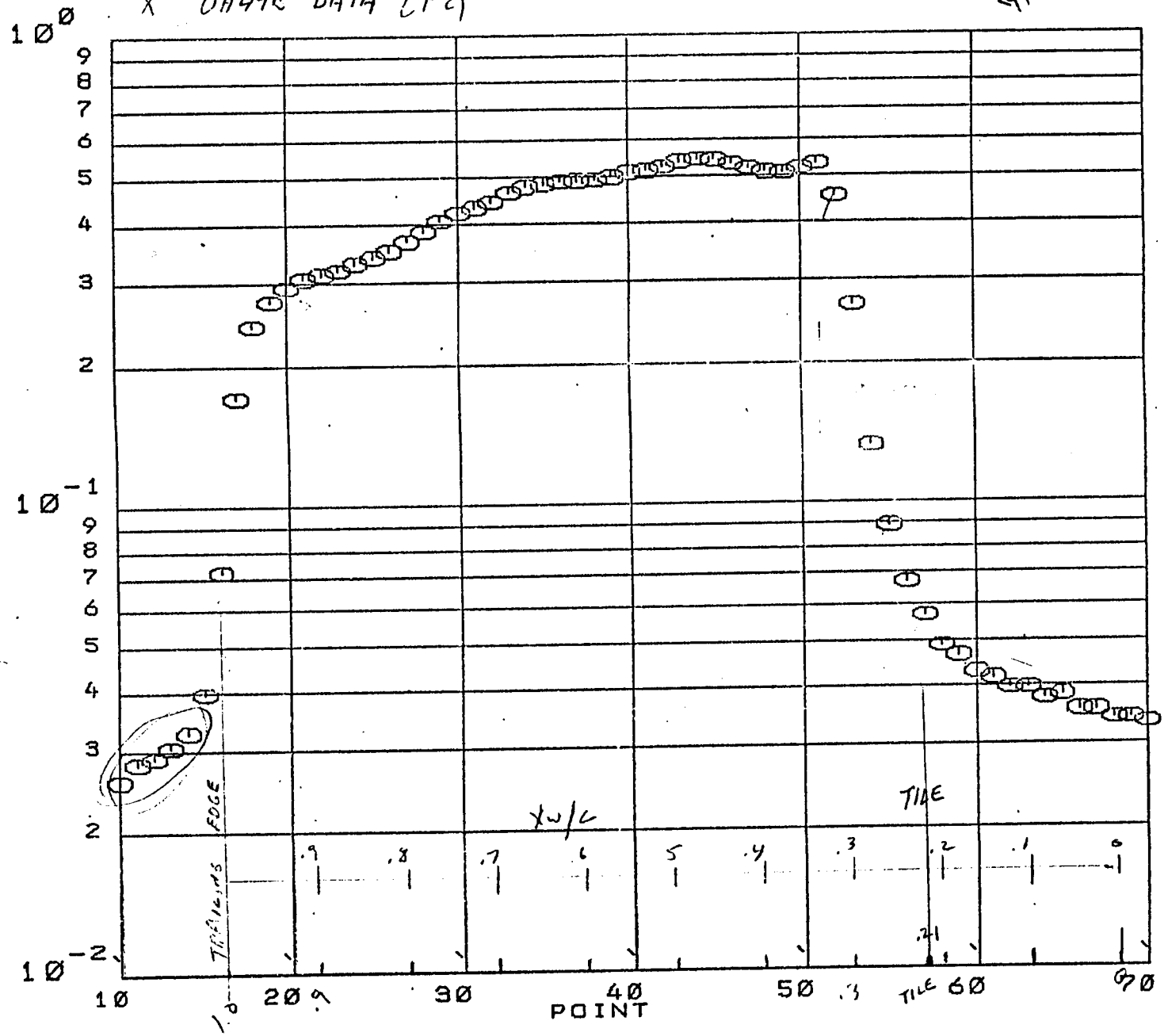
ARO, INC (AEDC)
ARNOLD AFS, TN
DATE 3/3/78
V41B-P4A

GROUP 7

NASA/AI OH90

RE/FT 3.51
ALPHA ~~40.00~~ 40.0
LINE 63

X OH49C DATA (LTC)

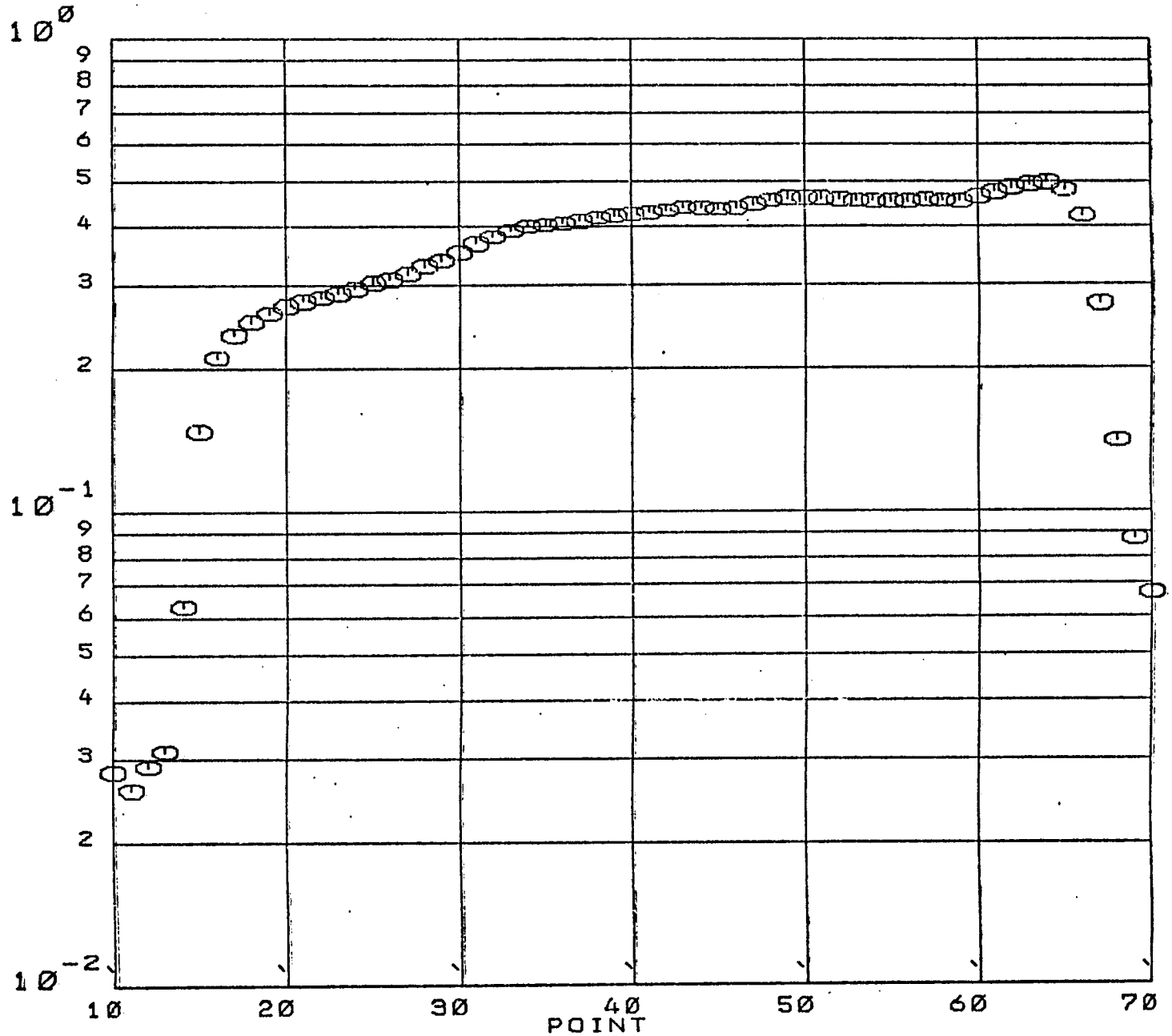


ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

RE/FT 3.51
ALPHA 40.00
LINE 74

GROUP 7



C-16

262

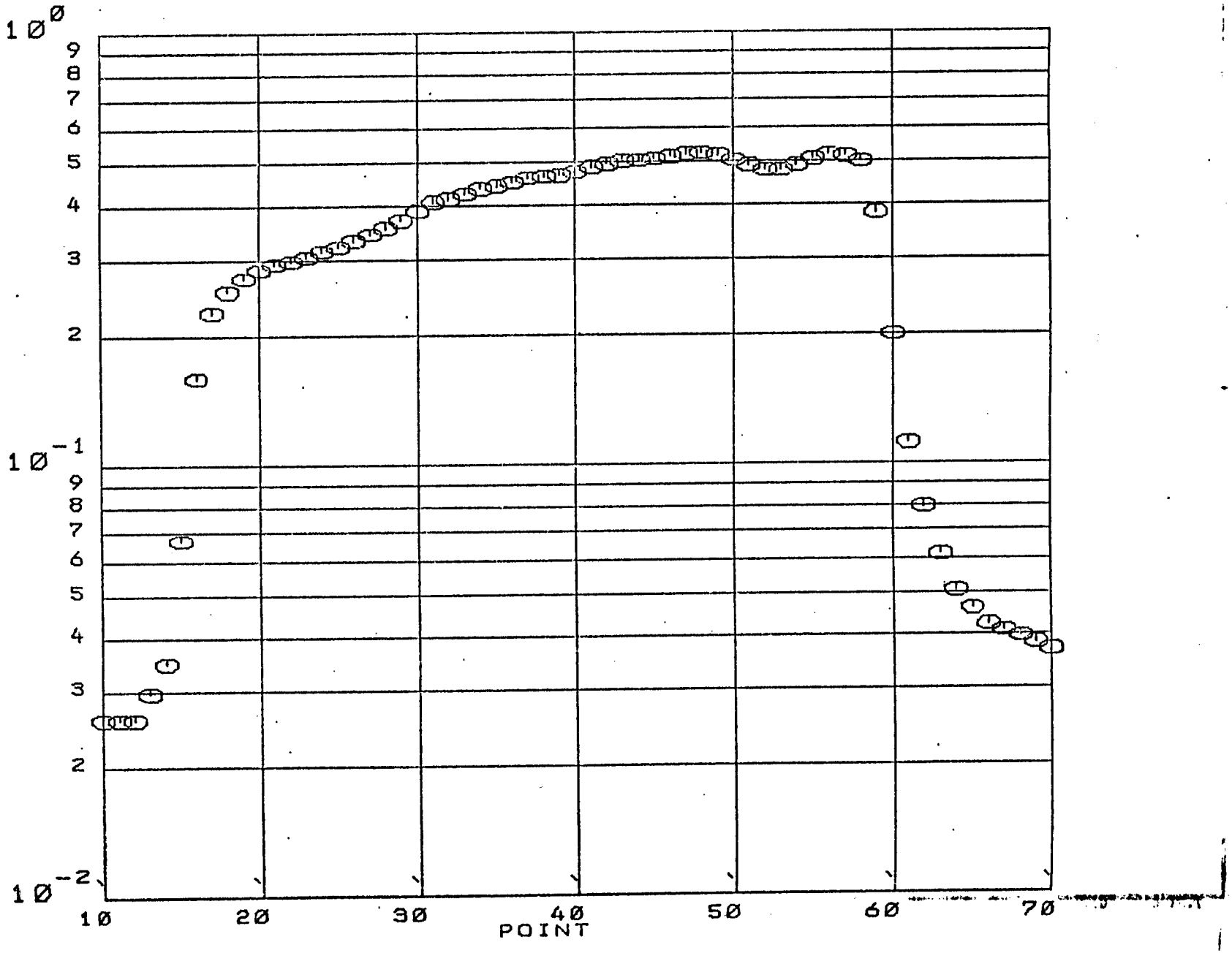
H(.9TO)
/HRFR

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 3.51
ALPHA 40.00
LINE 68

GROUP 7



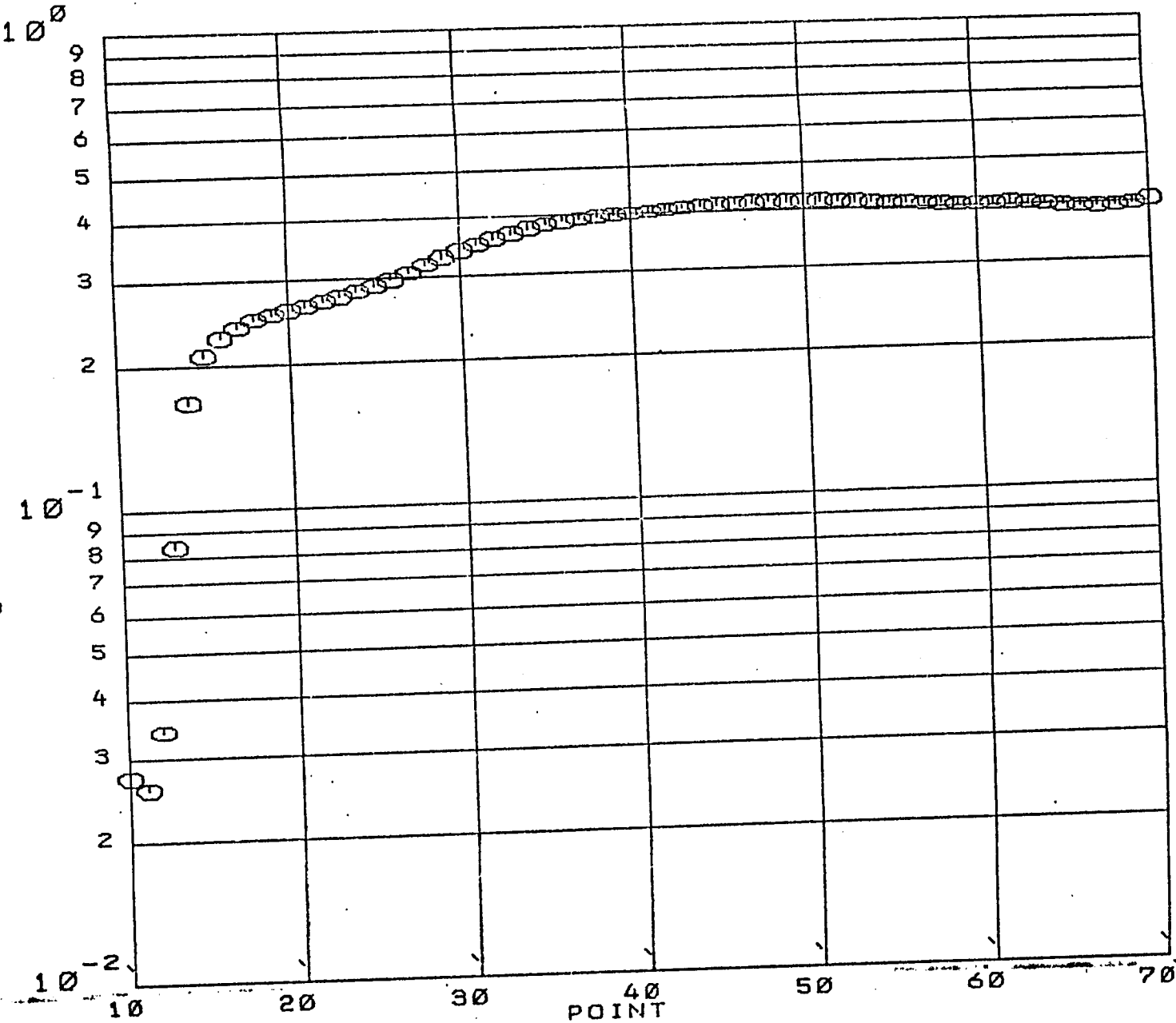
H(.9TO)
/HAFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 3.51
ALPHA 4 0.00
LINE 80

GROUP 7



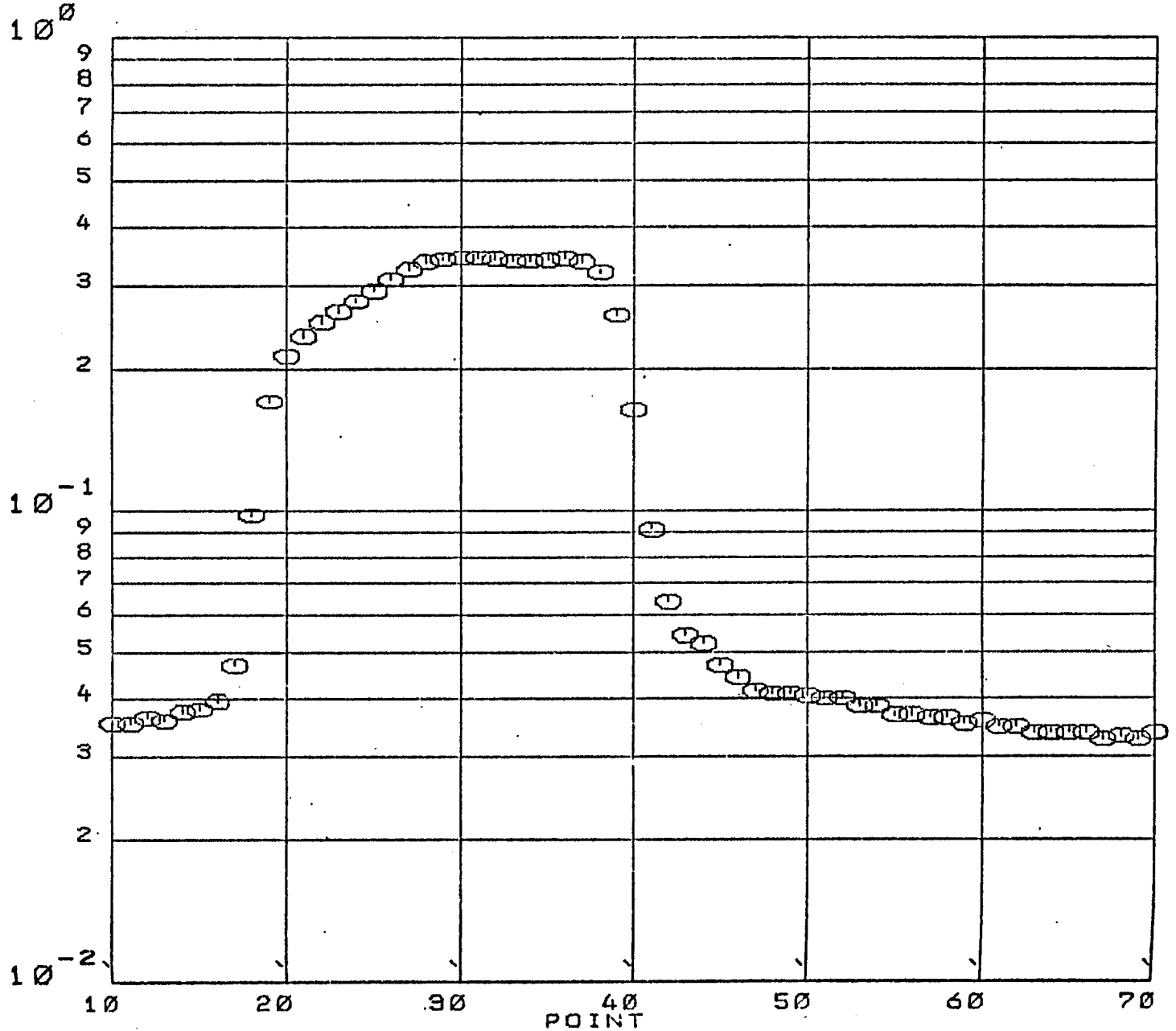
H(.9TO)
/HRFR

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 3.50
ALPHA 30.02
LINE 51

GROUP 9



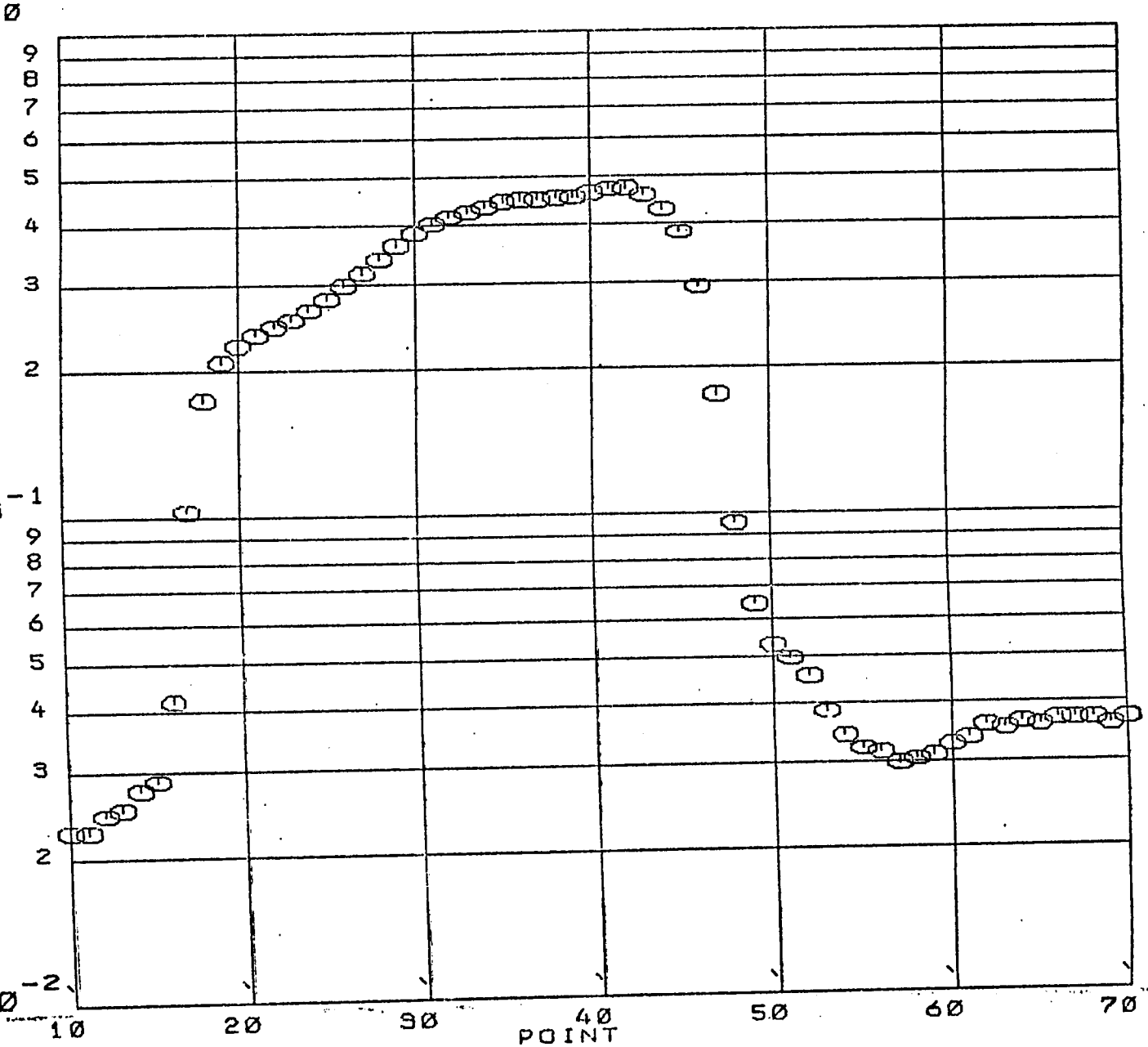
265. H(.9TO)
/HAFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 3.50
ALPHA 90.02
LINE 56

GROUP 9



C-20

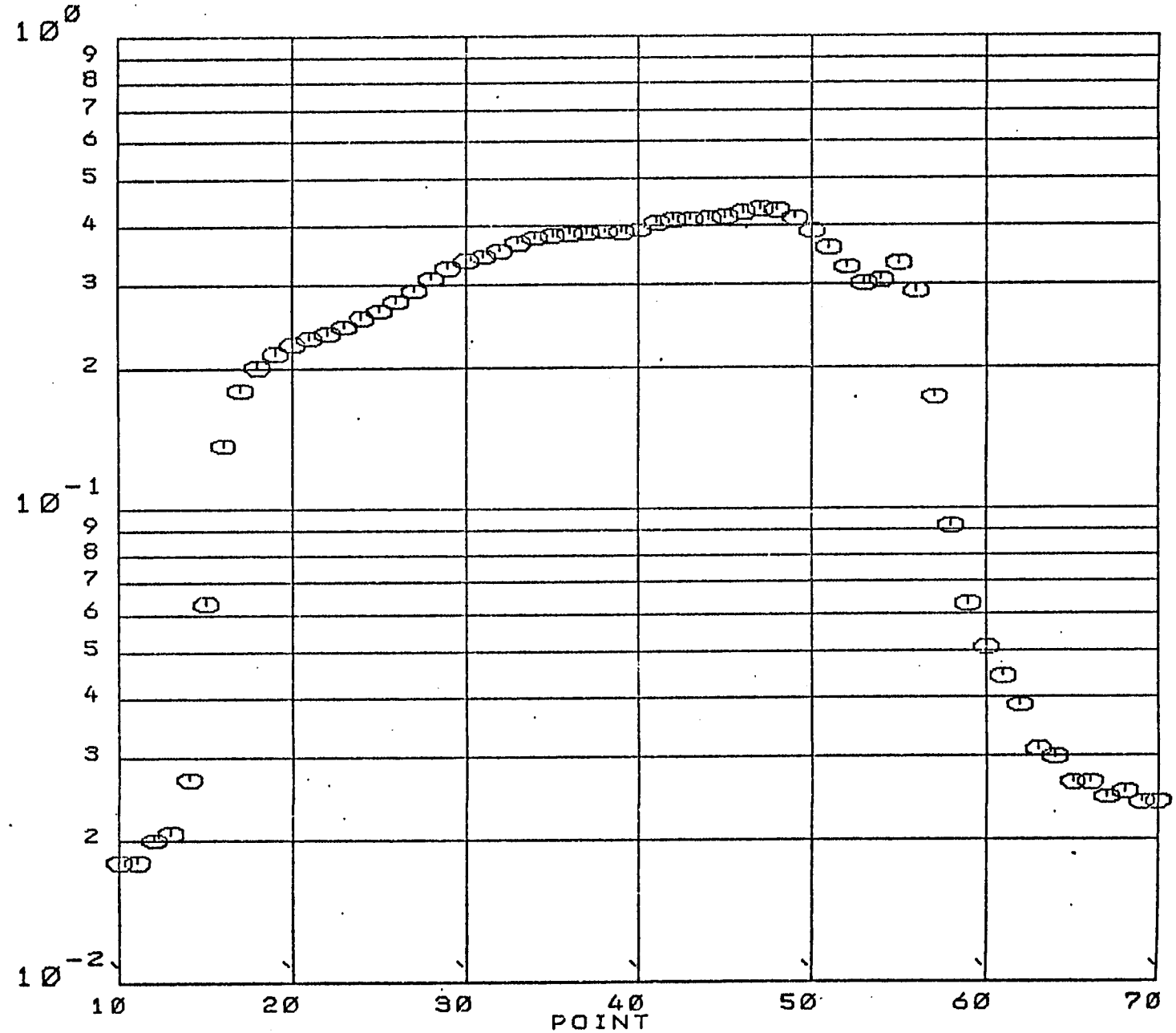
269 - H(.9TO)
/HAFR

ARO,INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI 0H90

RE/FT 3.50
ALPHA 30.02
LINE 63

GROUP 9



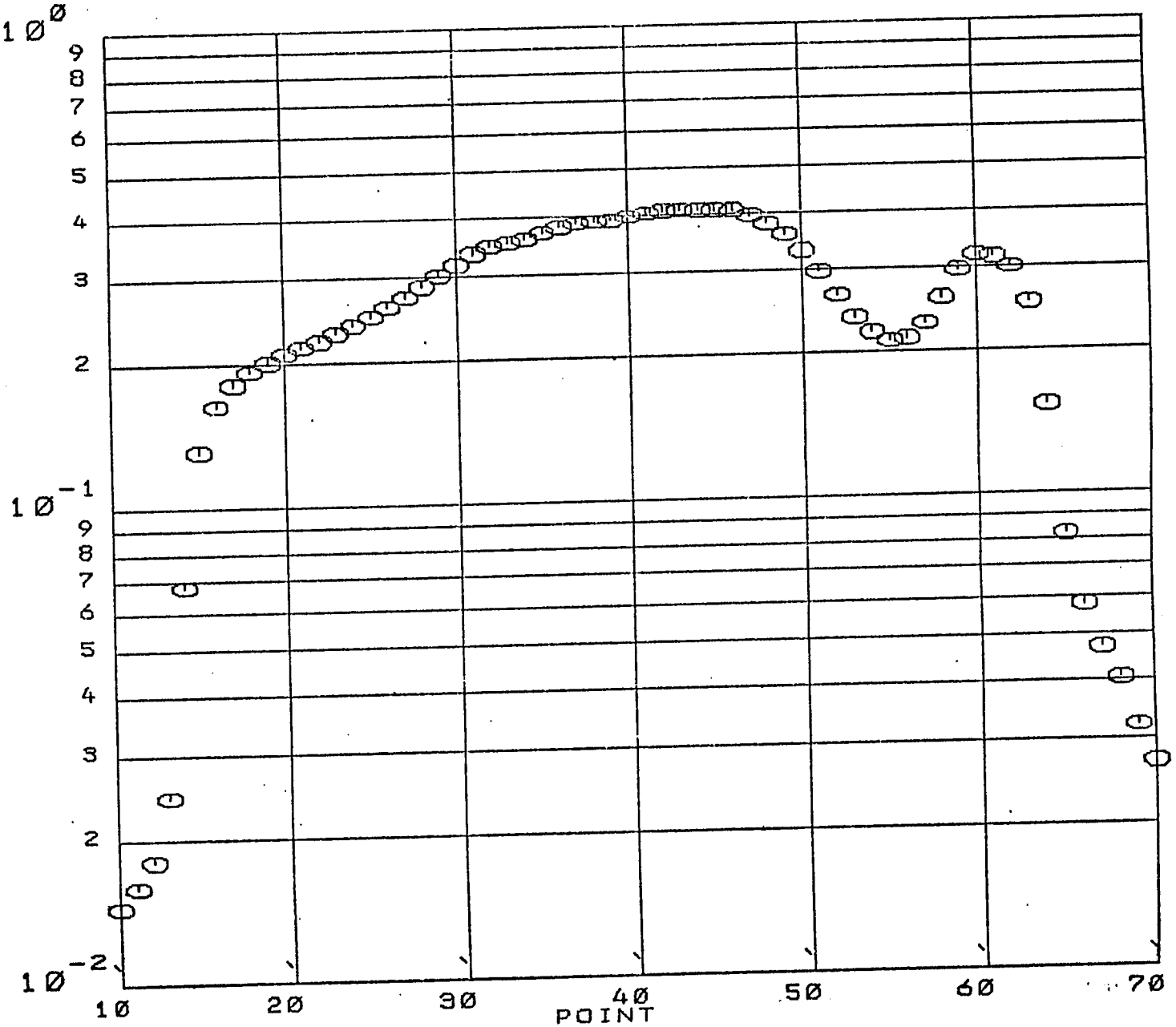
· H(.9TO)
/HAFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

GROUP 9

NASA/RI OH90

RE/FT 3.50
ALPHA 30.02
LINE 68



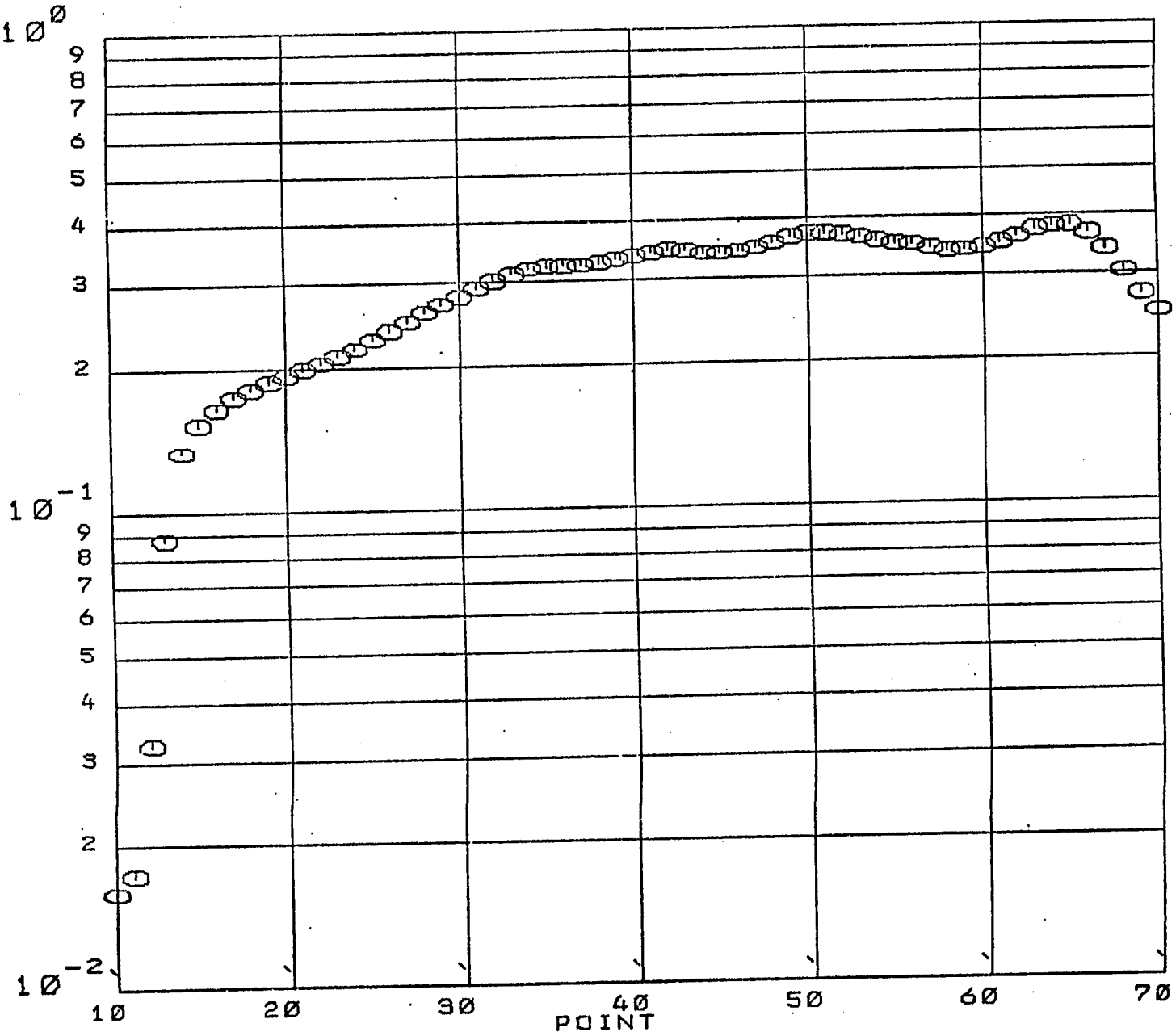
H(.9TO)
/HAFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3/3/78
V41B-P4A

NASA/RI OH90

RE/FT 3.50
ALPHA 90.02
LINE 74

GROUP 9



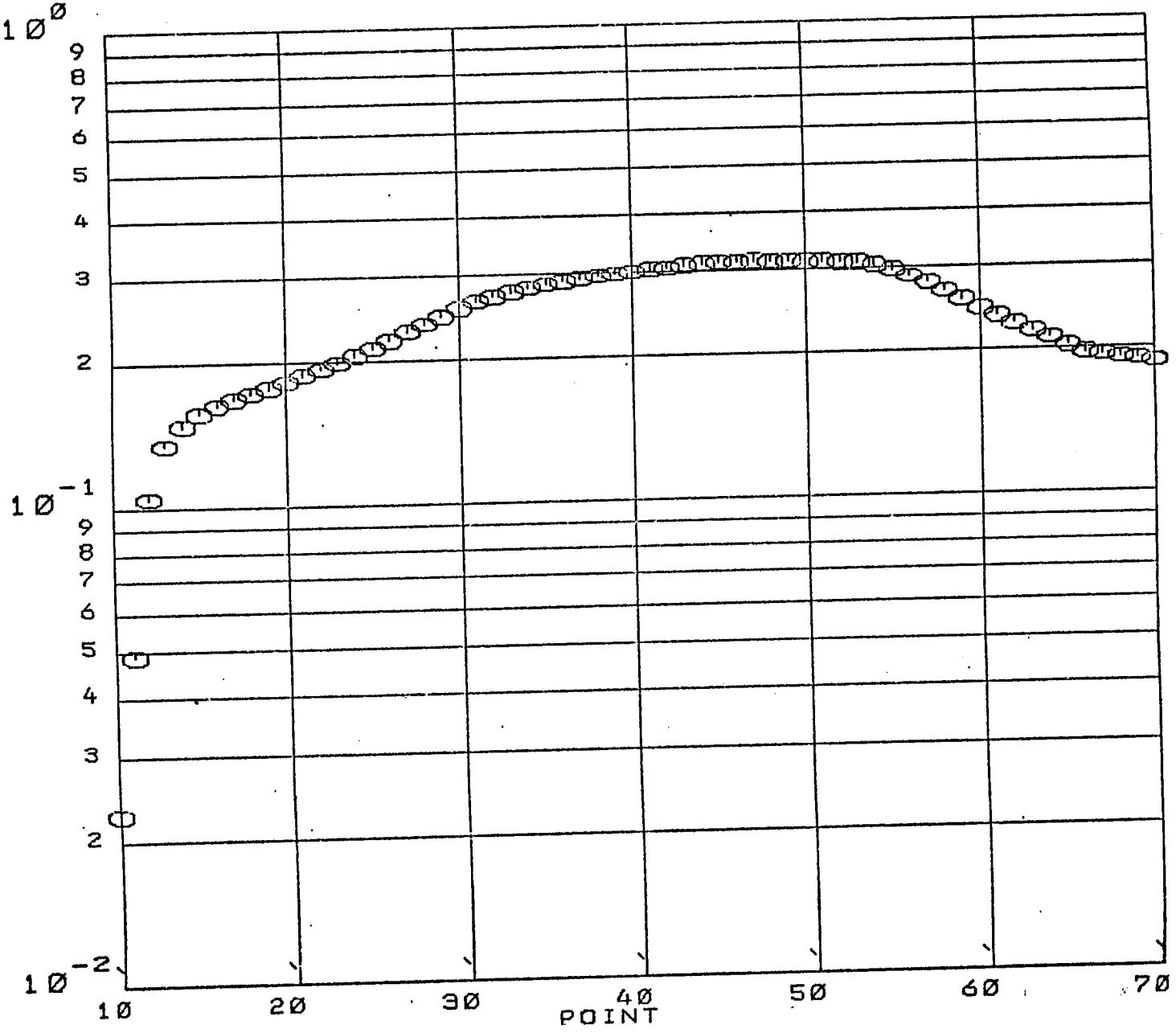
H(.9TO)
/HAFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

GROUP 9

NASA/AI 0H90

RE/FT 3.50
ALPHA 30.02
LINE 80



C-24 270.

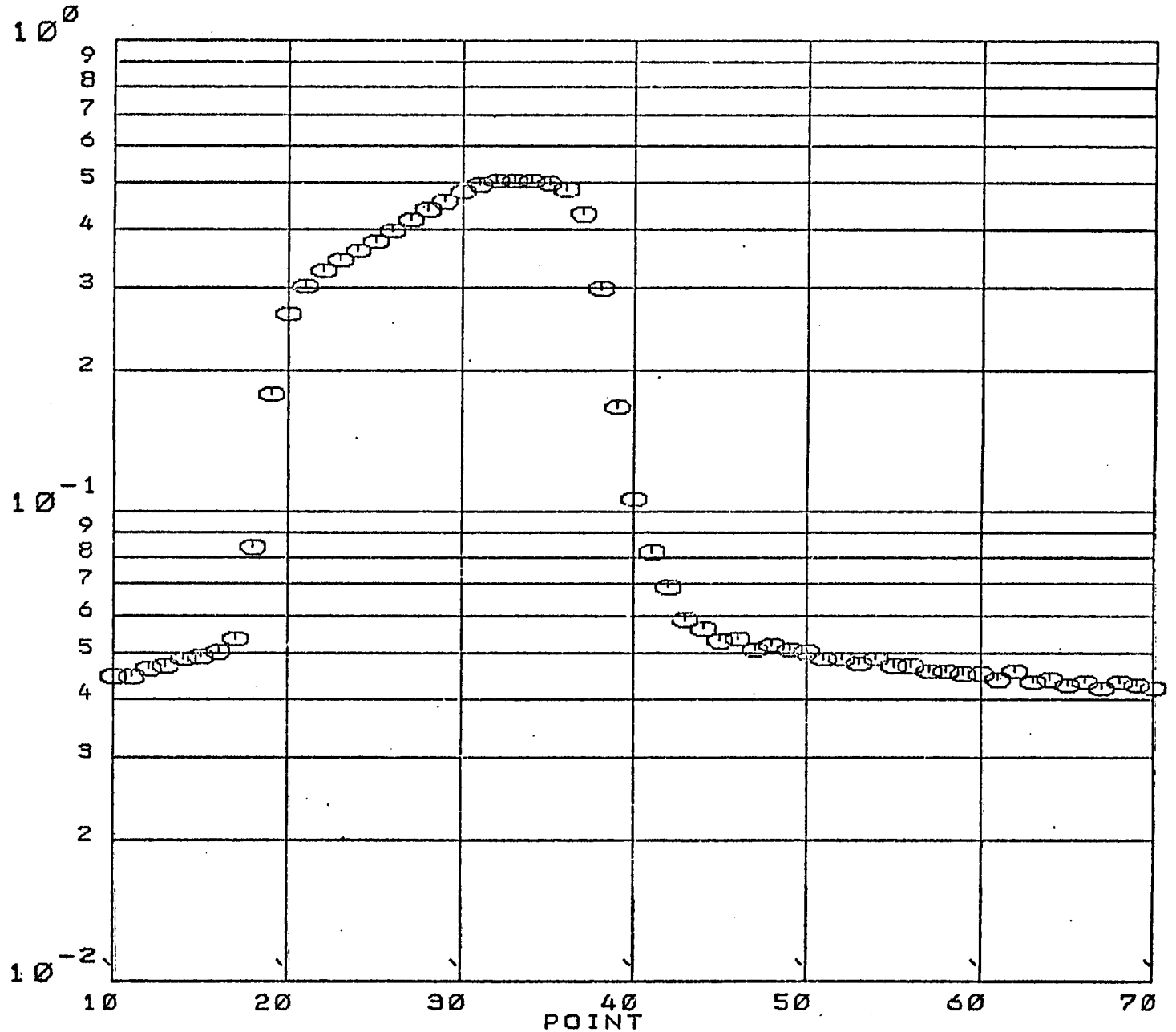
H(.9TO)
/HAFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

RE/FT 3.52
ALPHA 40.11
LINE 51

GROUP 10



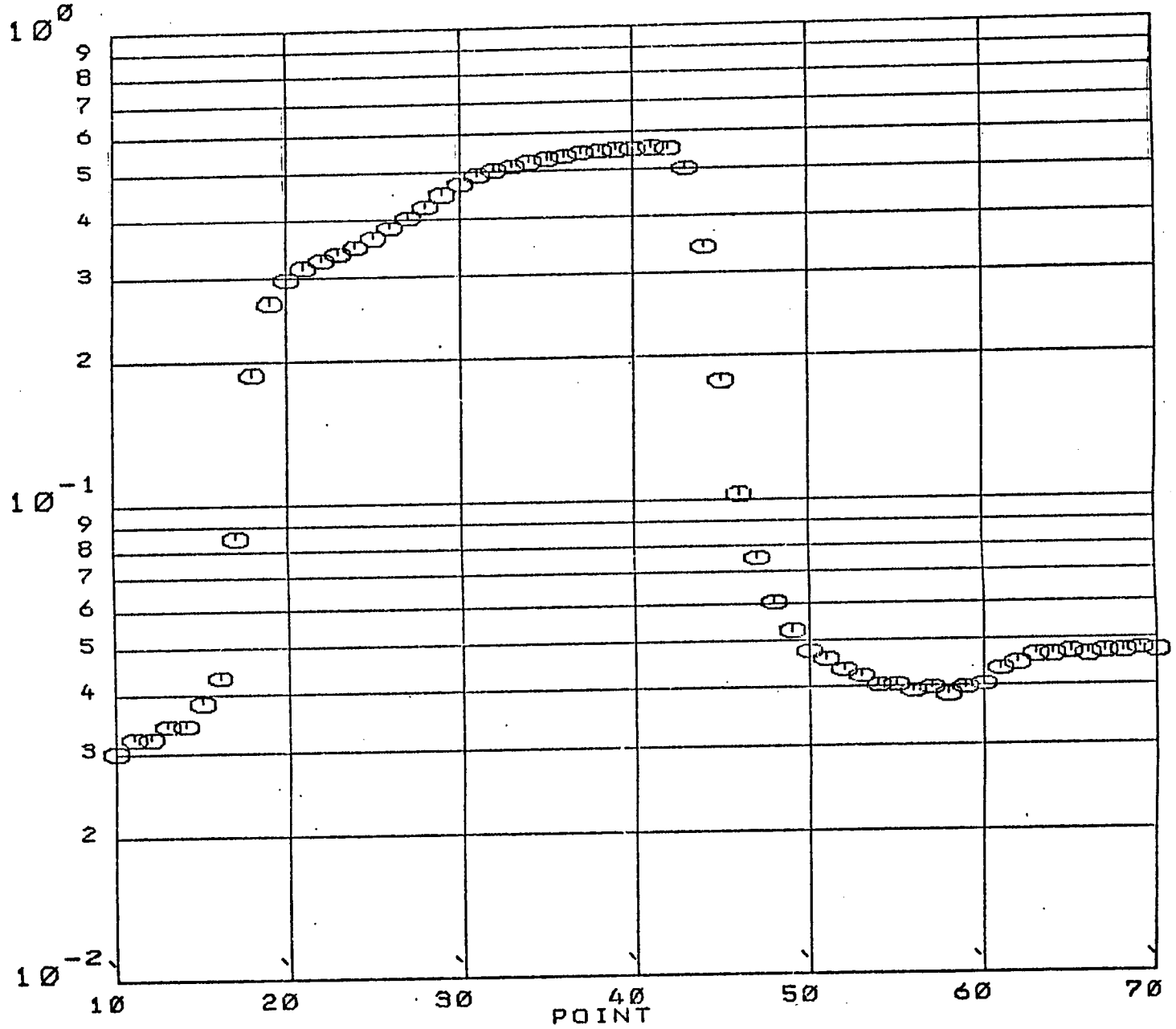
H(.9TO)
/HAFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

RE/FT 3.52
ALPHA 40.11
LINE 56

GROUP 10



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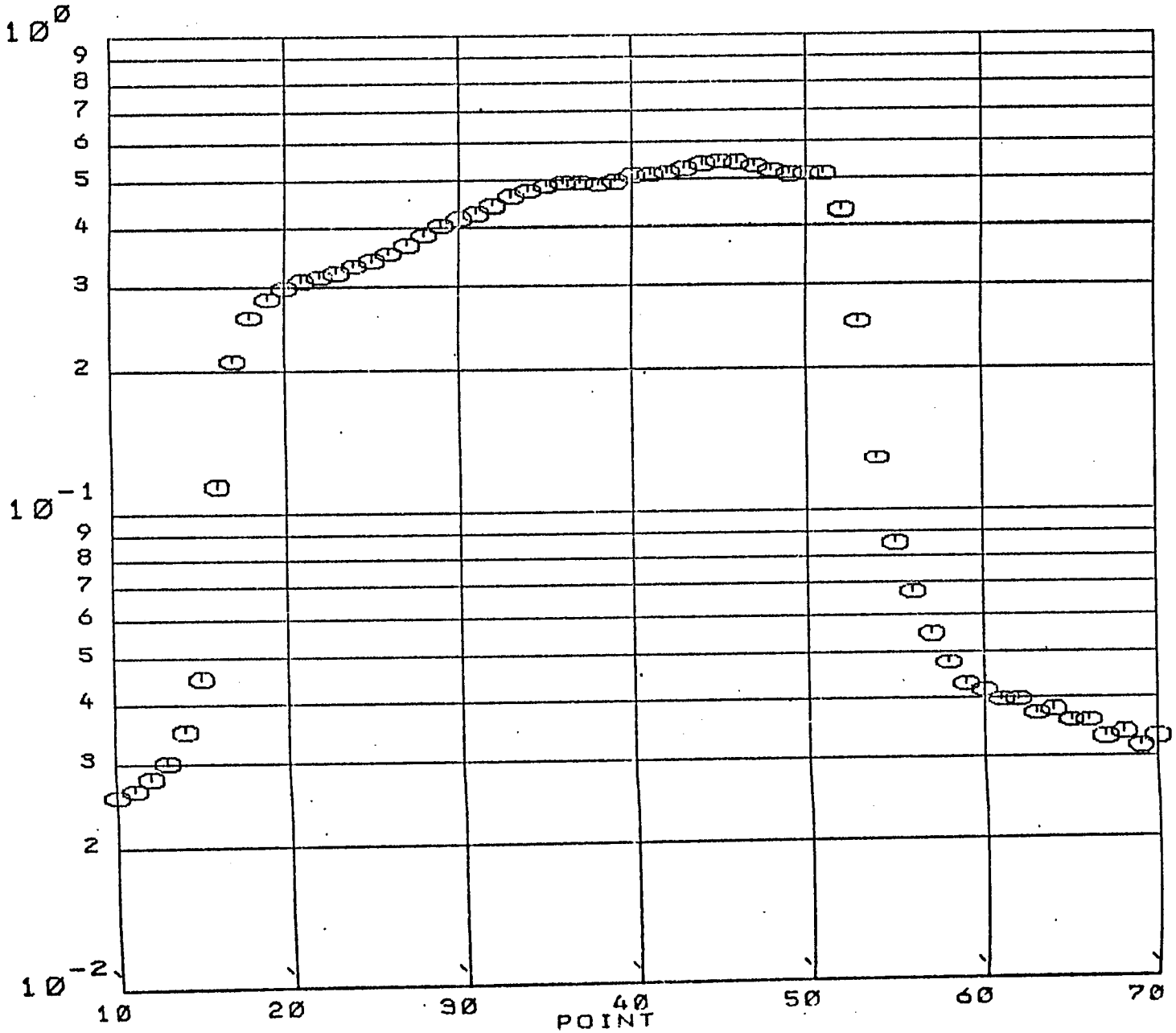
/HAFR

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 3.52
ALPHA 40.11
LINE 63

GROUP 10



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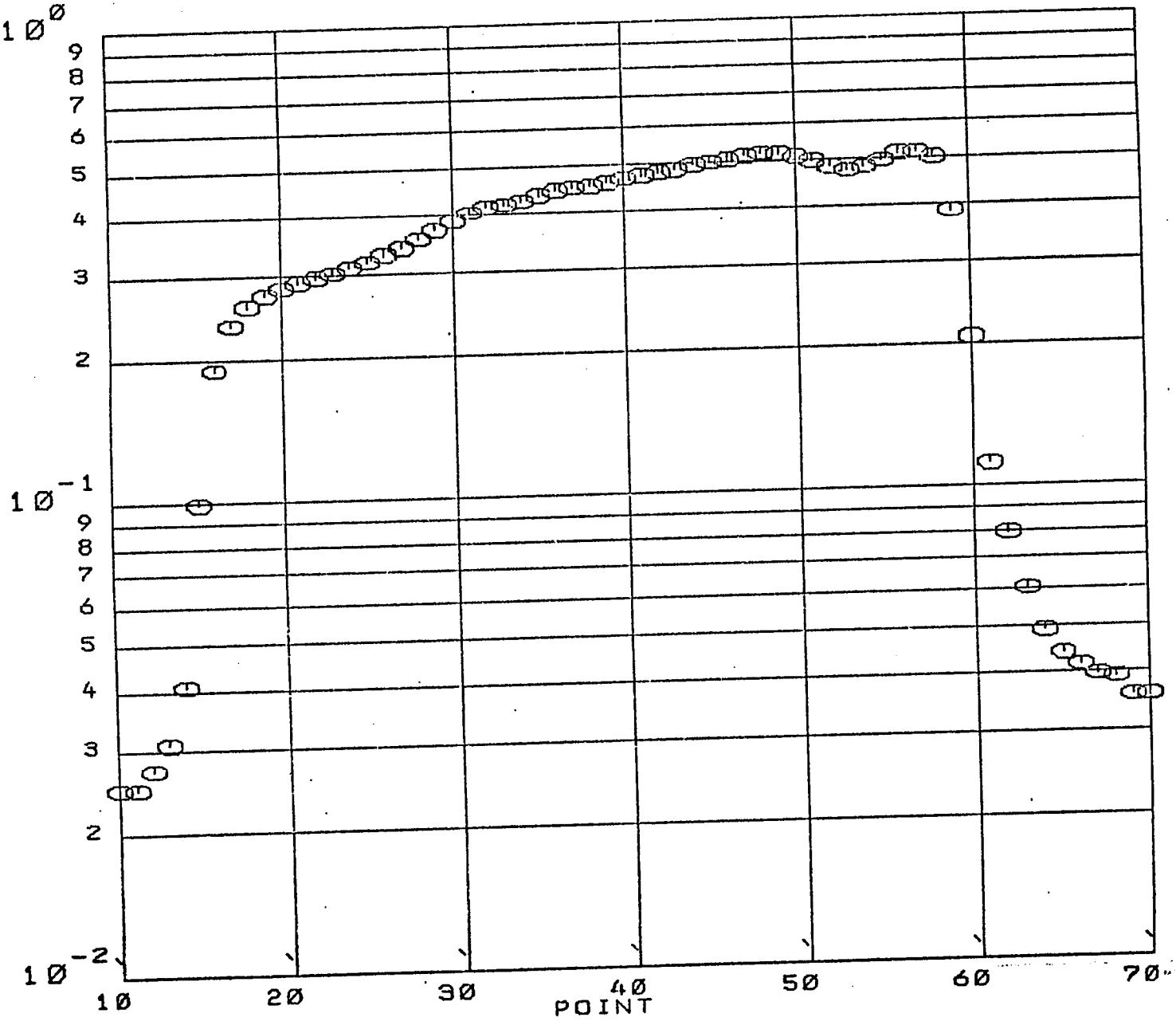
/HAFR

ARO,INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 3.52
ALPHA 40.11
LINE 68

GROUP 10



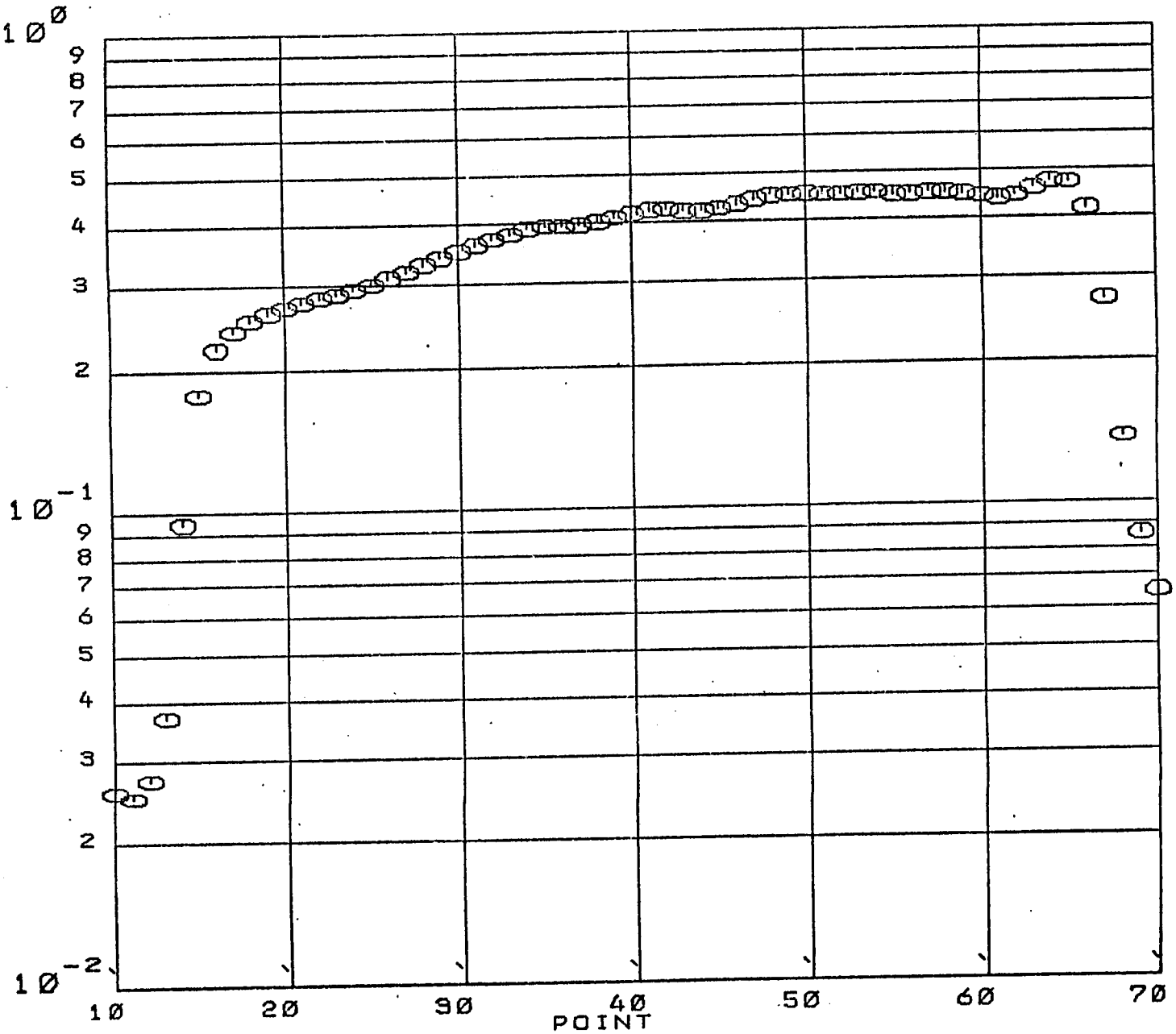
H(.9TO)
/HRFR

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

AE/FT 3.52
ALPHA 40.11
LINE 74

GROUP 10



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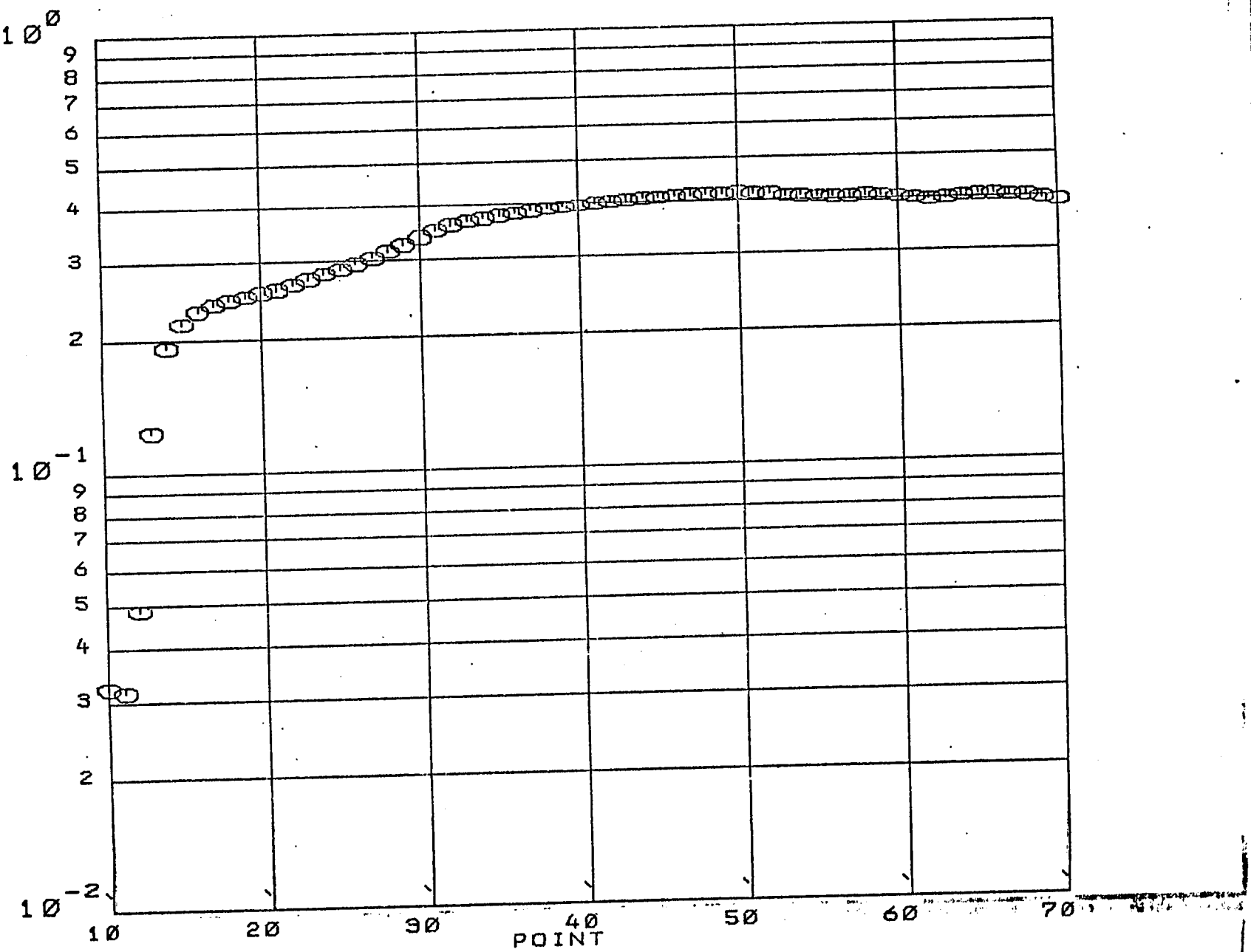
/HAFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

GROUP 10

NASA/AI OH90

RE/FT 3.52
ALPHA 40.11
LINE 80



H(.9TO)
/HAFA

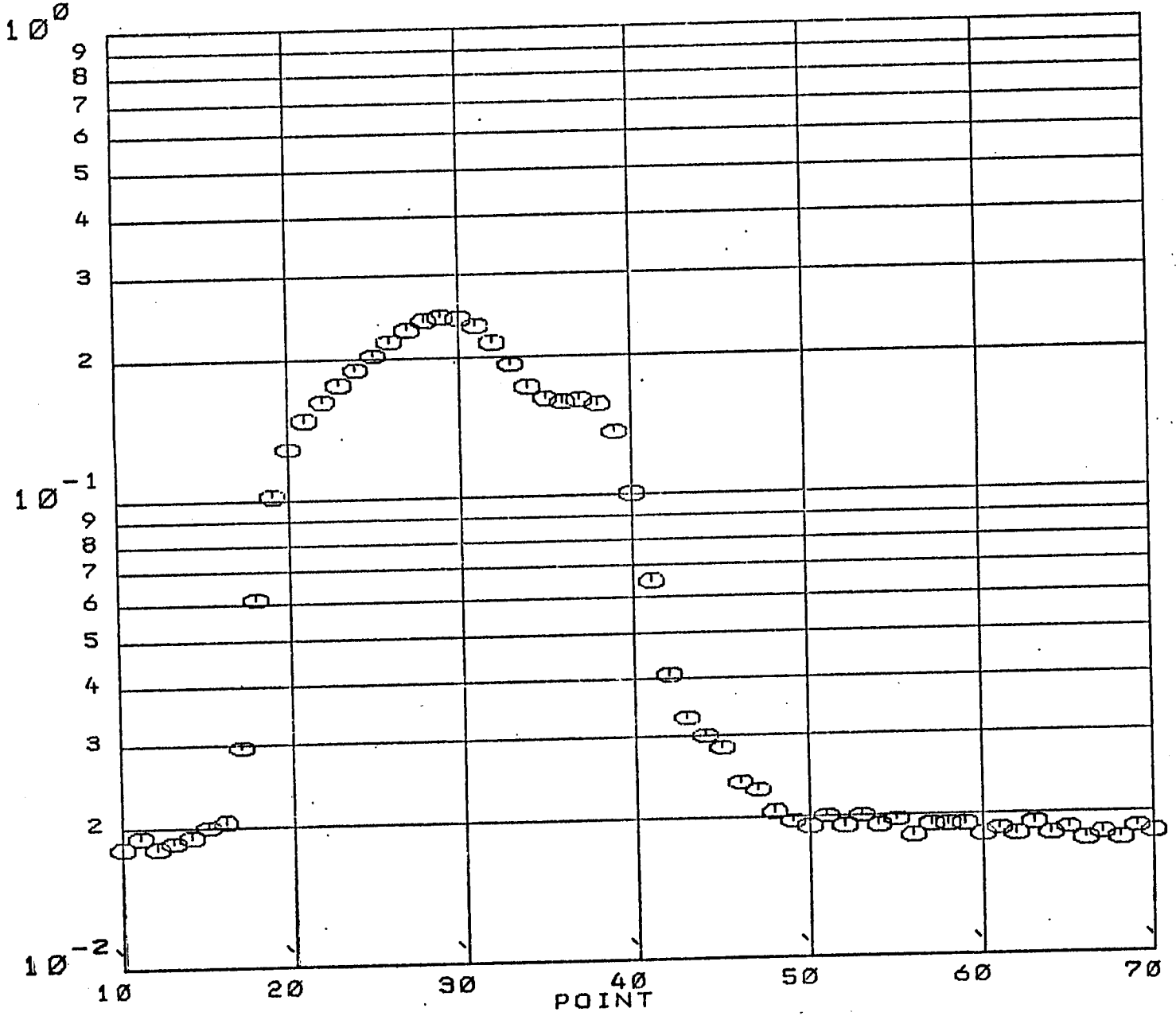
276

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 0.98
ALPHA 30.01
LINE 51

GROUP 13



H(.9TO)
/HRFR

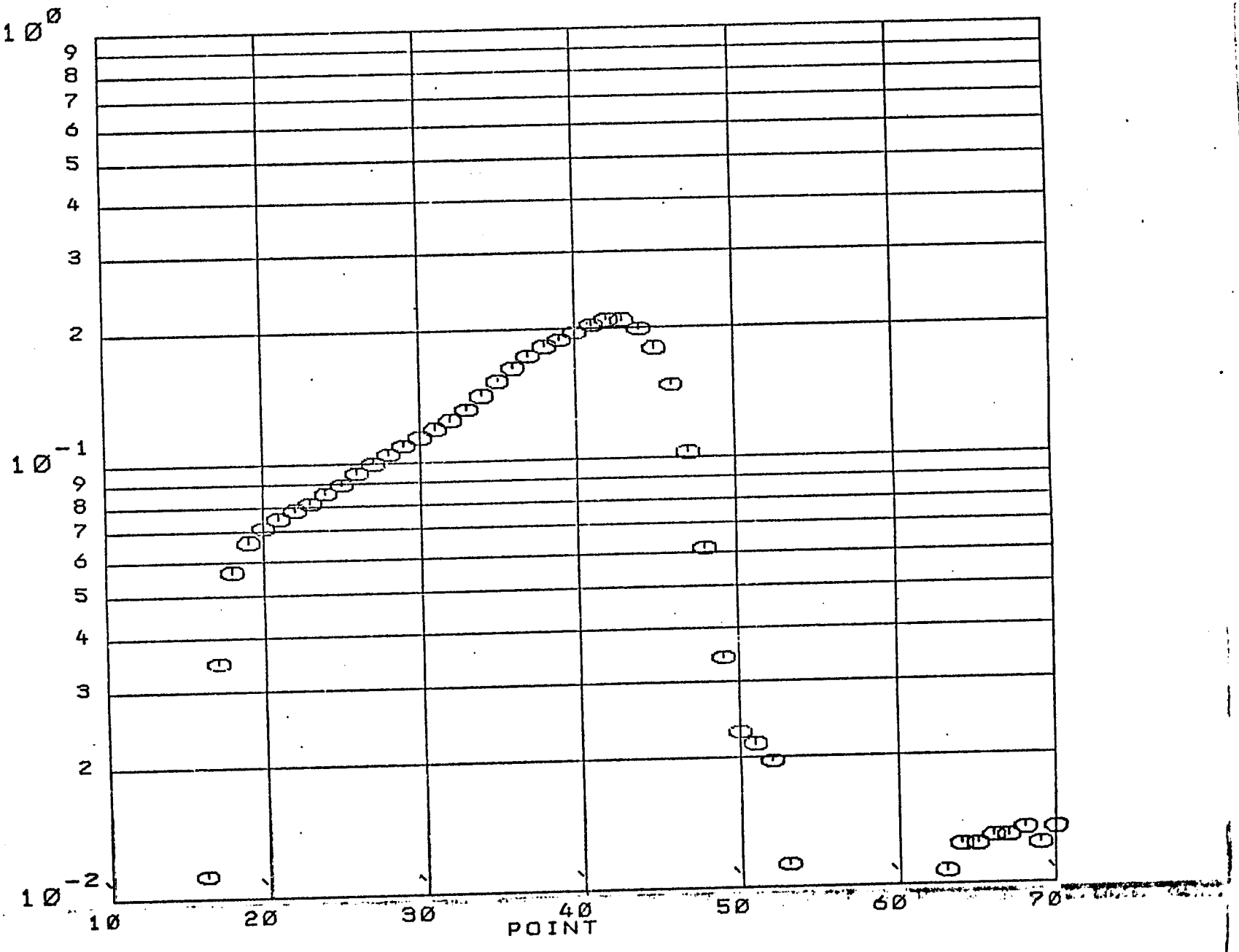
277.

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 0.98
ALPHA 30.01
LINE 56

GROUP 13



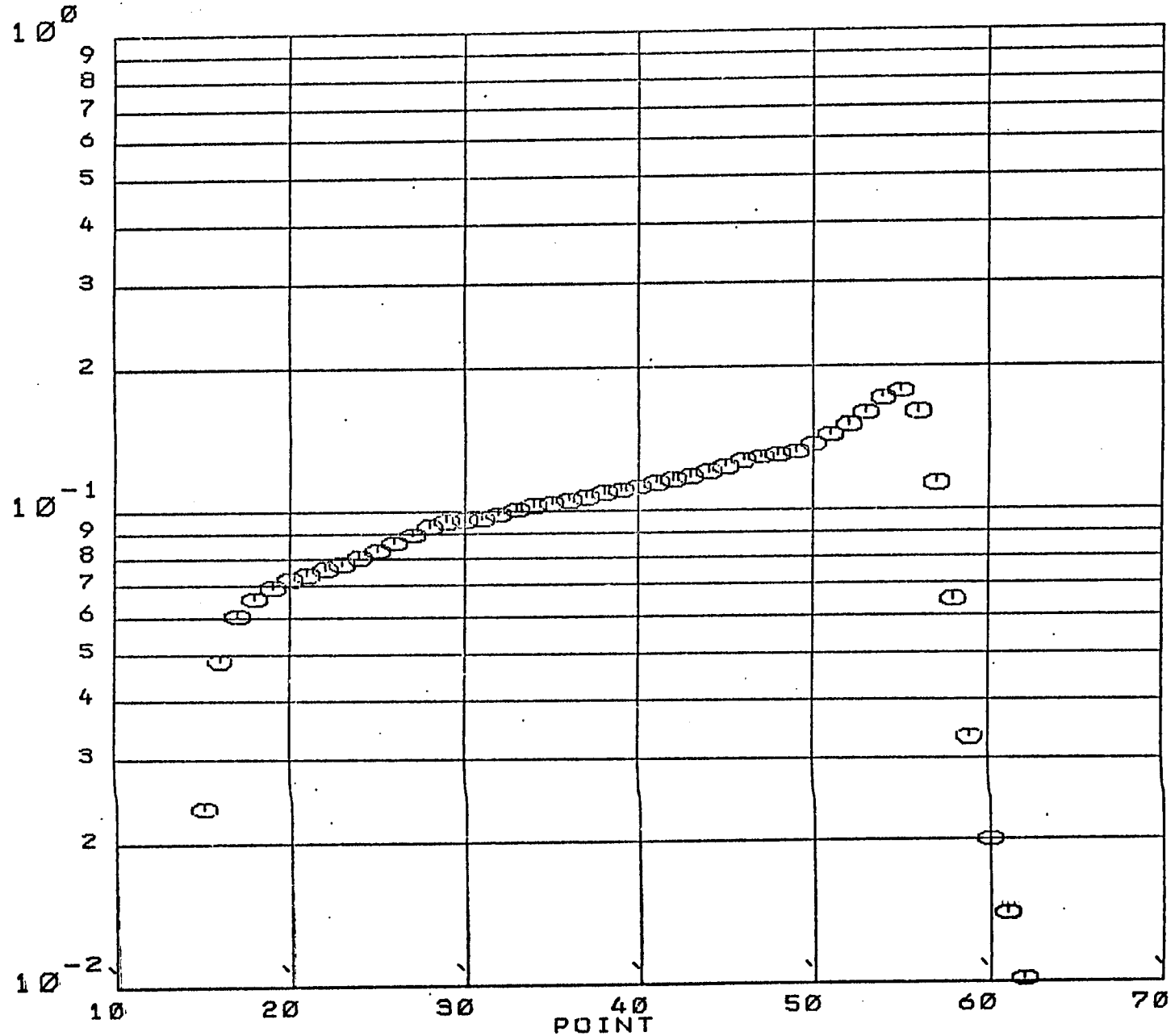
H(.9TO)
/HAFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 0.98
ALPHA 90.01
LINE 63

GROUP 13



H(.9TO)
/HRFA

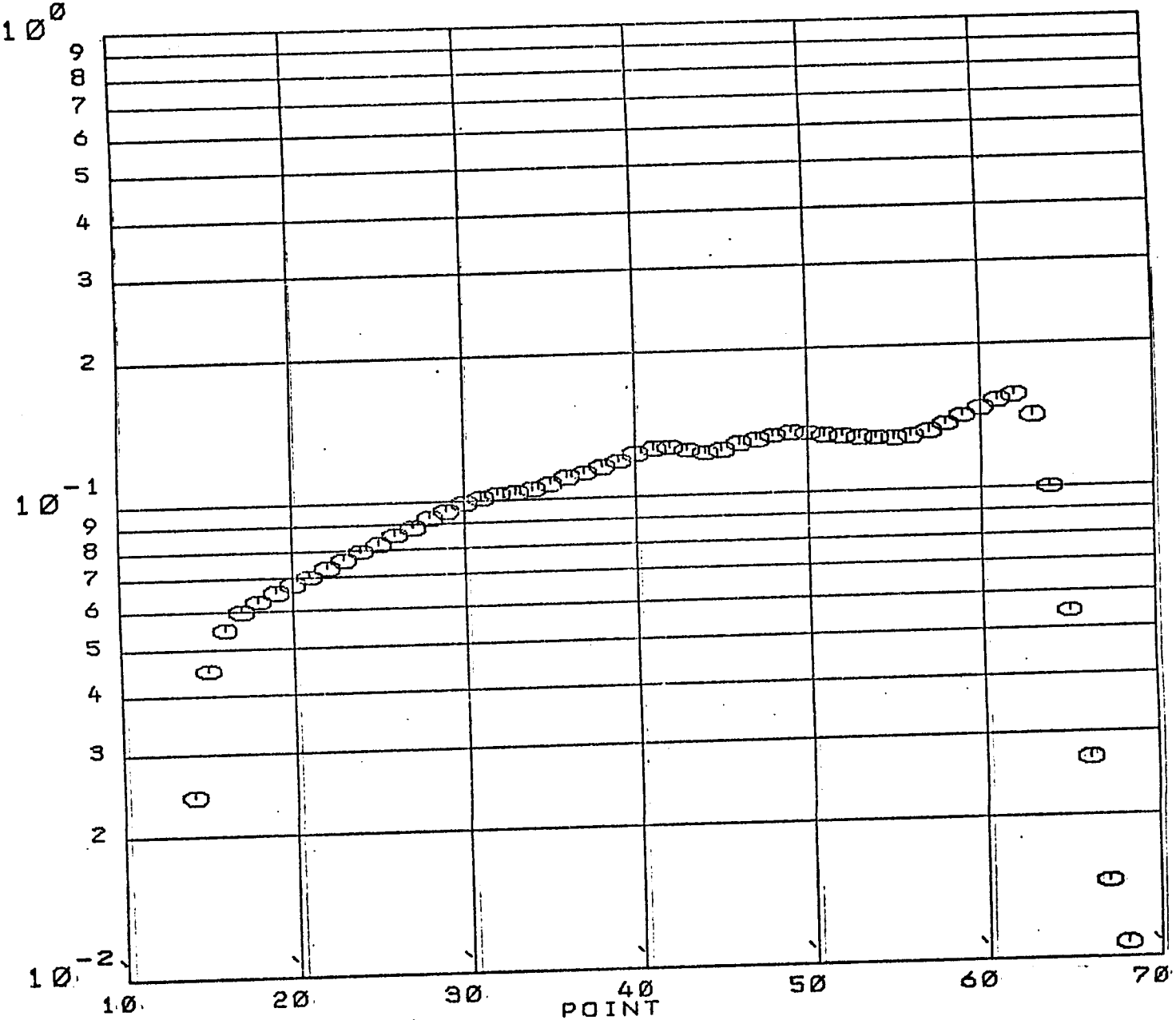
279

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

RE/FT 0.98
ALPHA 30.01
LINE 68

GROUP 13



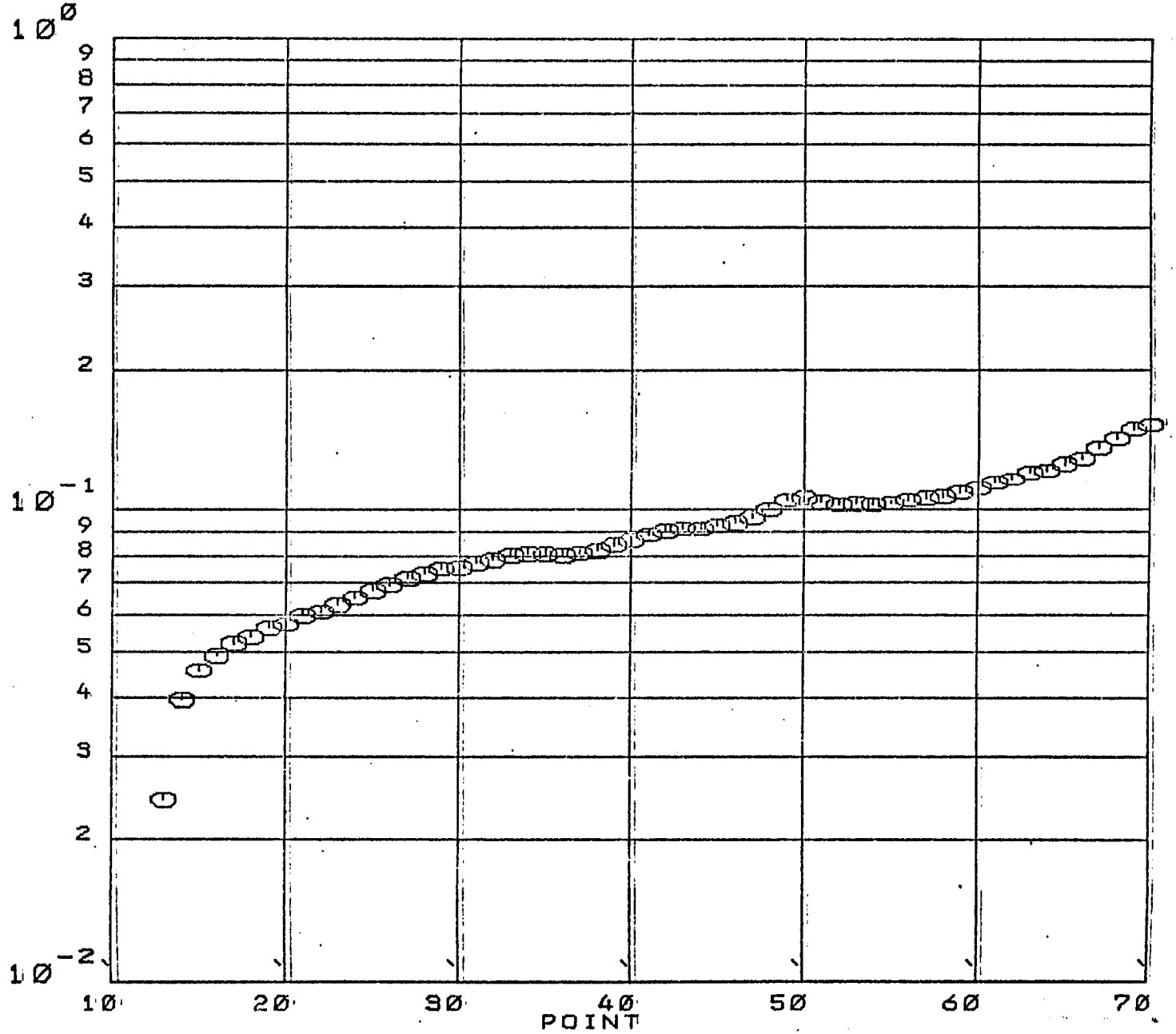
H(.9TO.)
/HAFR

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 0.98
ALPHA 30.01
LINE 74

GROUP 13

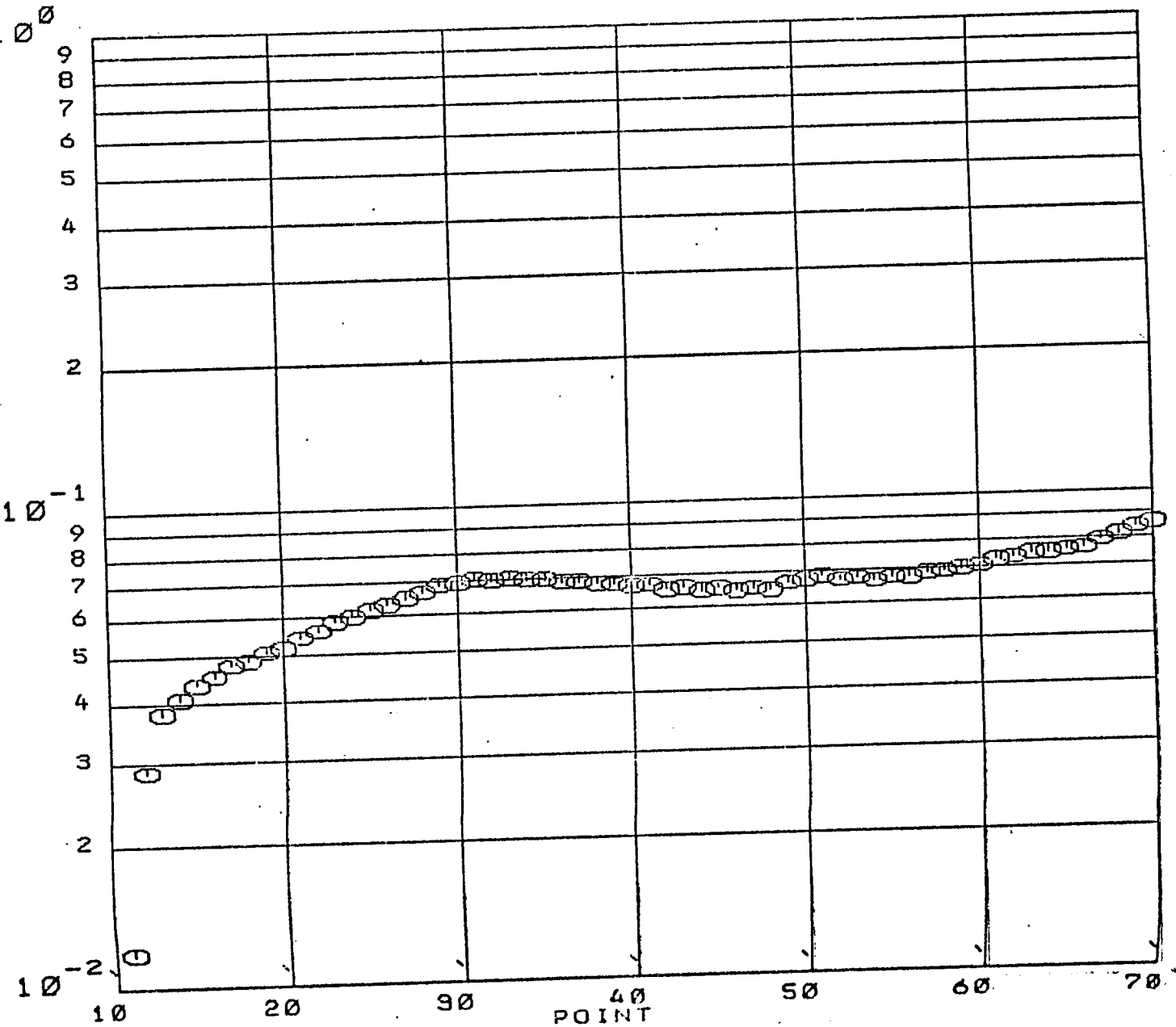


ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

RE/FT 0.98
ALPHA 30.01
LINE 80

GROUP 13



H(.9TO)
/HRFR

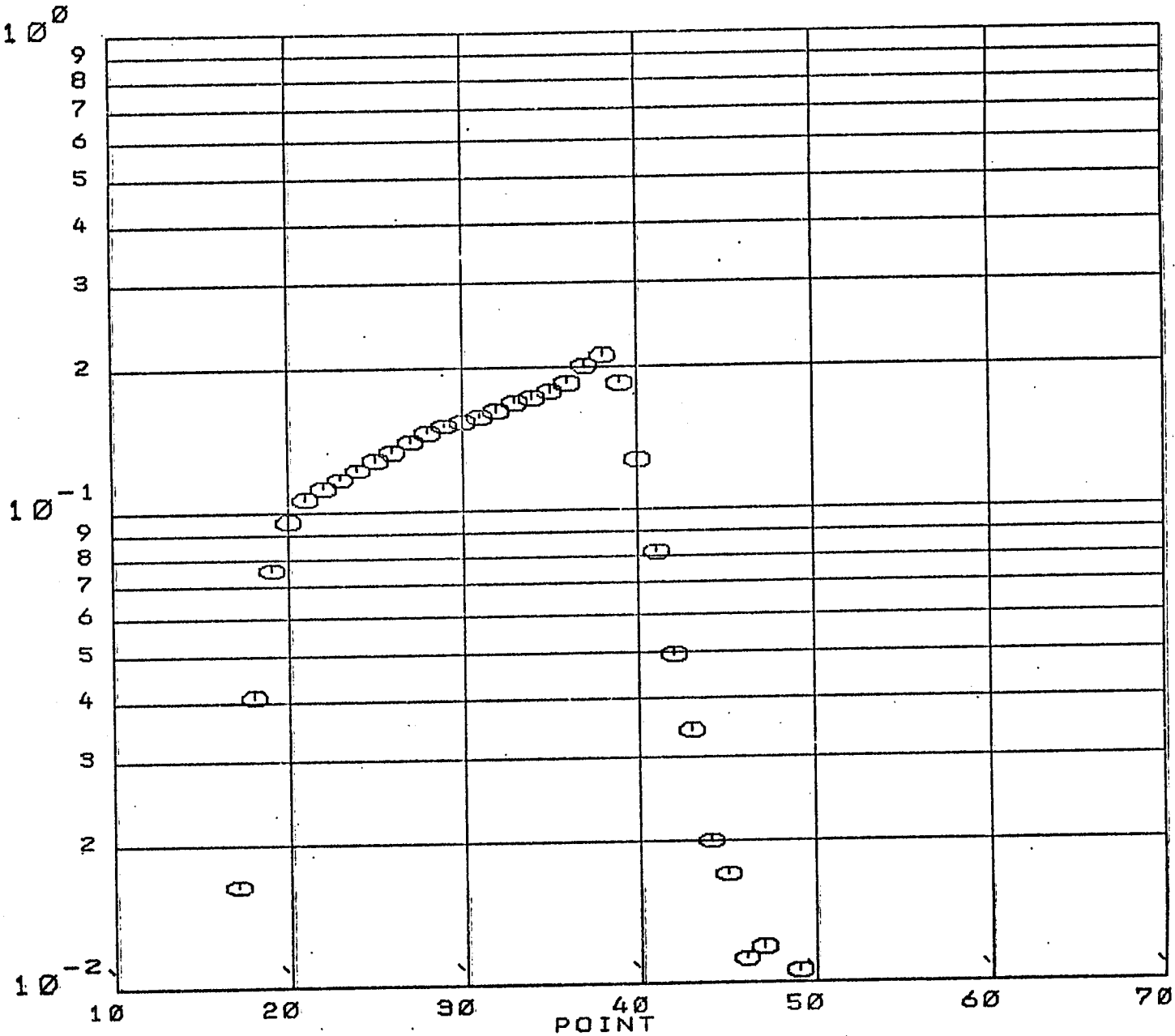
282

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.00
ALPHA 40.11
LINE 51

GROUP 15



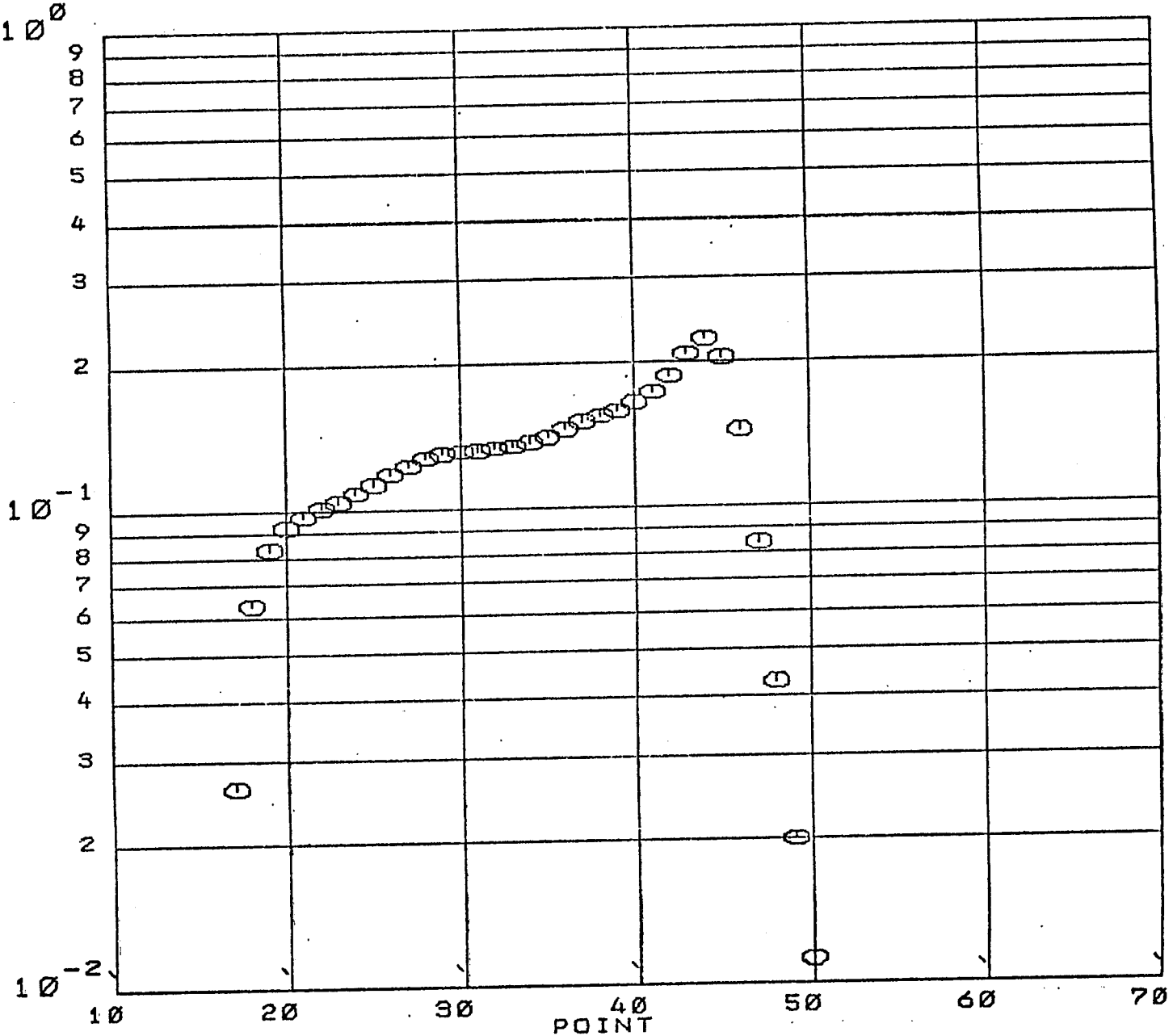
H(.9TO)
/HAFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

RE/FT 1.00
ALPHA 40.11
LINE 56

GROUP 15



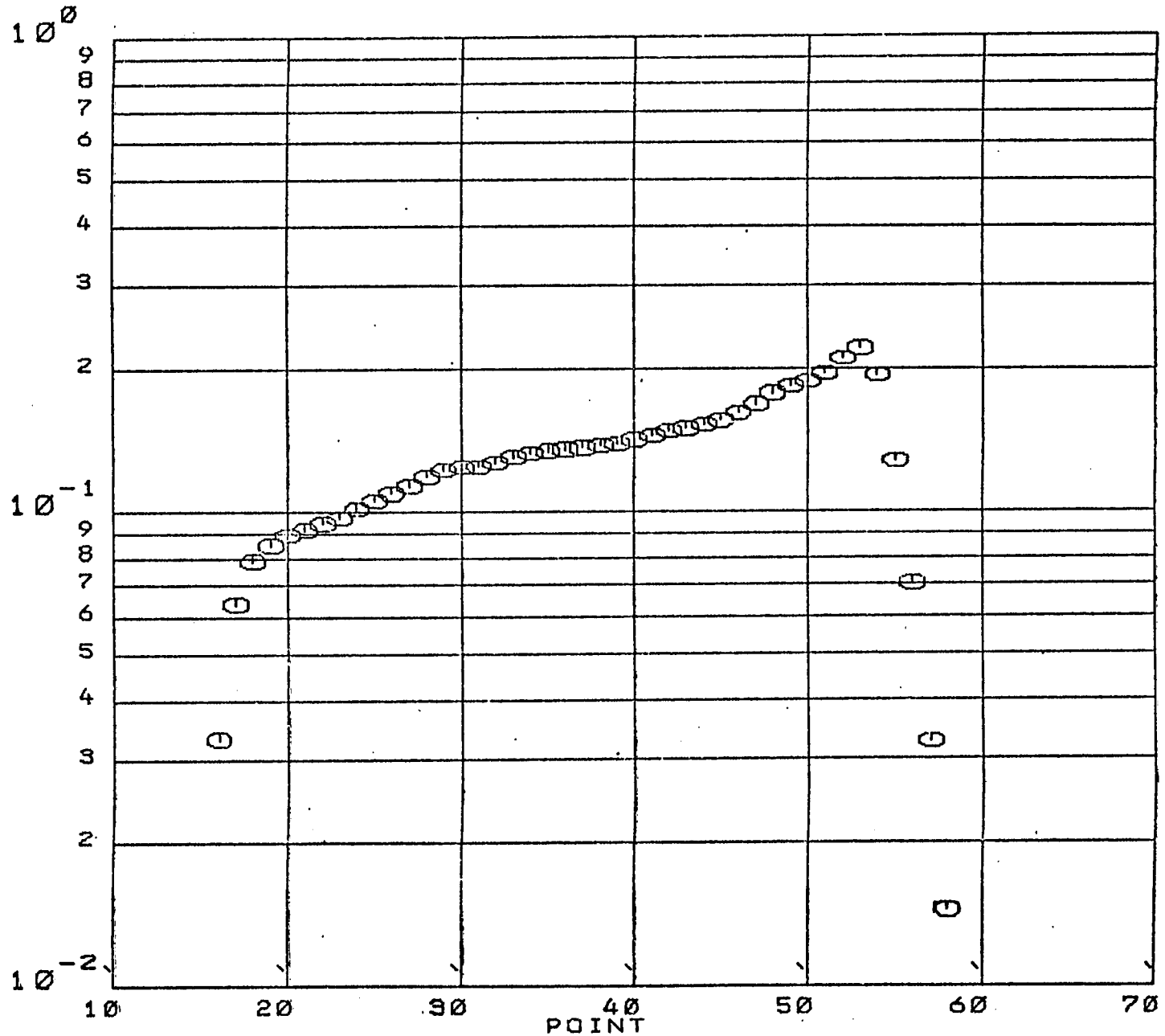
H(.9TO)
/HRFR

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.00
ALPHA 40.11
LINE 63

GROUP 15



H(.9TO)
/HAFR

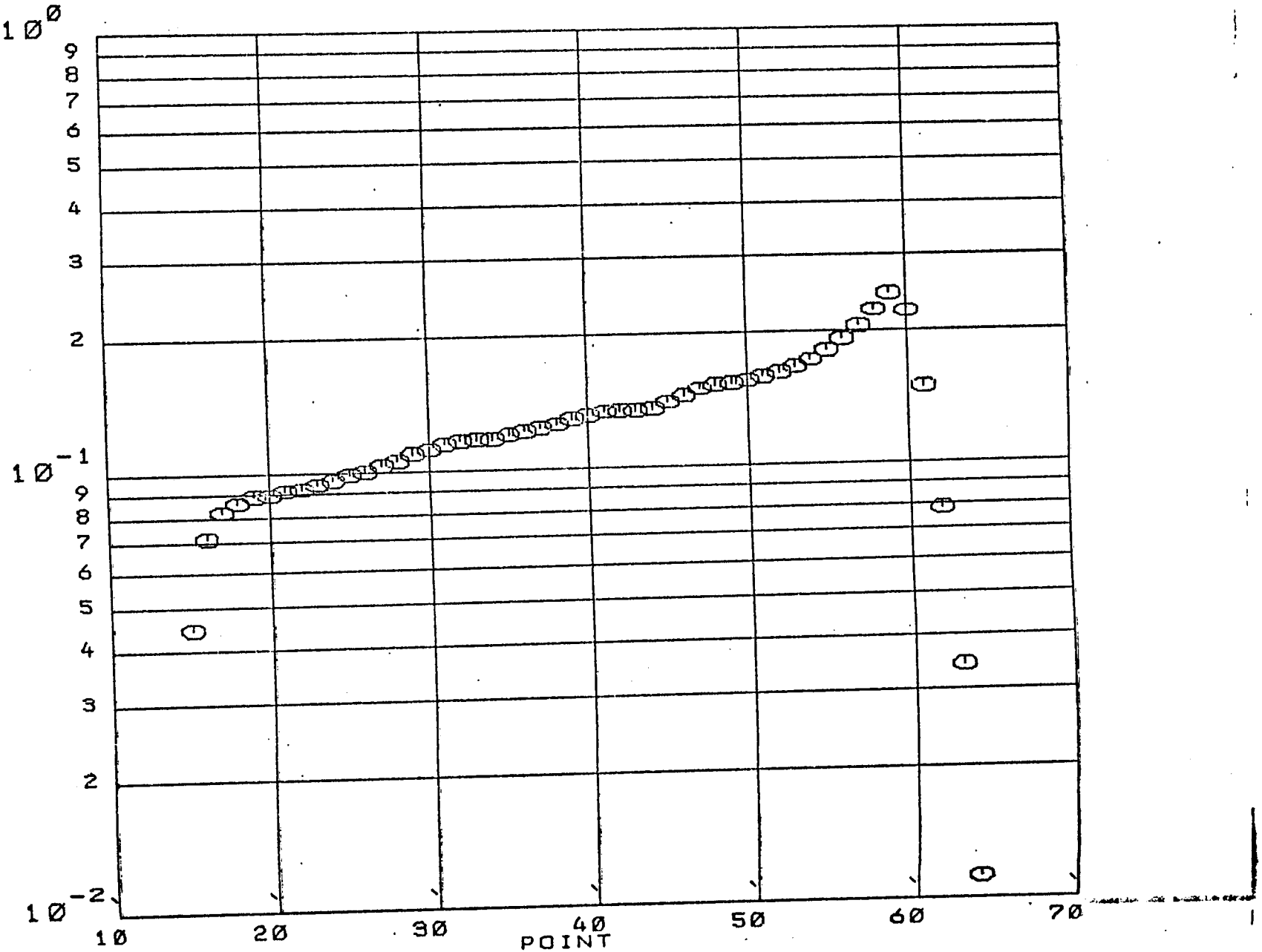
C-39 '85

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.00
ALPHA 40.11
LINE 68

GROUP 15



C-40 286.

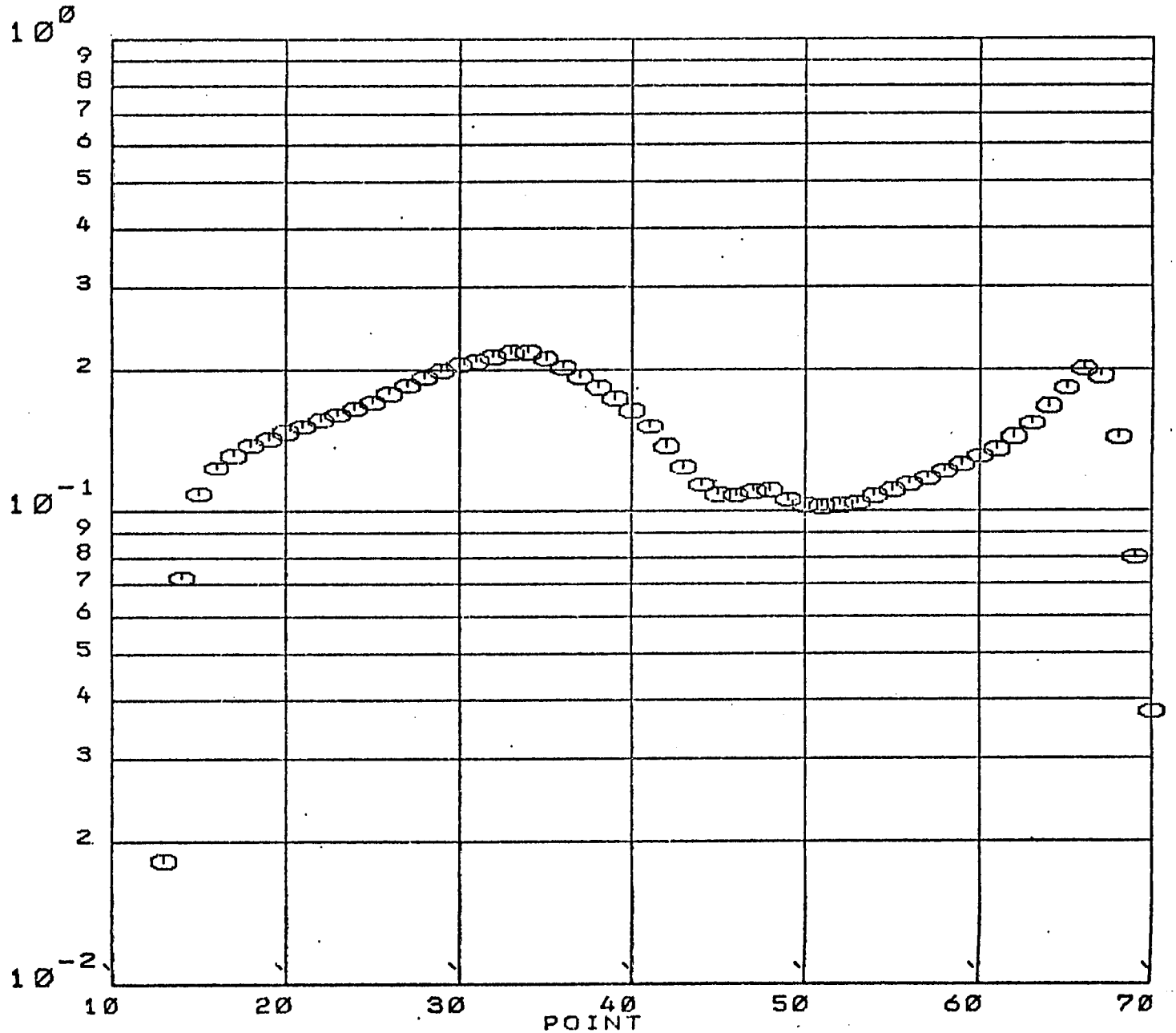
H(.9TO)
/HAFR

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.00
ALPHA 40.11
LINE 74

GROUP 15



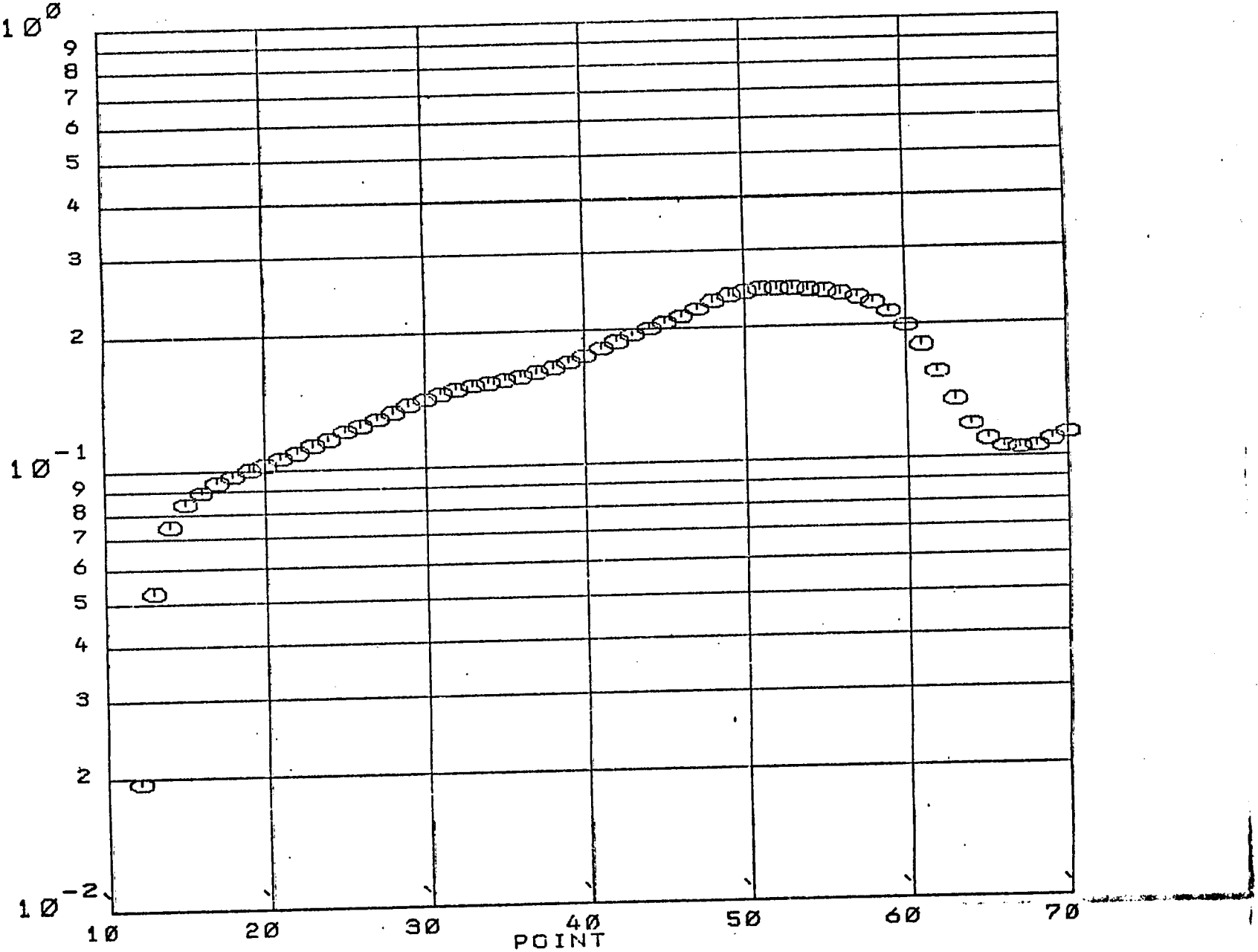
C-41 287

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3/3/78
V41B-P4A

NASA/AI OH90

RE/FT 1.00
ALPHA 40.11
LINE 80

GROUP 15



C-42

288.

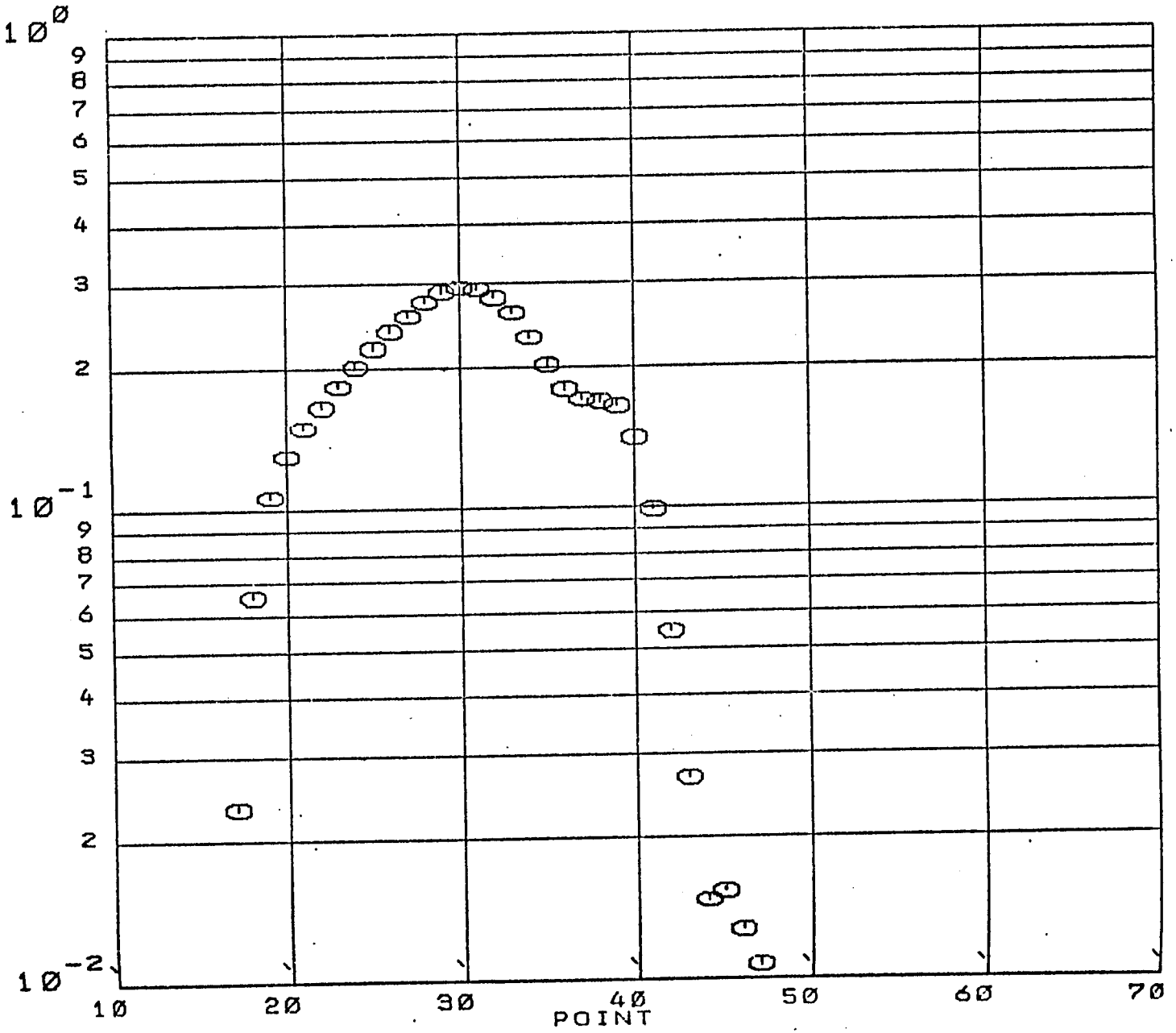
H(.9TO)
/HRFR

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

RE/FT 1.02
ALPHA 90.06
LINE 51

GROUP 18



H(.9TO)
/HAFA

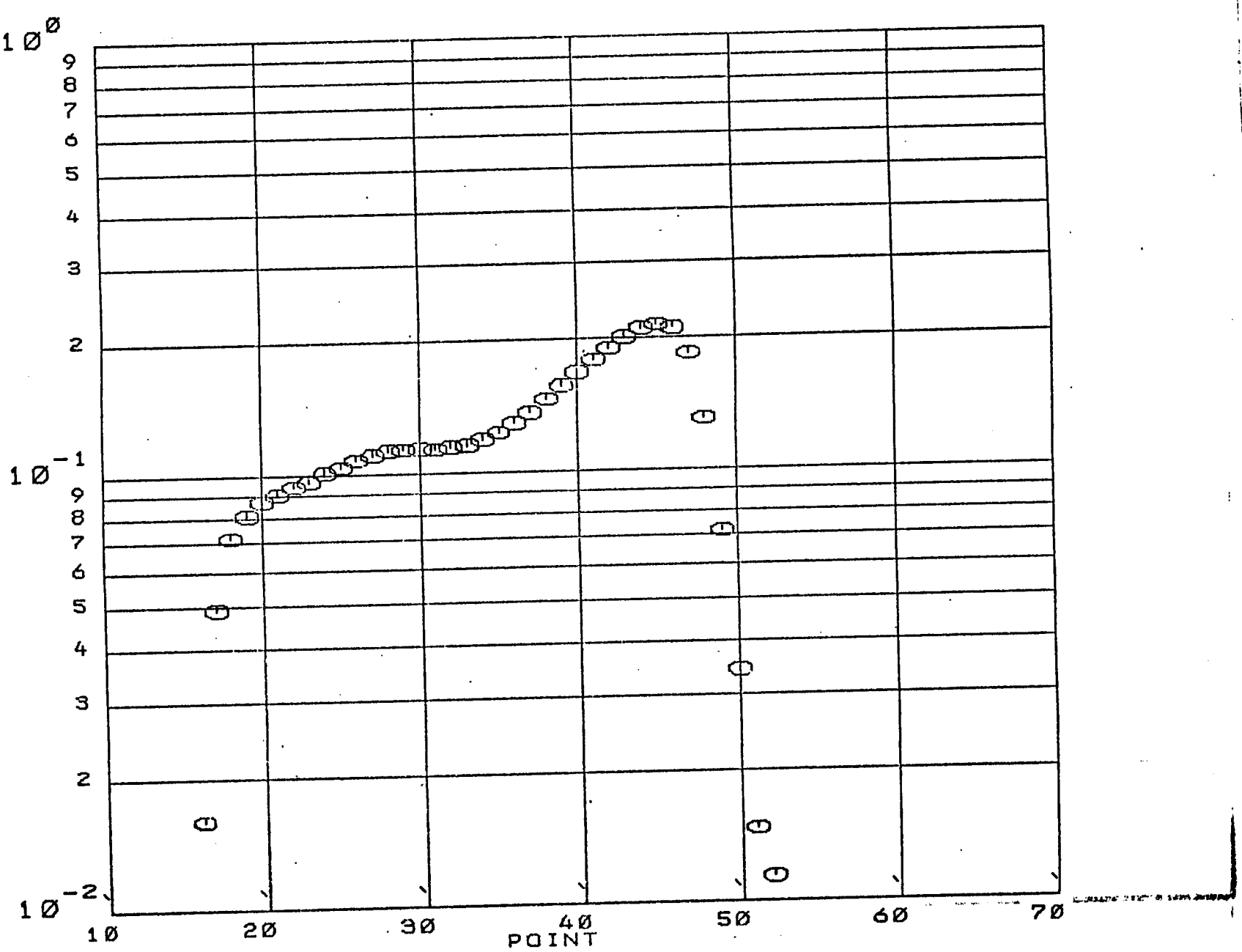
289

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

RE/FT 1.02
ALPHA 30.06
LINE 56

GROUP 18



C-44 290

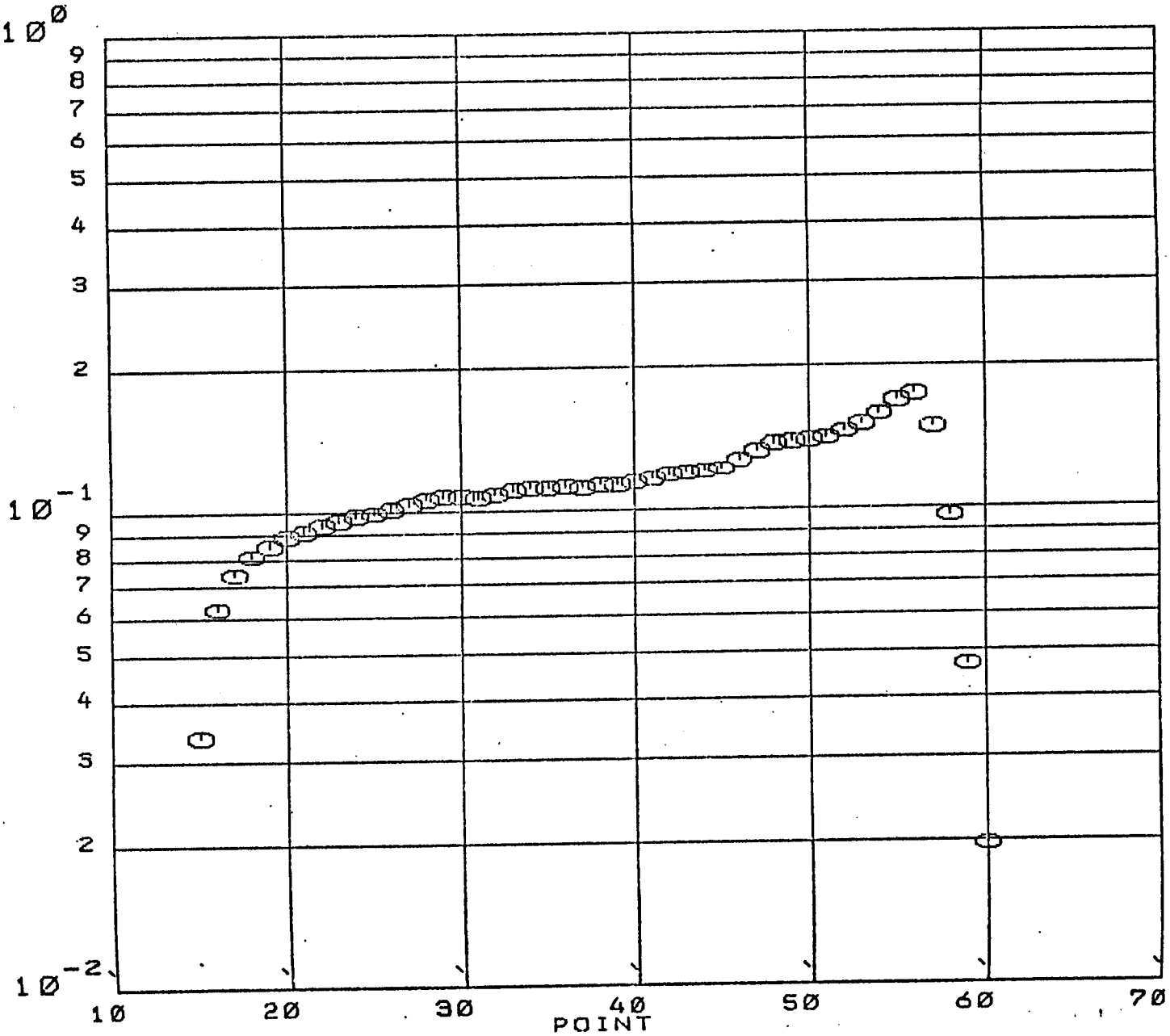
H(.9TO)
/HRFR

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.02
ALPHA 30.06
LINE 63

GROUP 18



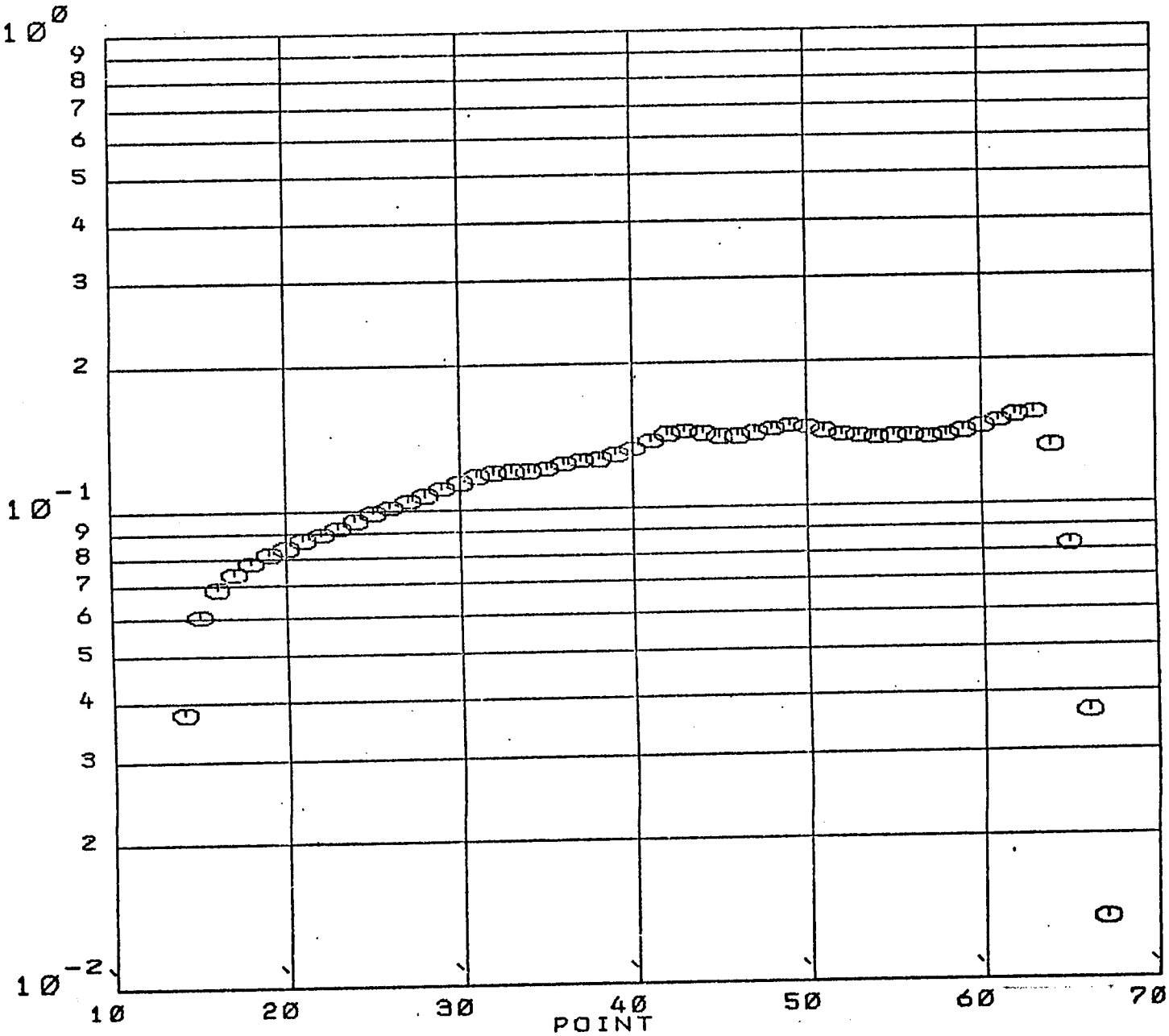
H(.9TO)
/HRFR

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.02
ALPHA 30.06
LINE 68

GROUP 18



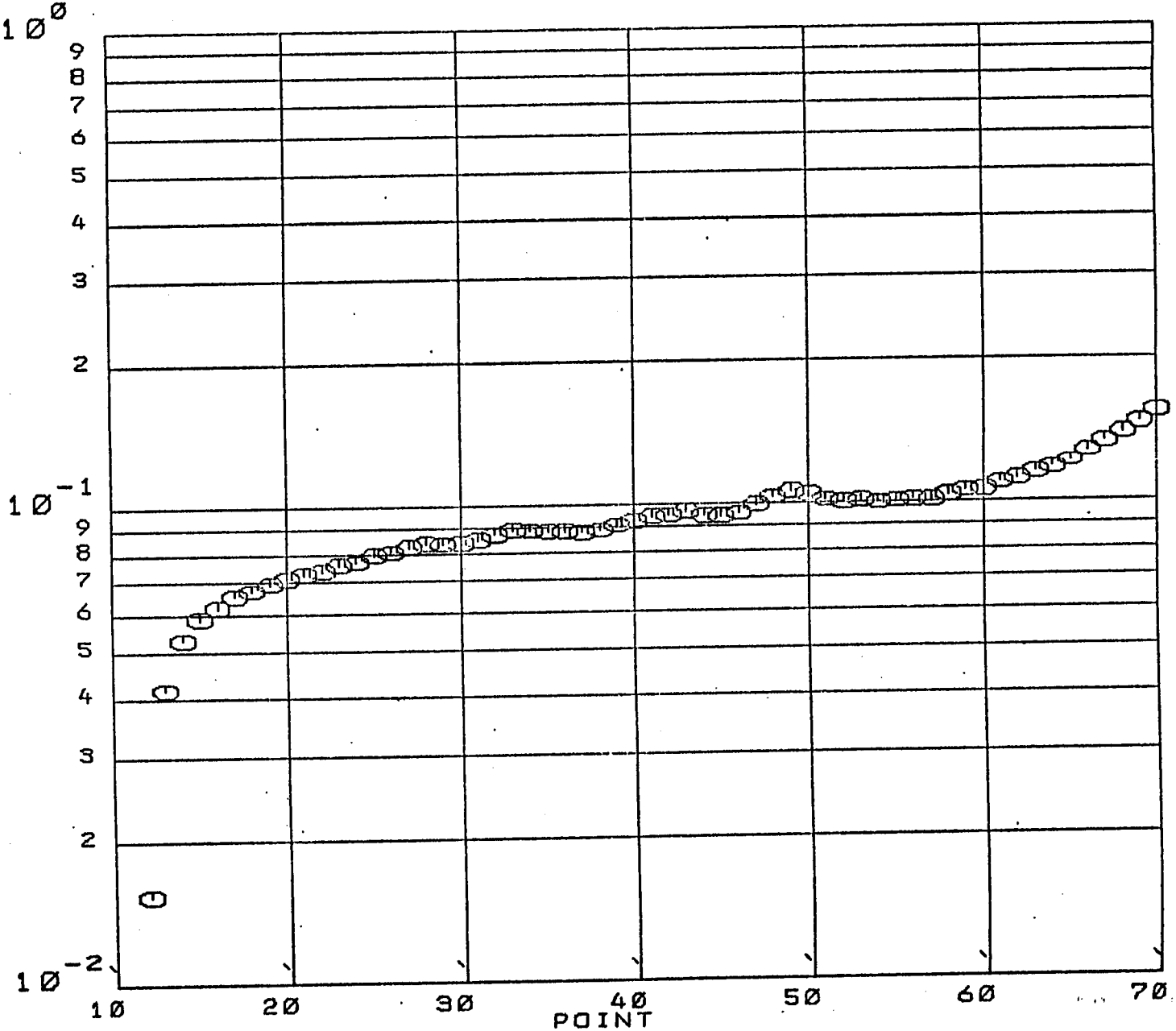
C-46 292. H(.9TO)
/HRFR

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.02
ALPHA 30.06
LINE 74

GROUP 18



H(.9TO)
/HRFR

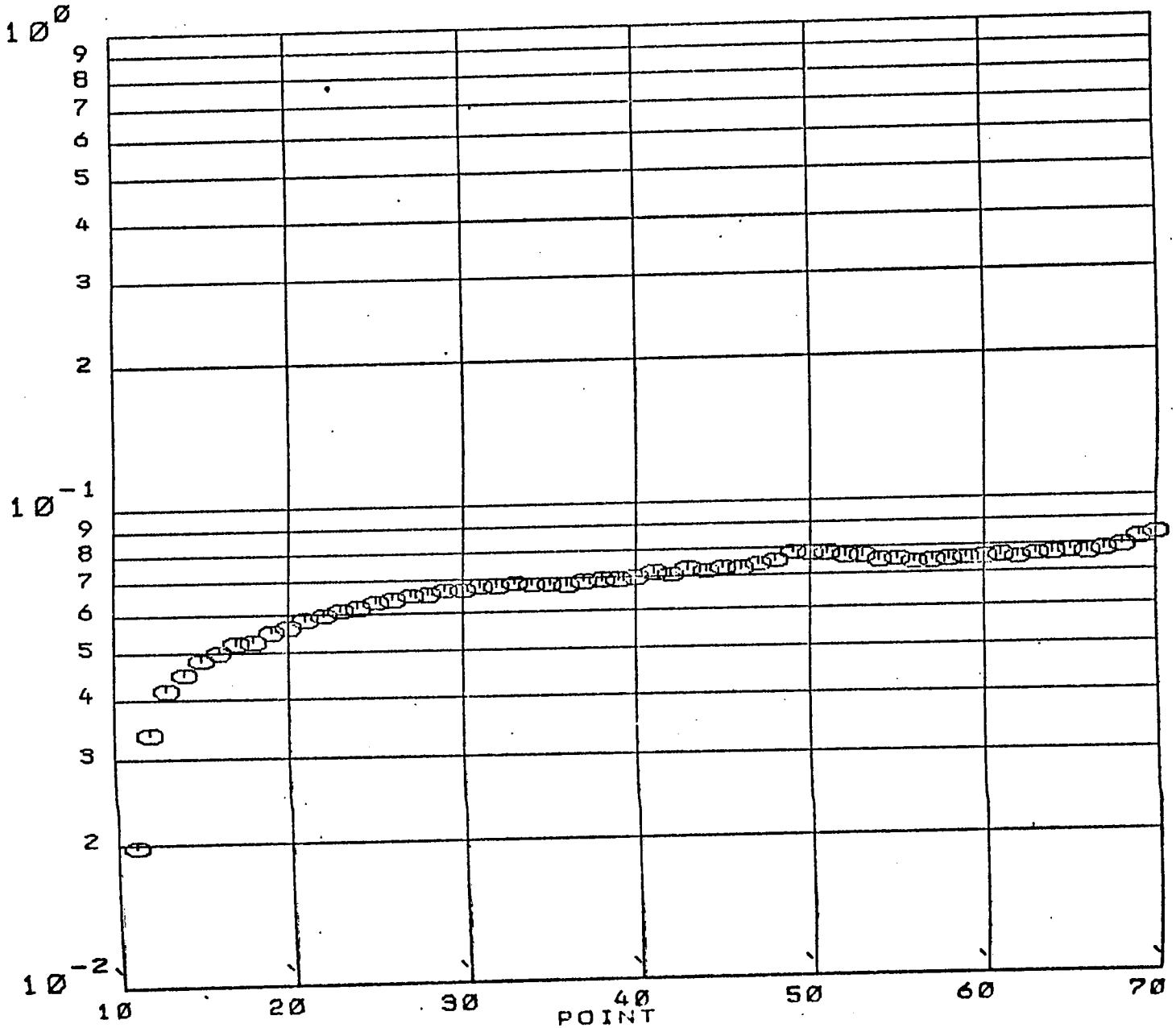
29.3

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3/3/78
V41B-P4A

NASA/AI OH90

RE/FT	1.02
ALPHA	90.06
LINE	80

GROUP 18



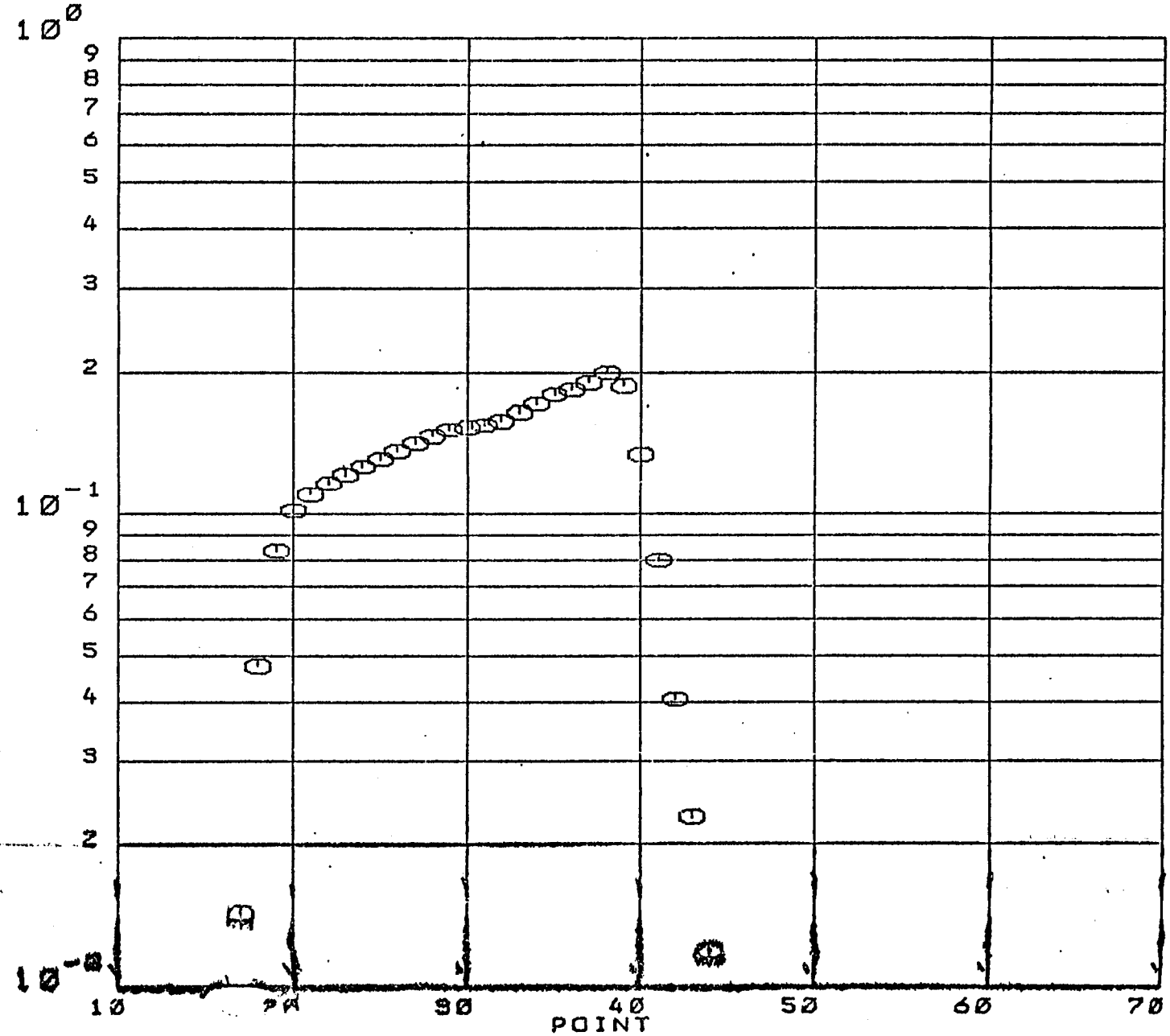
H(.9TO)
/HAFR

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.02
ALPHA 40.11
LINE 51

GROUP 19



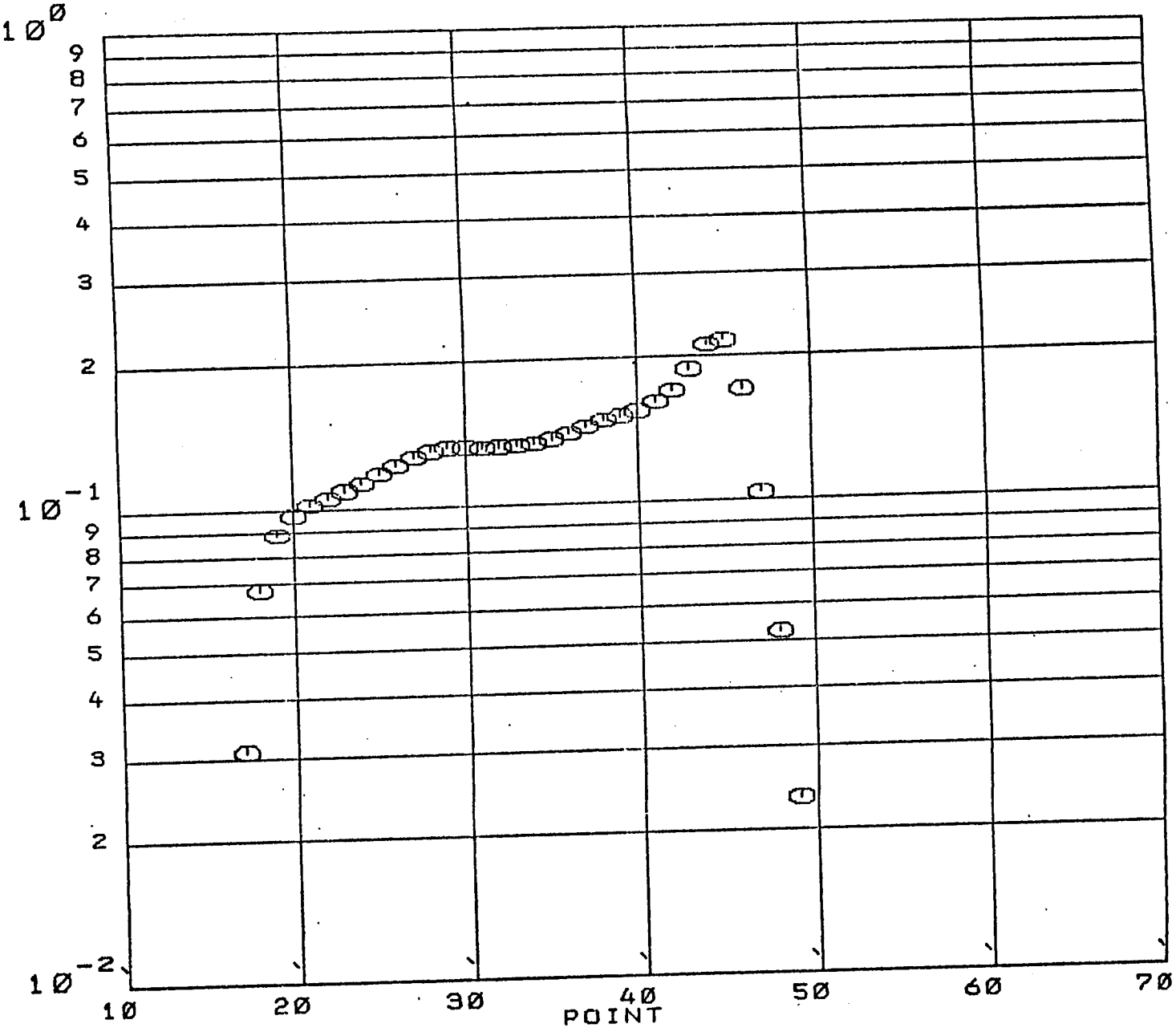
295. H(.9TO) /HAFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.02
ALPHA 40.11
LINE 56

GROUP 19



C-50 .236

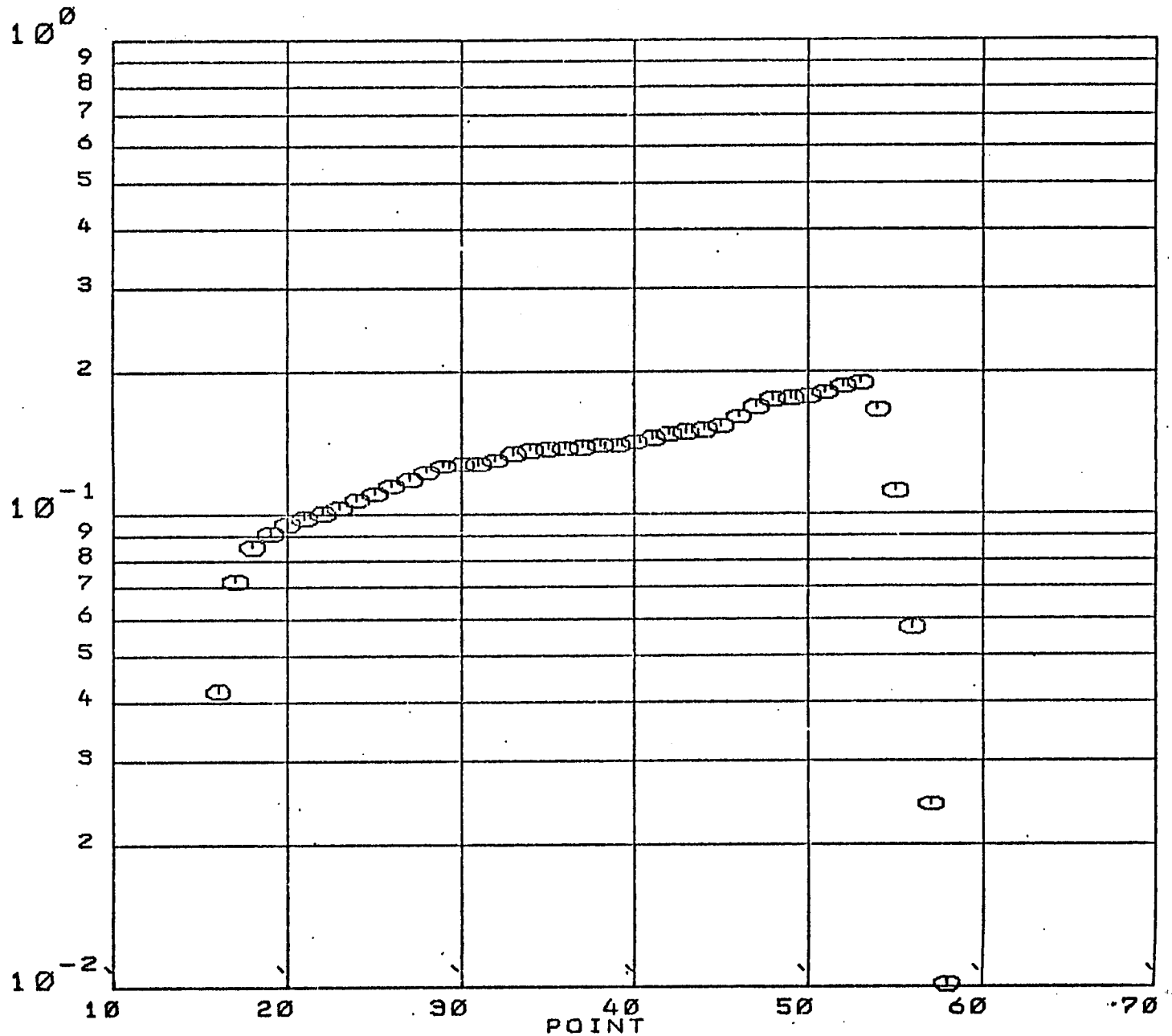
H(.9TO)
/HAFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.02
ALPHA 40.11
LINE 63

GROUP 19



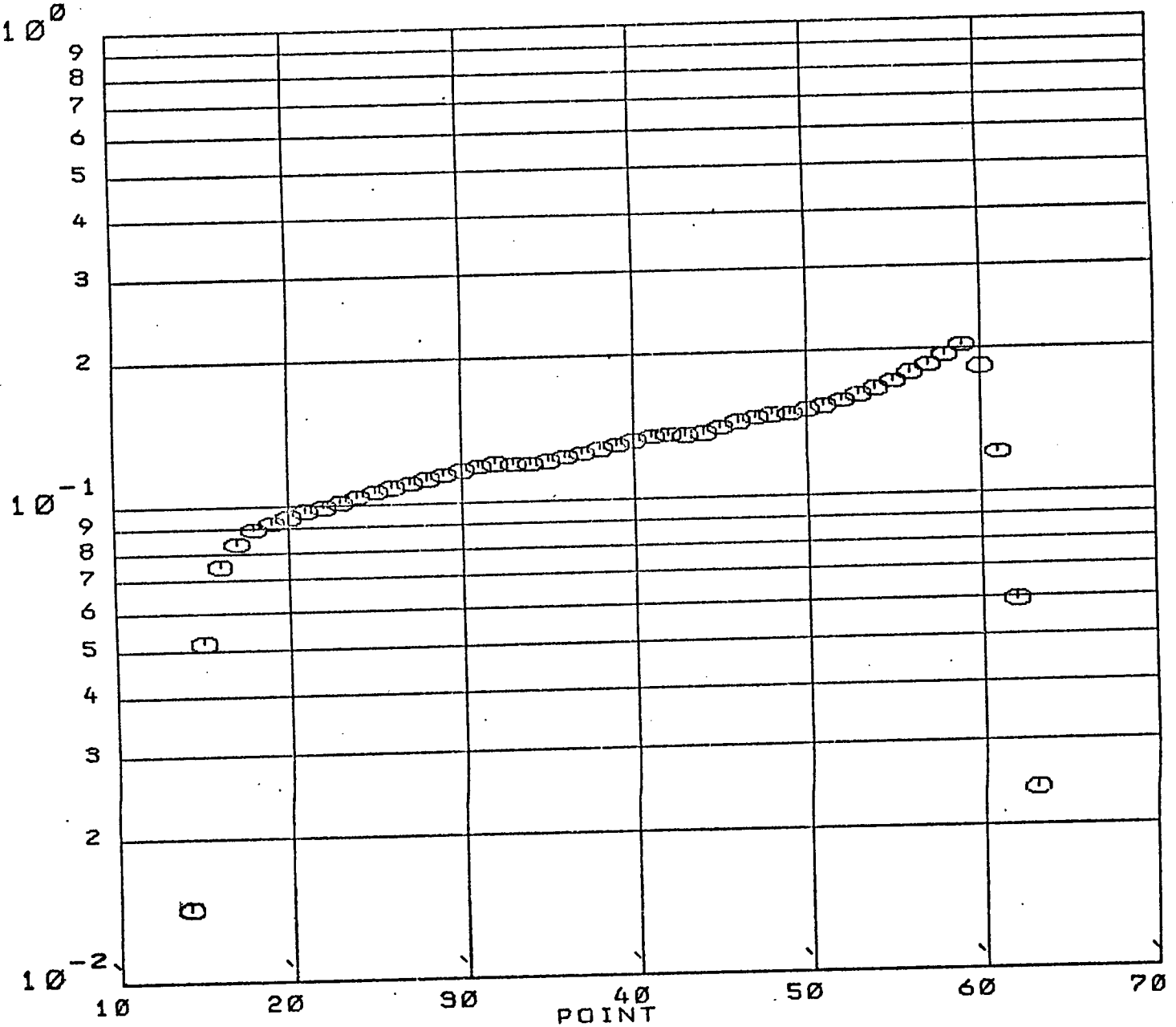
C-51 '97

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH9Ø

RE/FT 1.Ø2
ALPHA 4Ø.11
LINE 68

GROUP 19

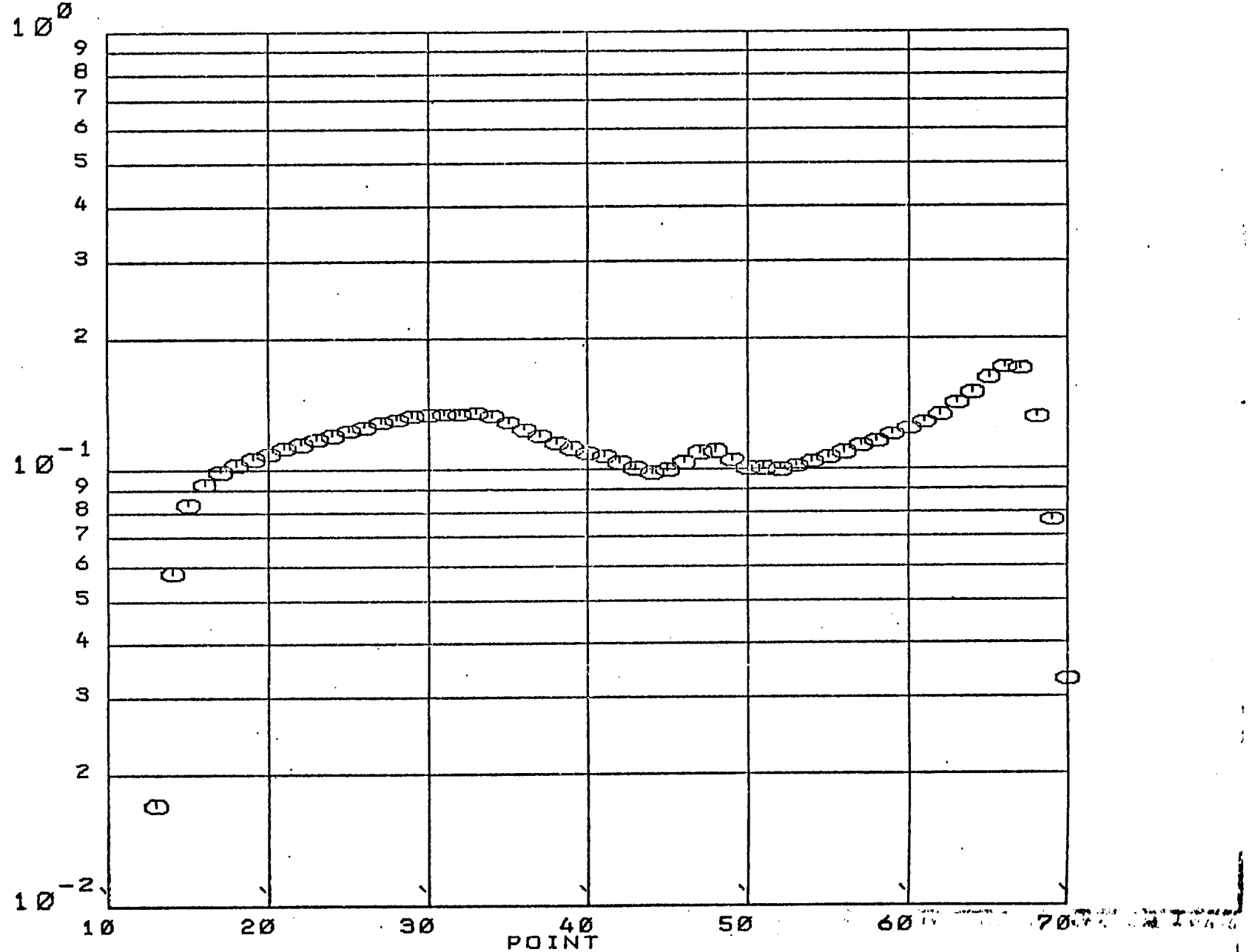


ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

RE/FT 1.02
ALPHA 40.11
LINE 74

GROUP 19



H(.9TO)
/HAFA

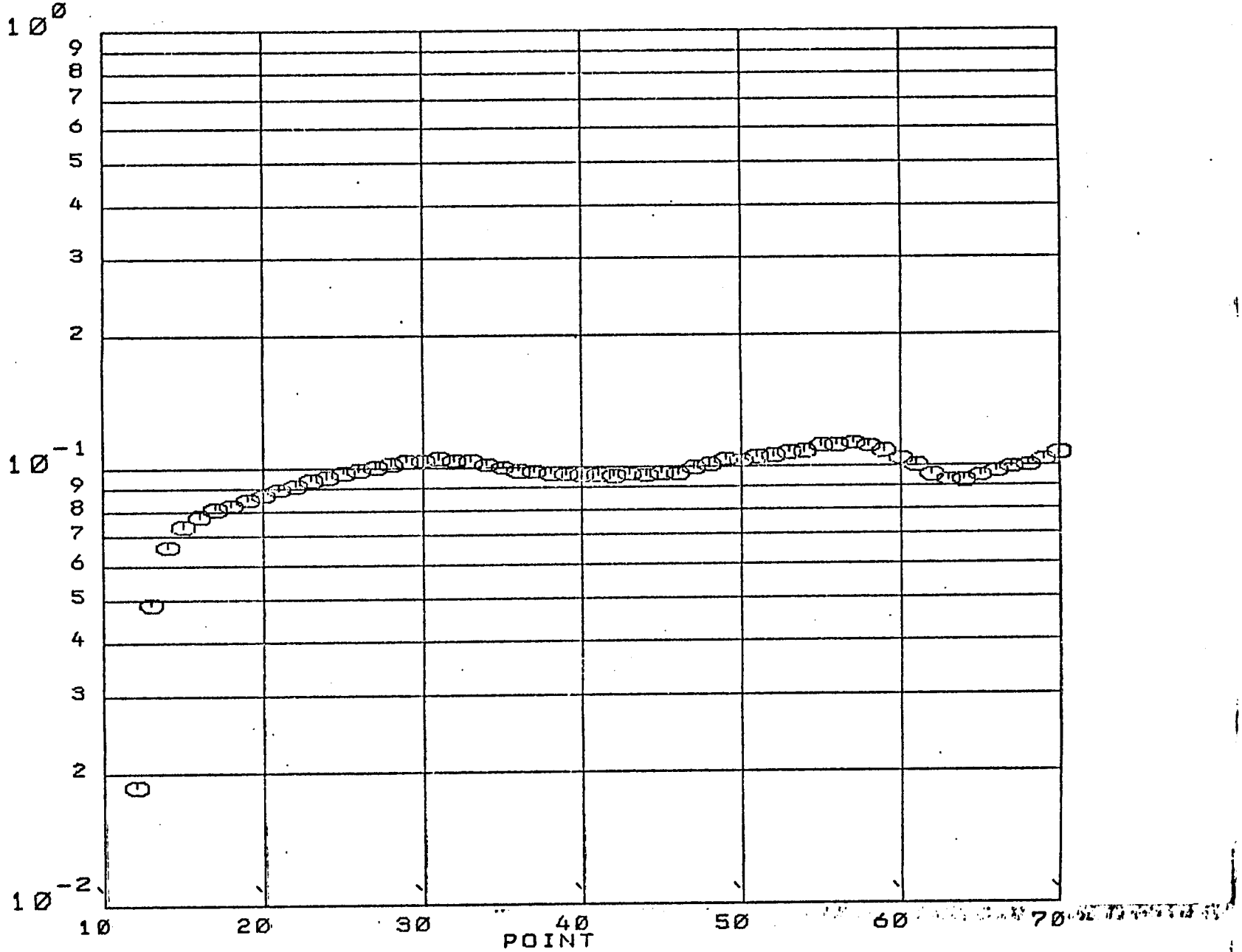
C-53 299

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

RE/FT 1.02
ALPHA 0.00
LINE 80

GROUP 19



C-54 10U

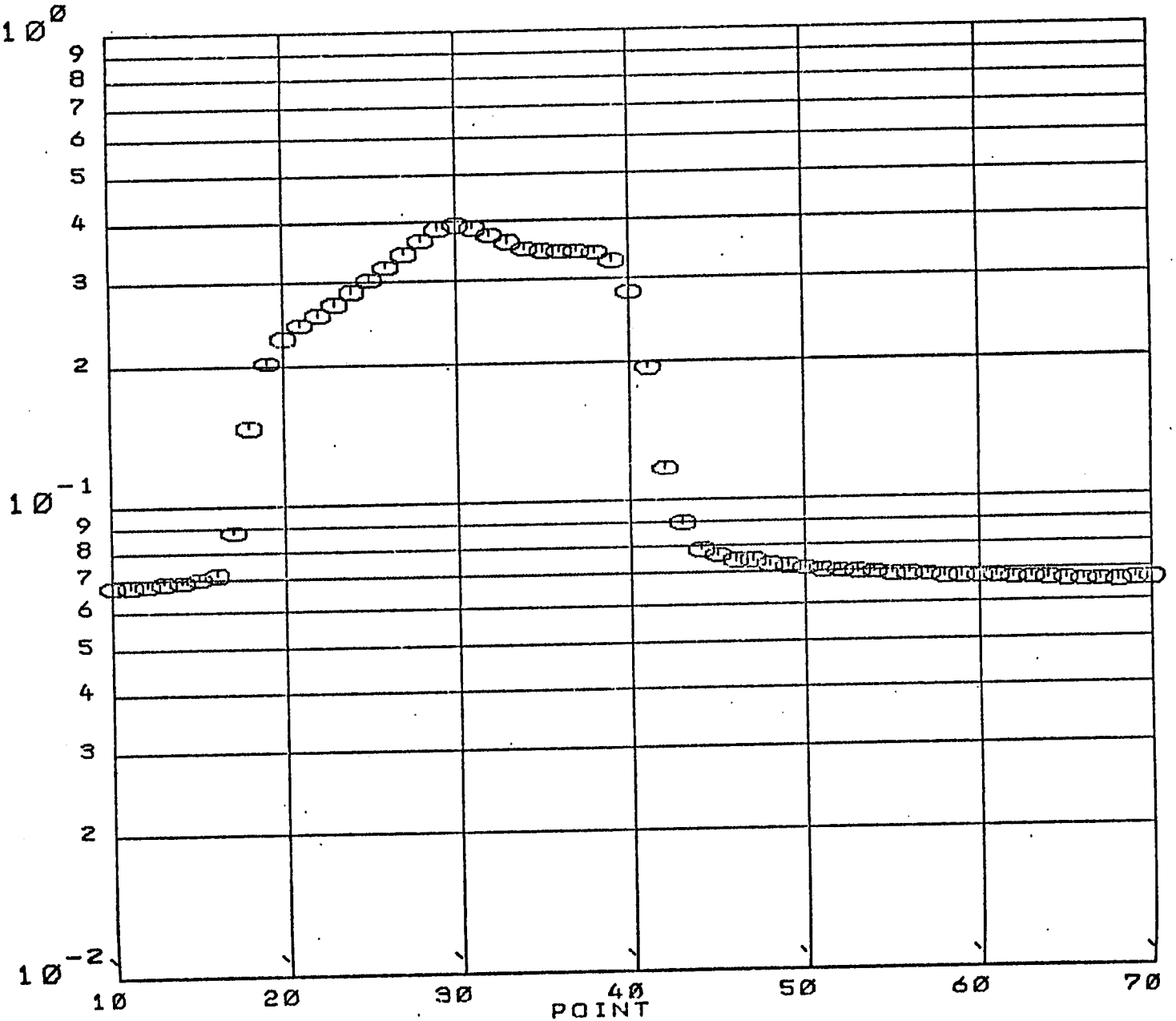
H(.9TO)
/HAFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 3.51
ALPHA 30.05
LINE 51

GROUP 24



H(.9TO)
/HAFA

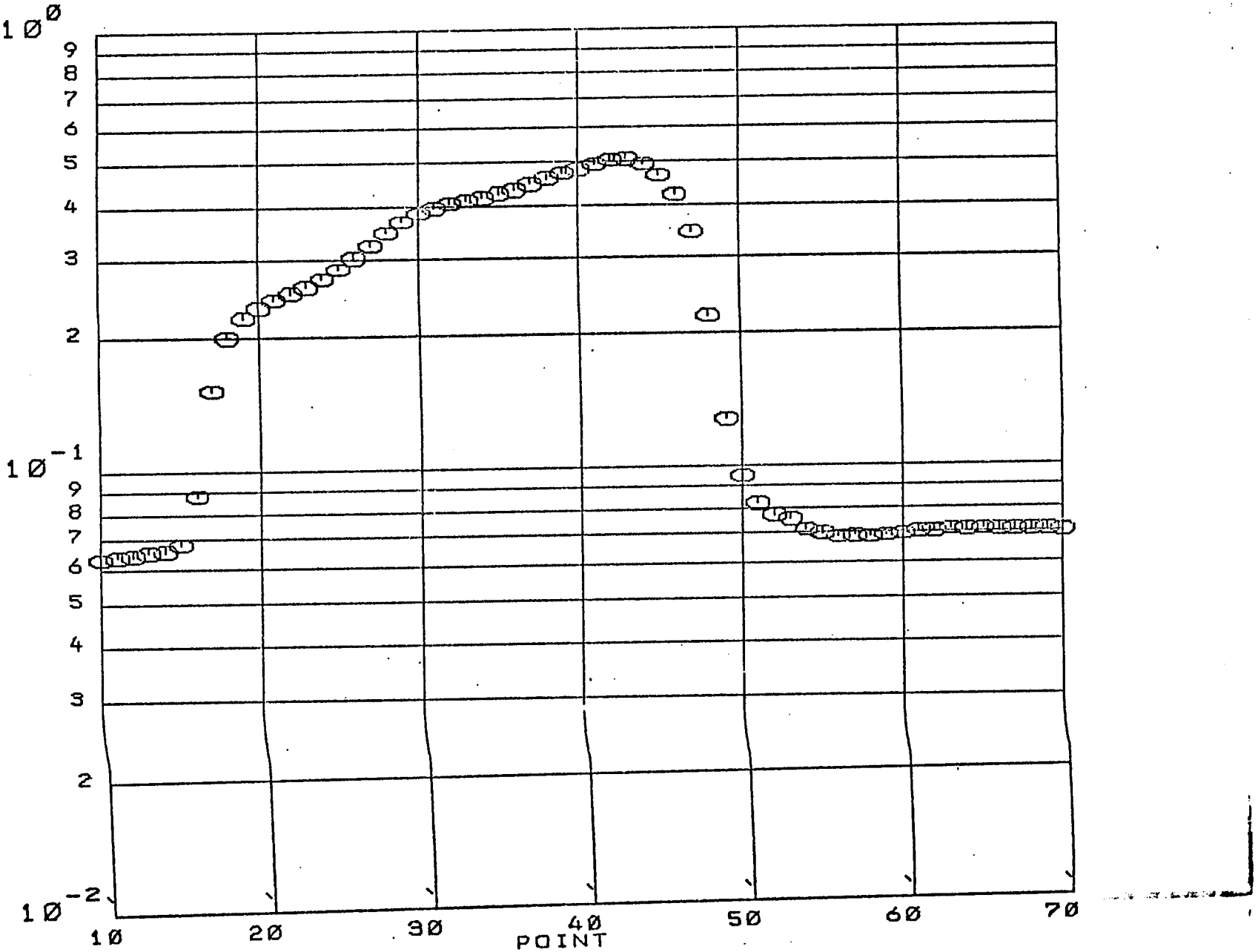
C-55 301.

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 3.51
ALPHA 30.05
LINE 56

GROUP 24



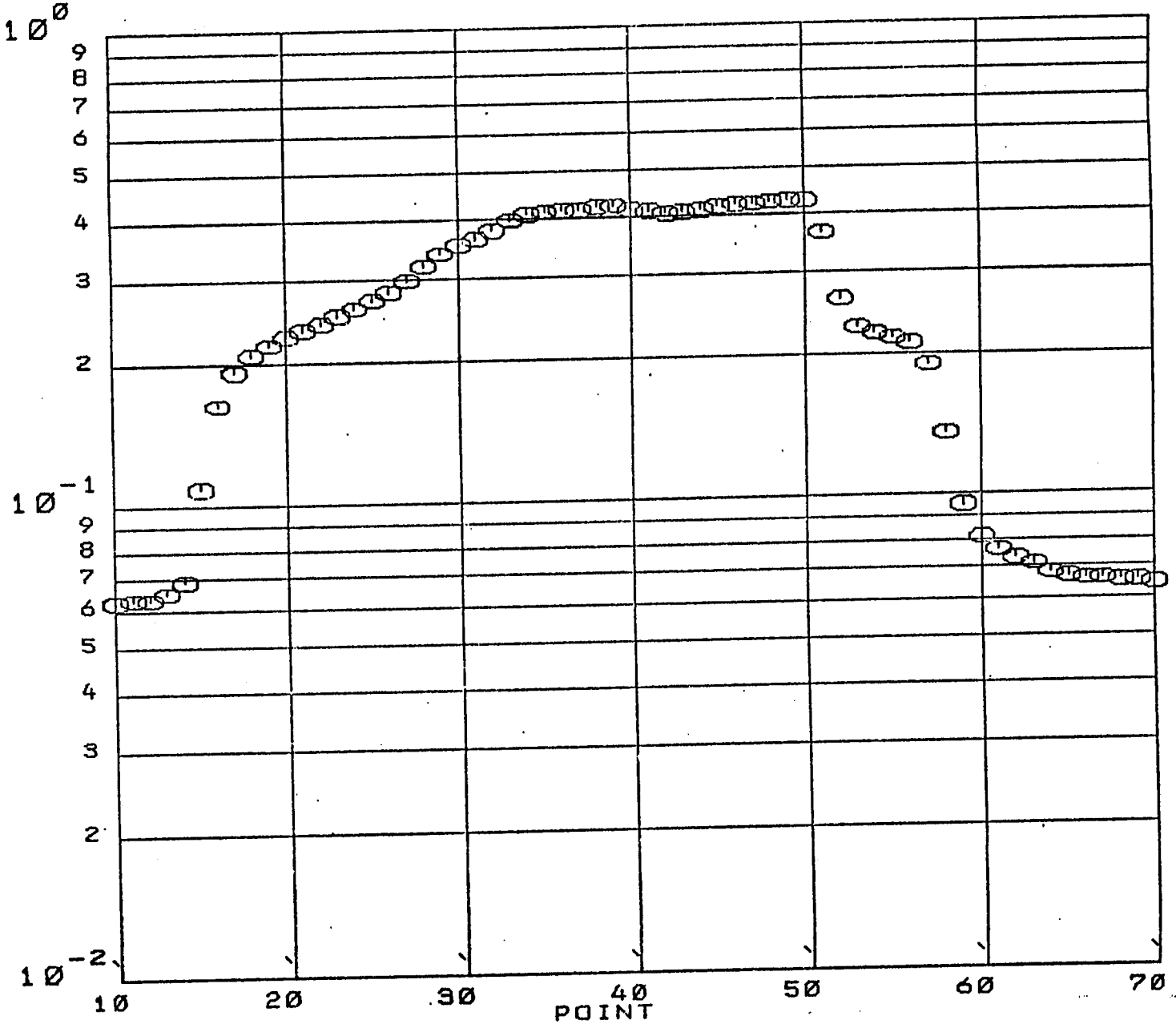
302. H(.9TO)
/HAFR

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

RE/FT 3.51
ALPHA 90.05
LINE 63

GROUP 24



C-57 03

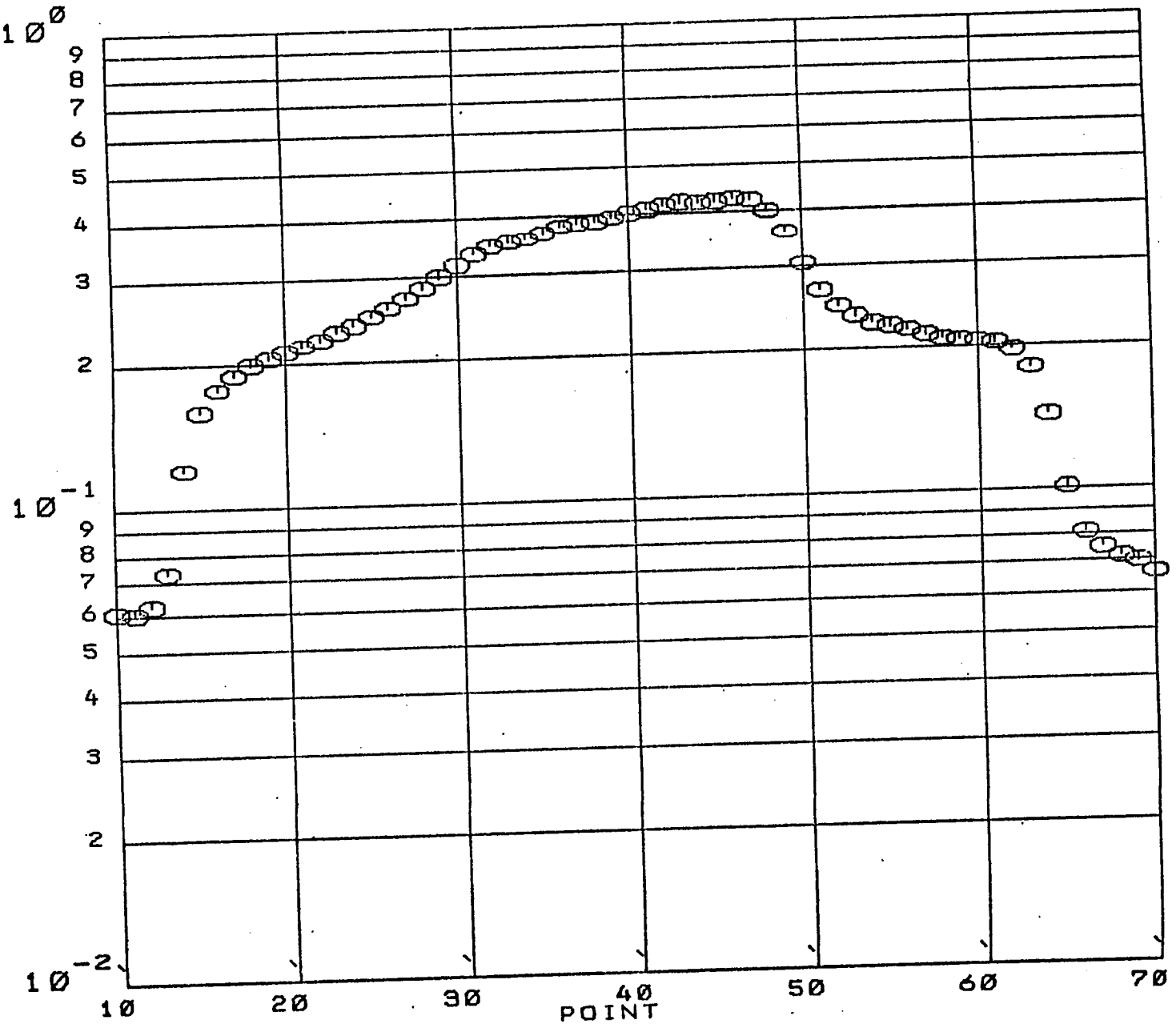
H(.9TO)
/HAFR

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

GROUP 24

NASA/RI OH90

RE/FT 3.51
ALPHA 30.05
LINE 68



H(.9TO)
/HAFR

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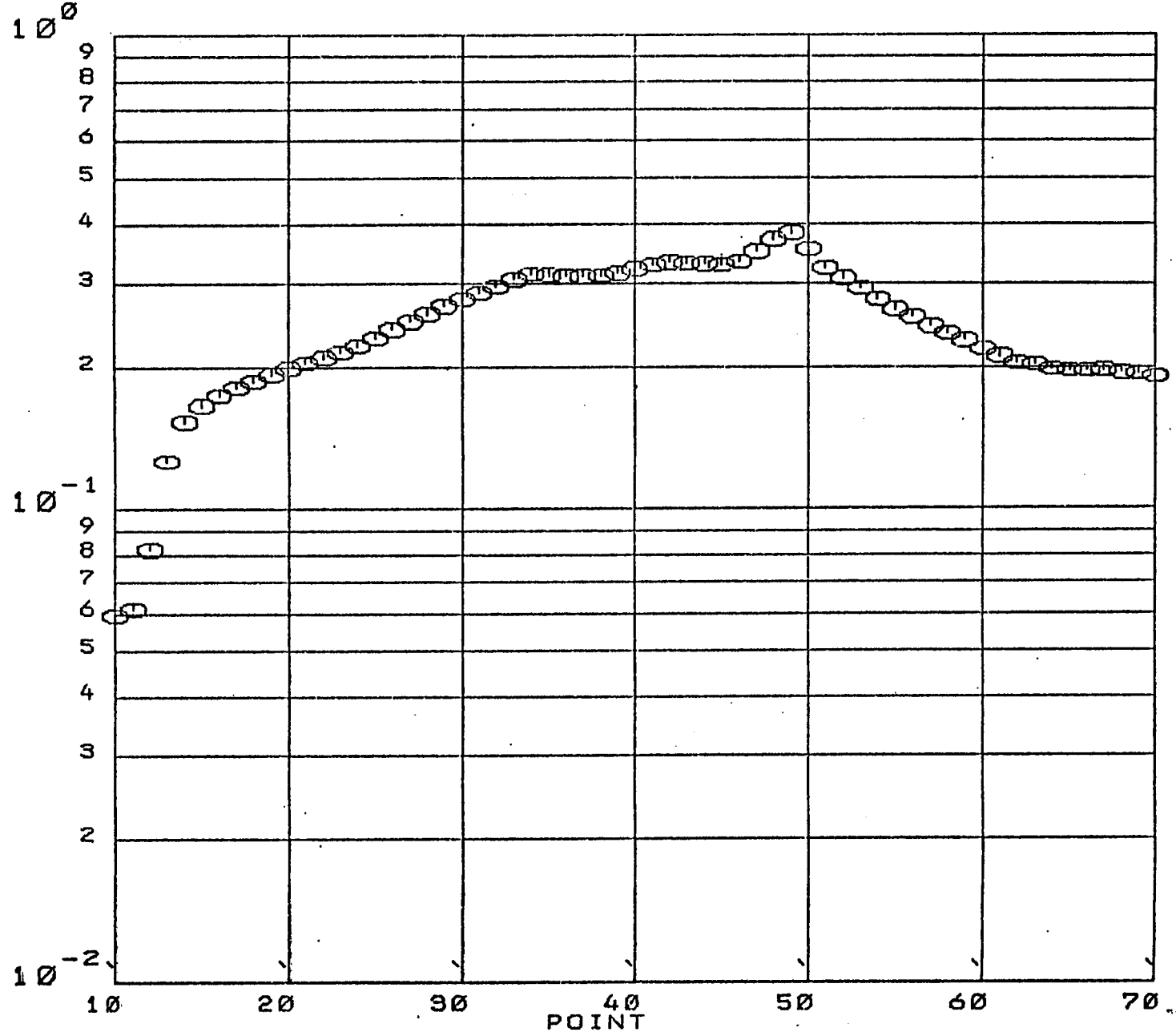
ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3/3/78
V41B-P4A

NASA/AI OH90

RE/FT 3.51
ALPHA 30.05
LINE 74

GROUP 24

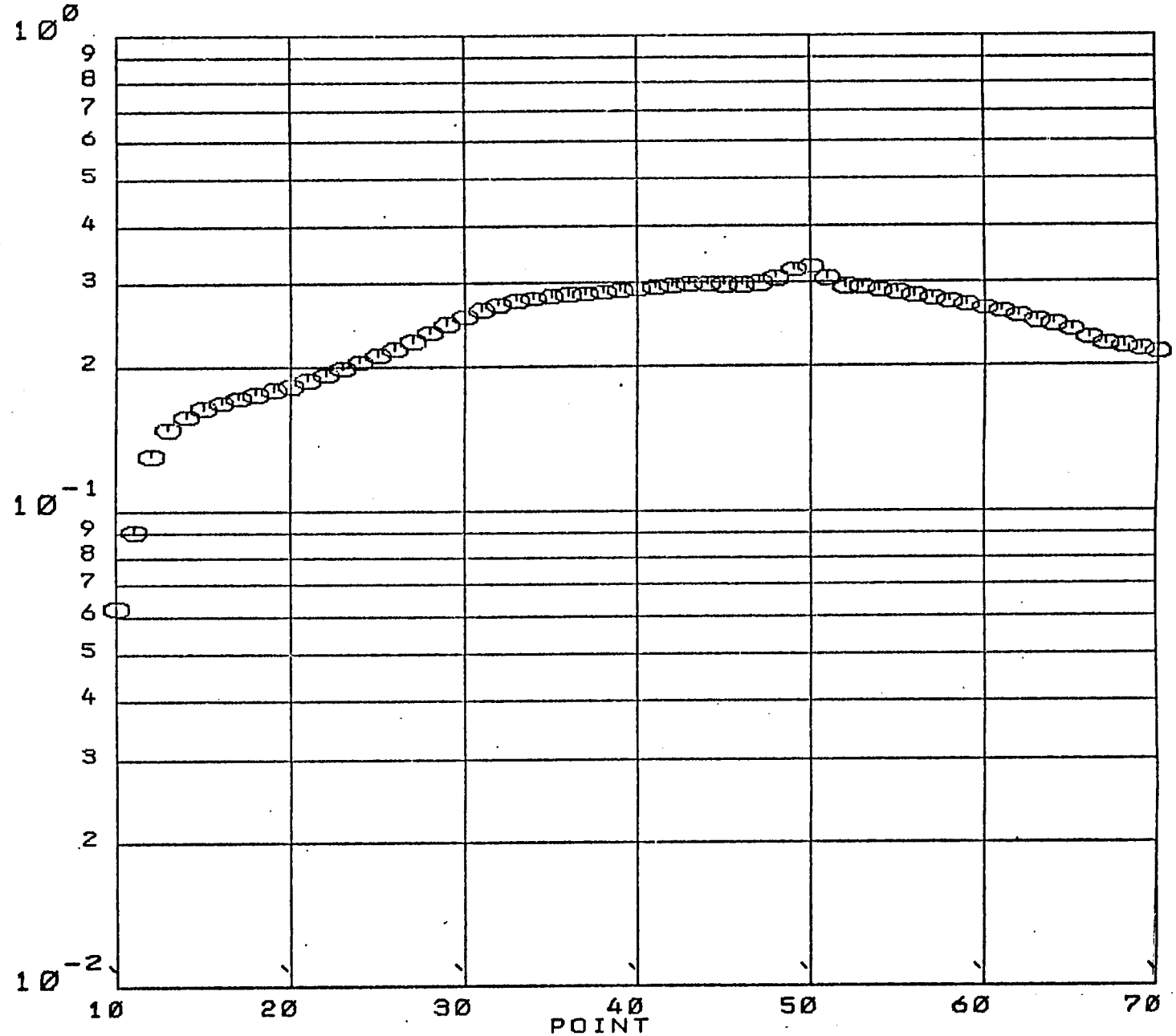


ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

RE/FT 3.51
ALPHA 30.05
LINE 80

GROUP 24



H(.9TO)
/HAFA

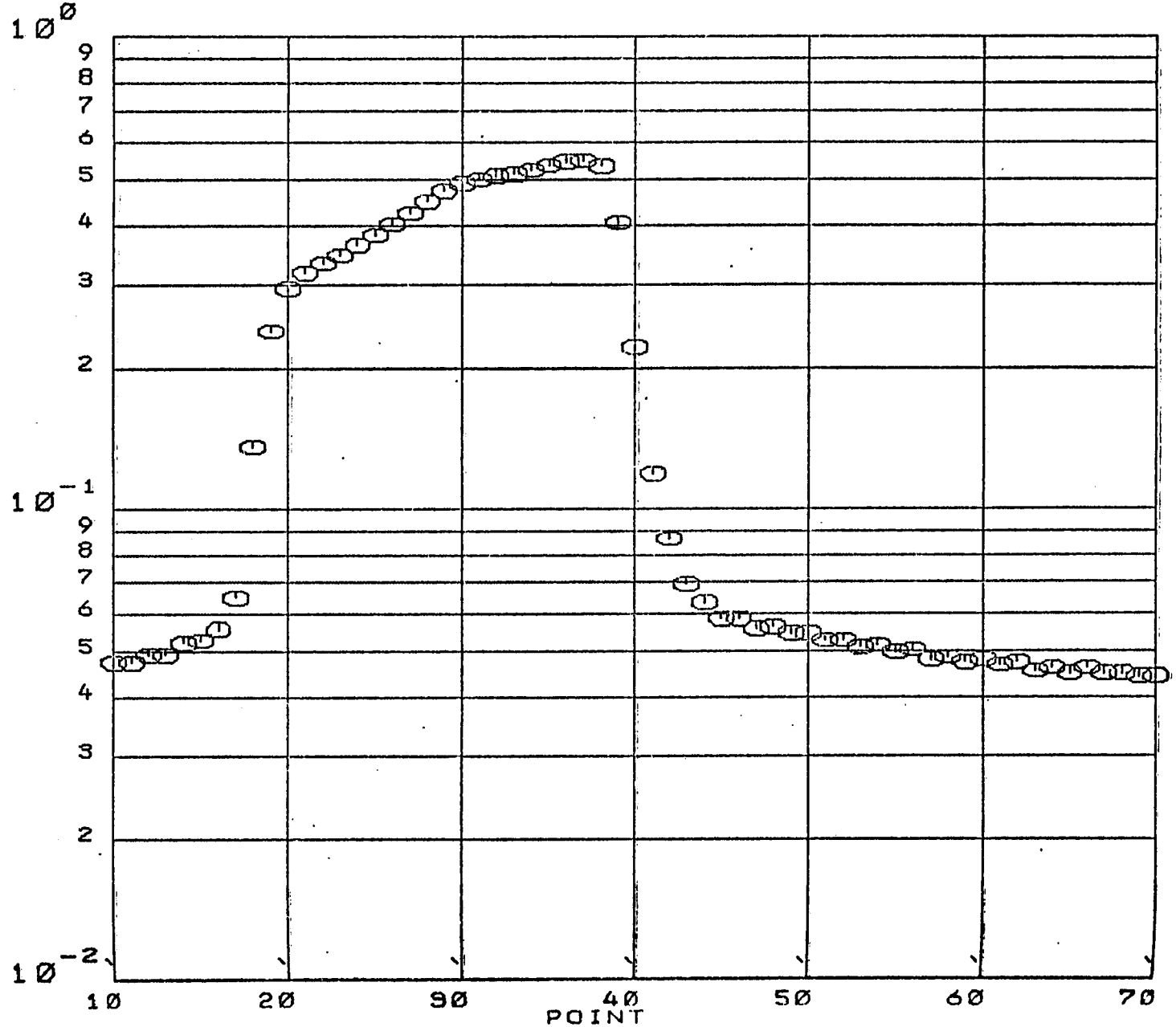
C-60 305

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3/3 /78
V41B-P4A

NASA/AI OH90

RE/FT 3.48
ALPHA 40.09
LINE 51

GROUP 25



H(.9TO)
/HAFA

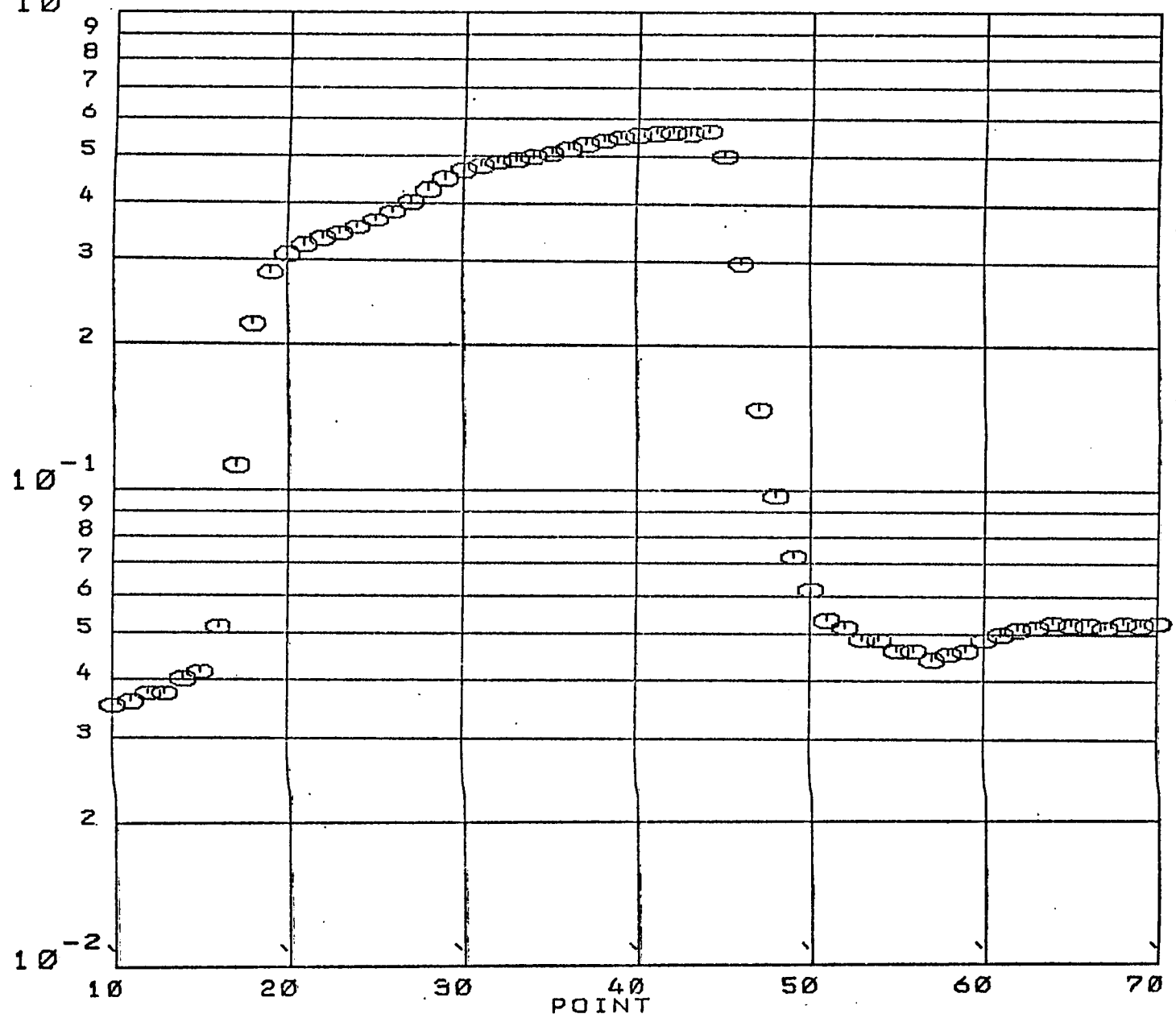
C-61 307

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 3.48
ALPHA 40.09
LINE 56

GROUP 25



H(.9TO)
/HAFR

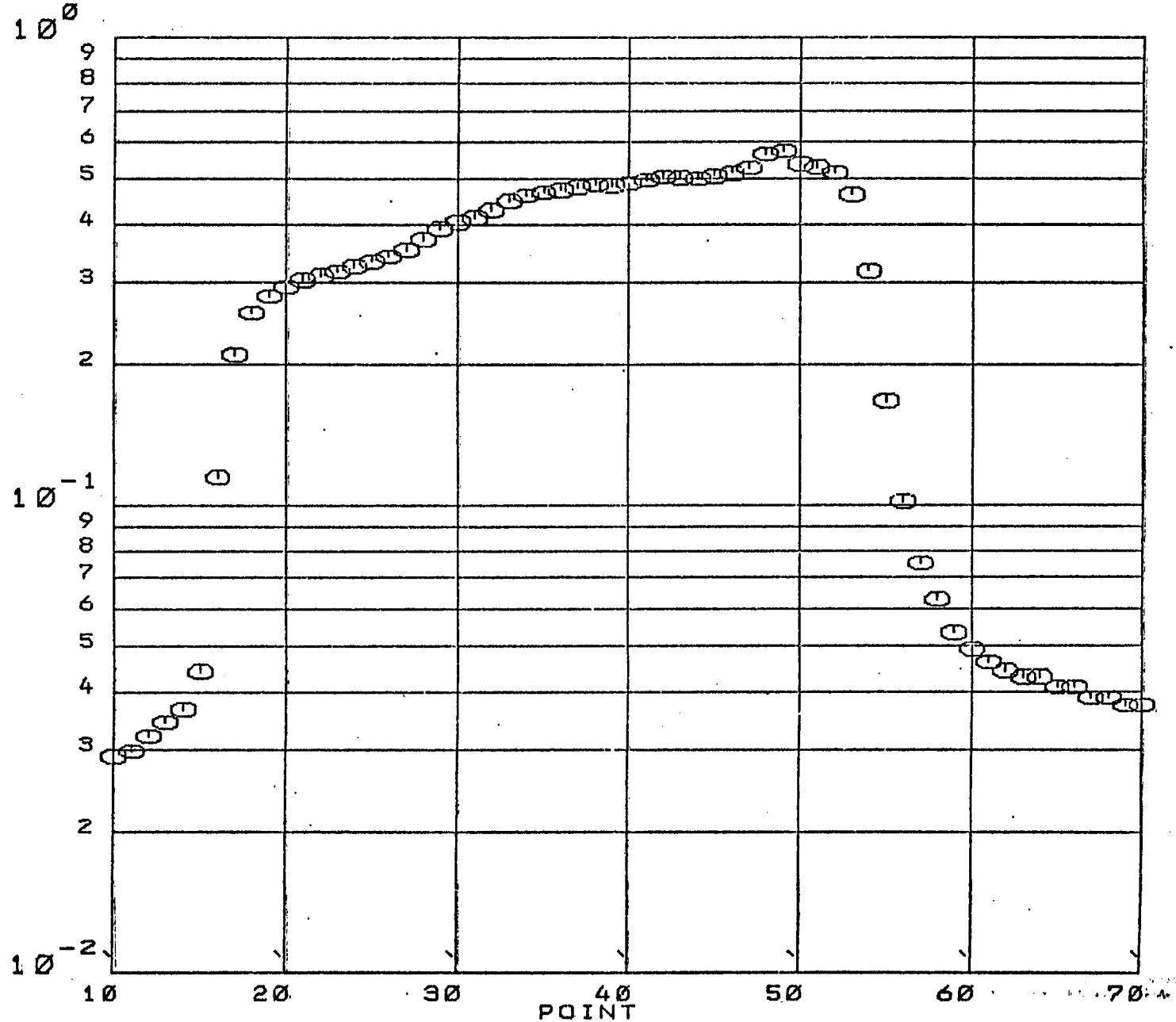
C-62

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

RE/FT 3.48
ALPHA 40.09
LINE 63

GROUP 25

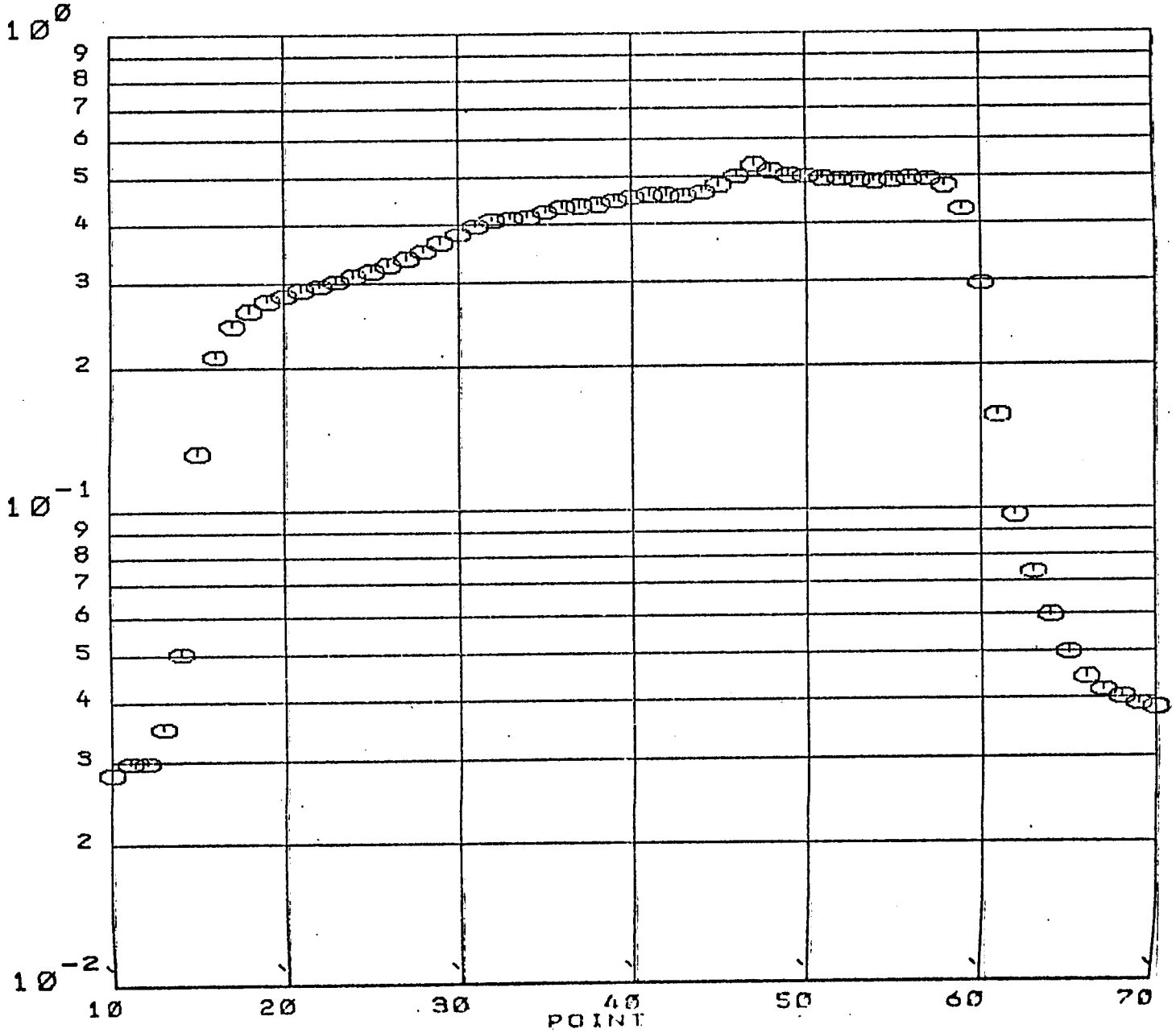


ARO,INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 3.48
ALPHA 40.09
LINE 68

GROUP 25



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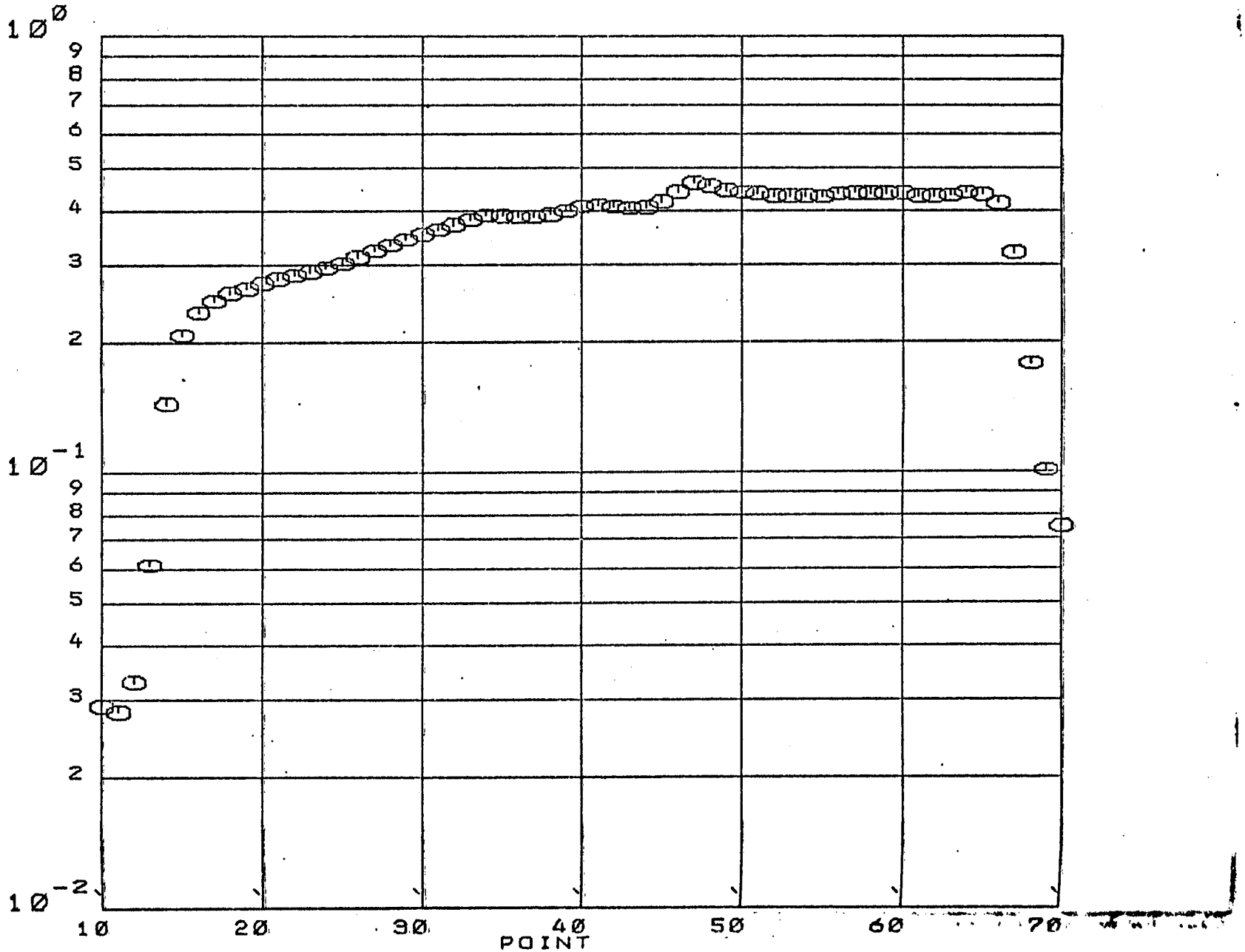
/HAFR

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

RE/FT 3.48
ALPHA 40.09
LINE 74

GROUP 25



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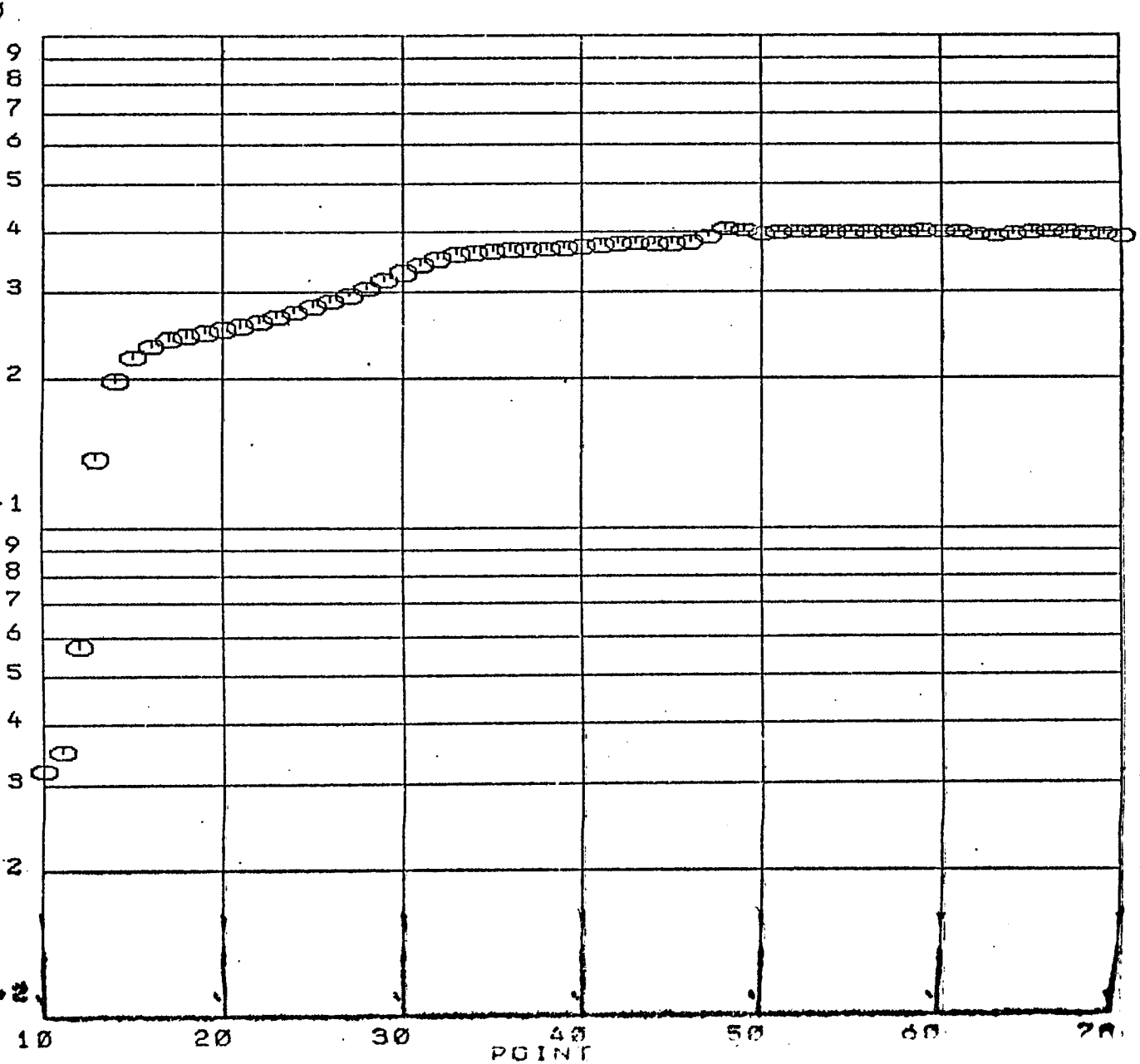
/HAFR

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

AE/FT 3.48
ALPHA 40.09
LINE 80

GROUP 25



C-66

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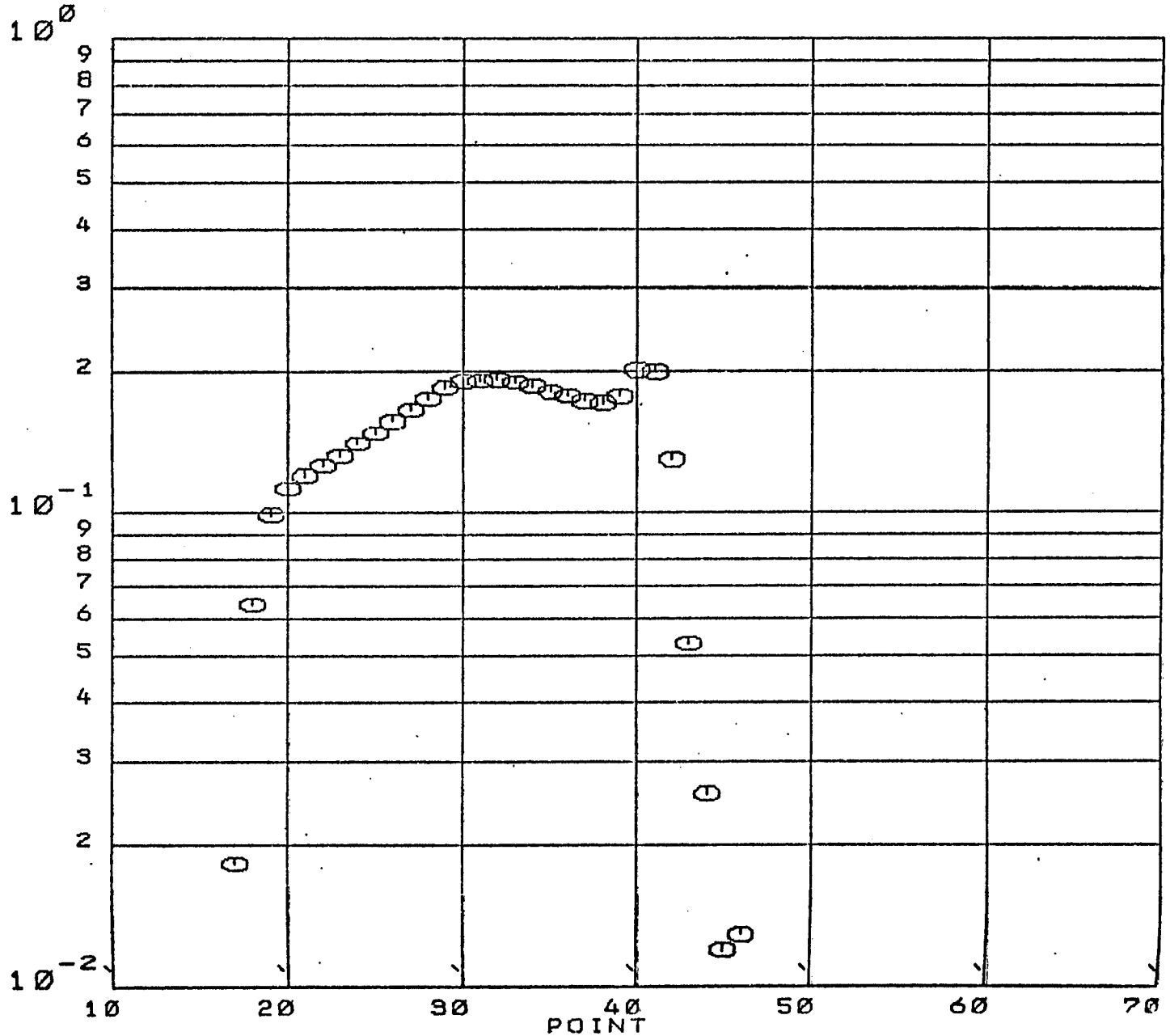
/HRFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.51
ALPHA 30.03
LINE 51

GROUP 43



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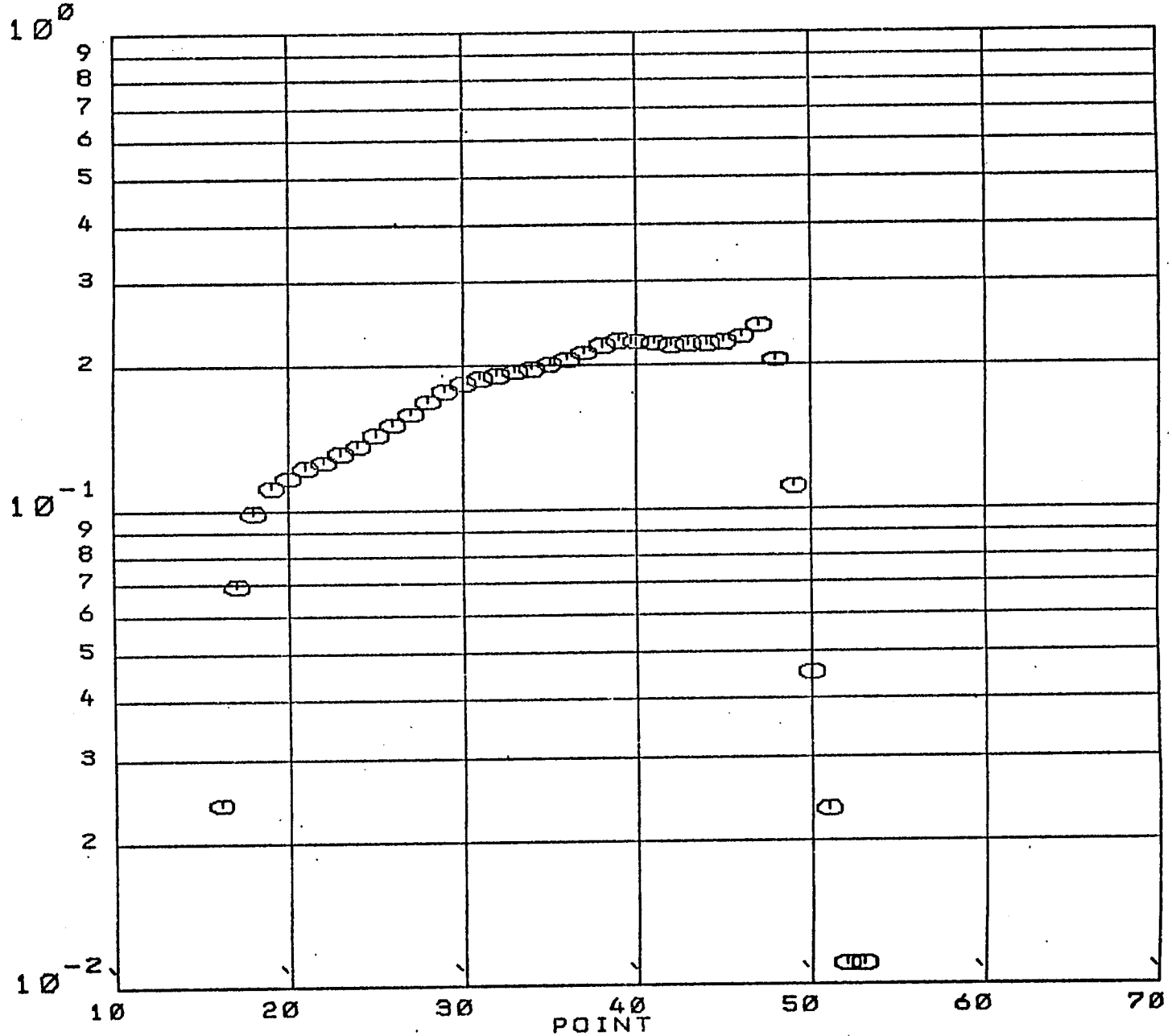
/HBFB

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.51
ALPHA 90.03
LINE 56

GROUP 43



H(.9TO)
/HRFR

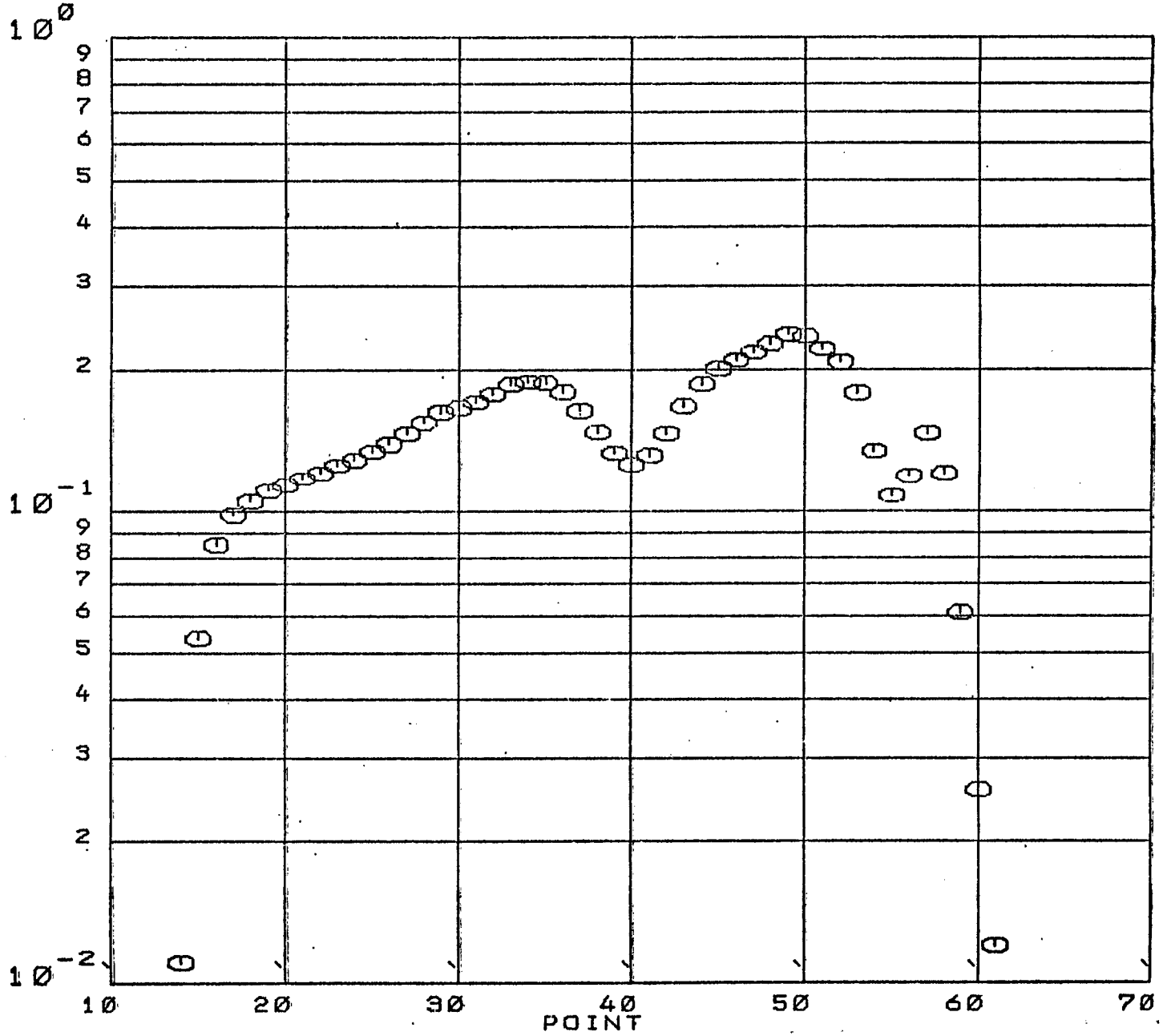
C-68 14

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

AE/FT 1.51
ALPHA 30.03
LINE 63

GROUP 43



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/HAFA

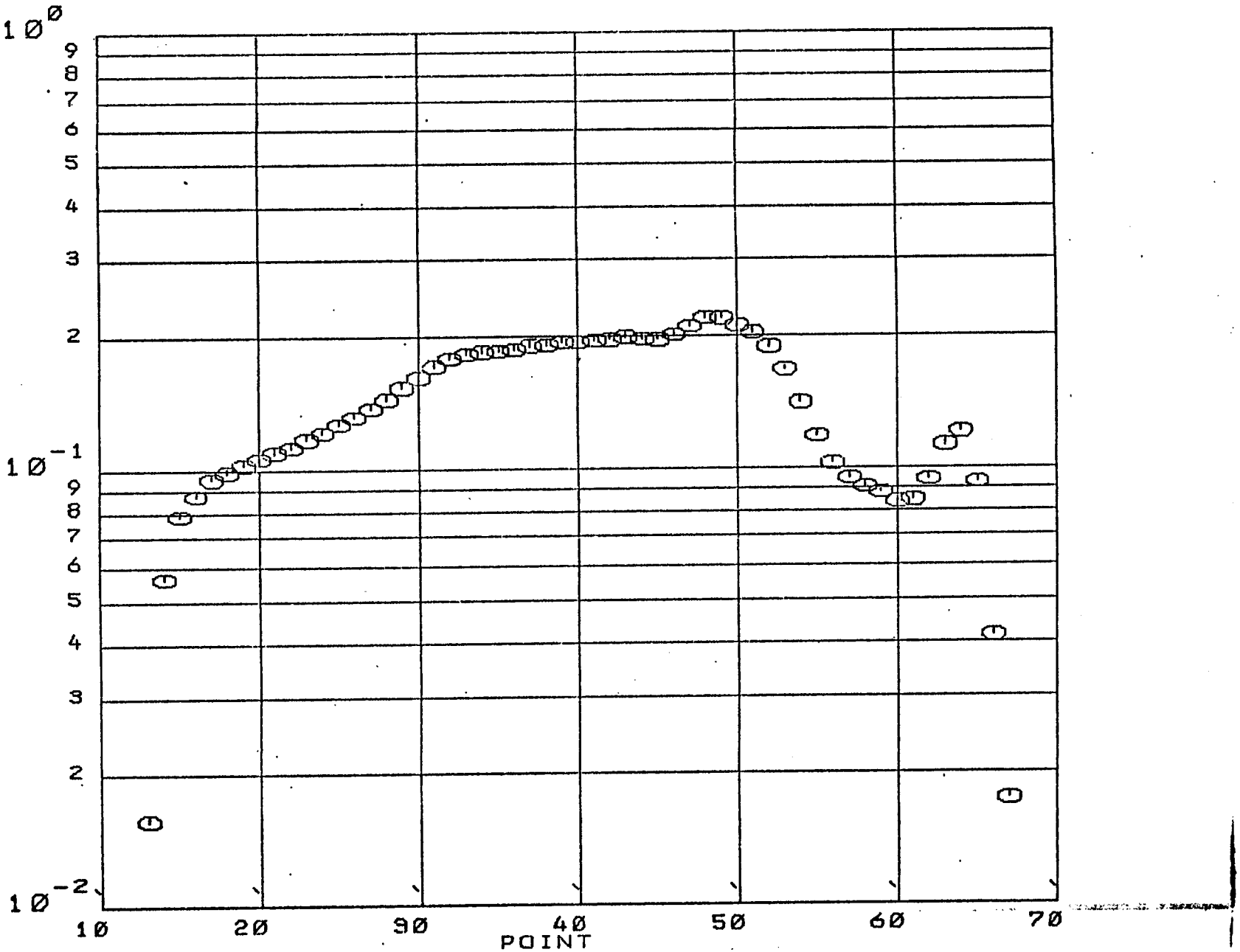
C-69-15

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

RE/FT 1.51
ALPHA 30.03
LINE 68

GROUP 43



C-70 6

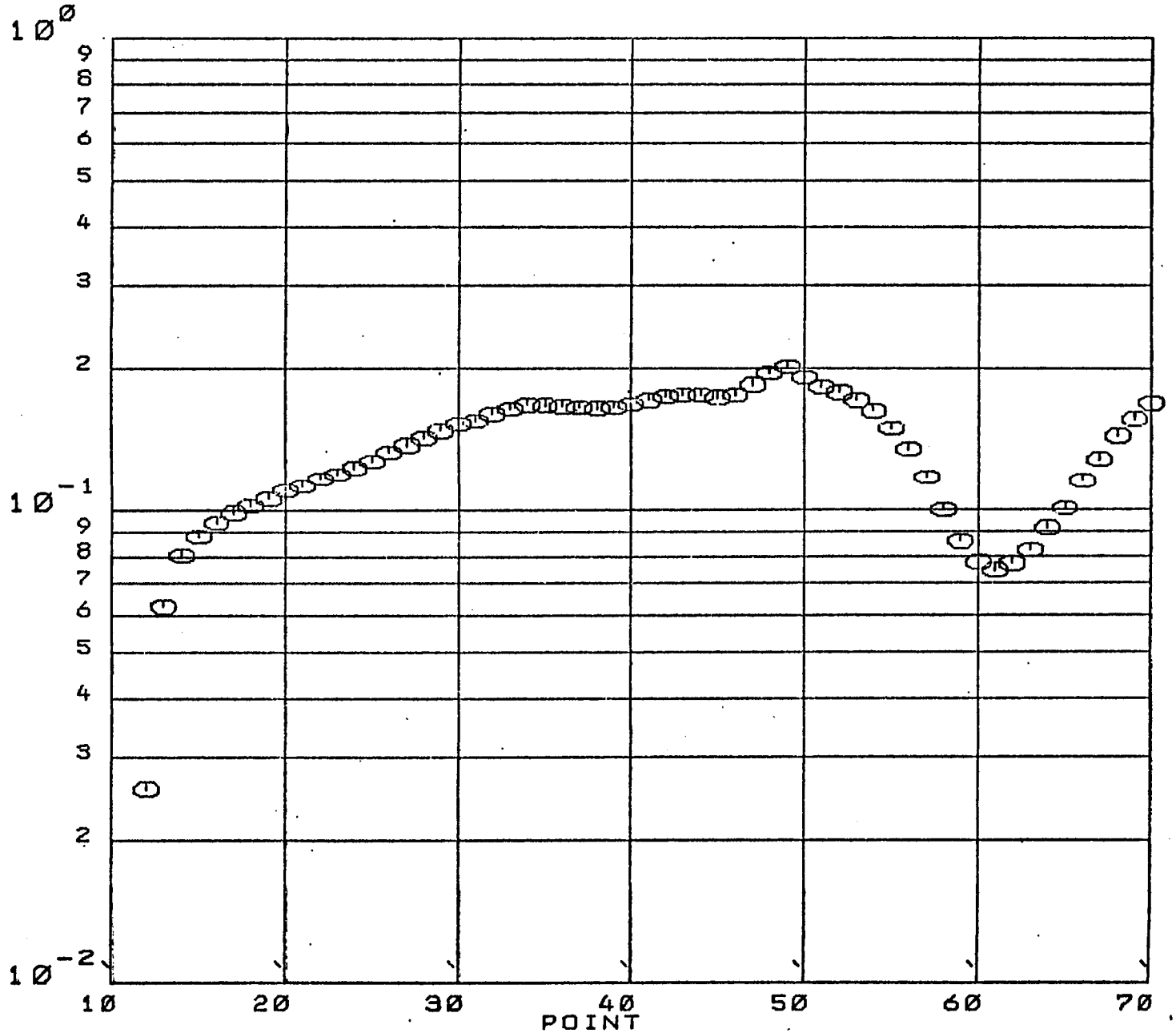
H(.9TO)
/HAFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.51
ALPHA 30.03
LINE 74

GROUP 43



H(.9TO)
/HRFR

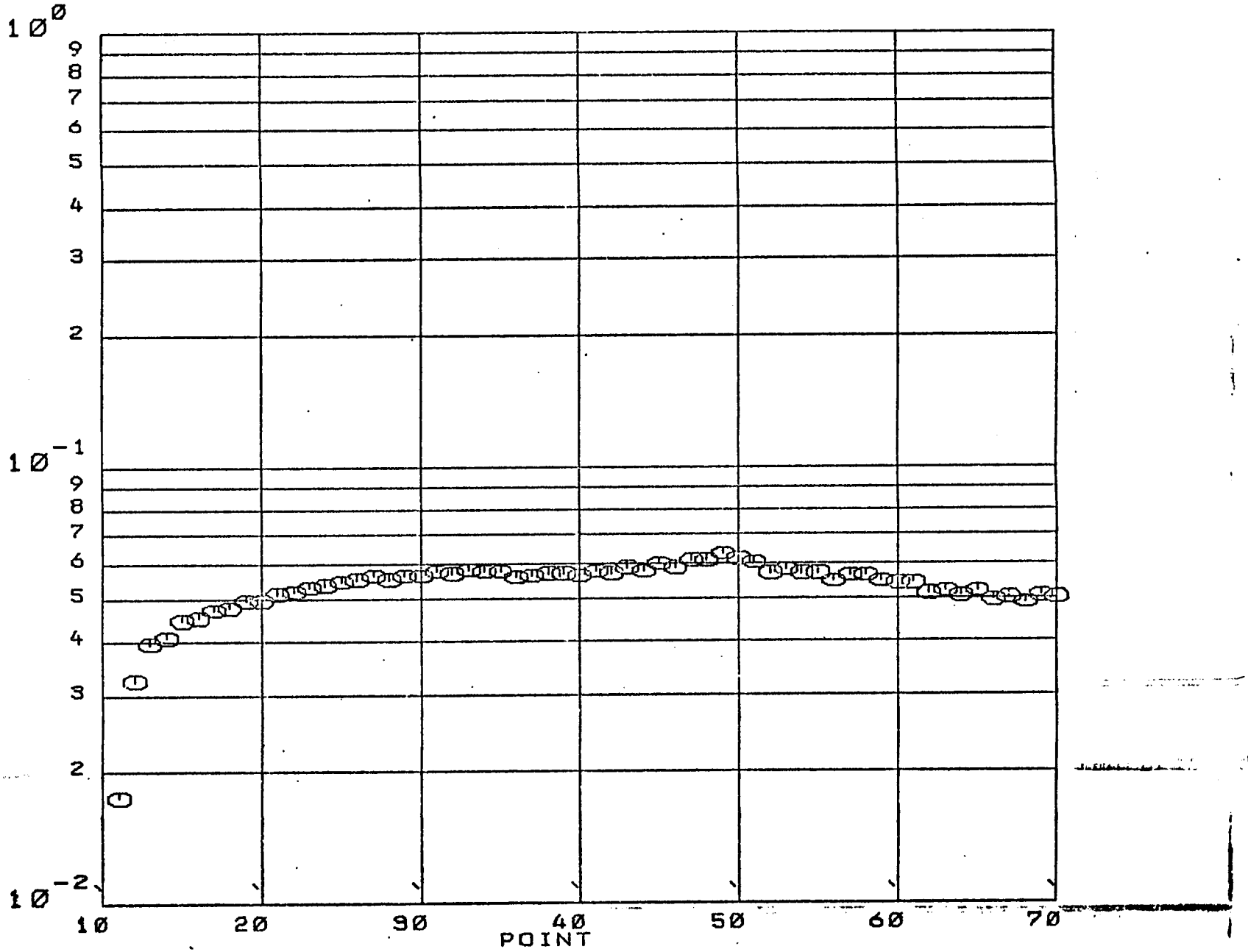
C-71 317

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3. /78
V41B-P4A

NASA/AI OH90

AE/FT 1.51
ALPHA 30.03
LINE 80

GROUP 43



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/HAFR

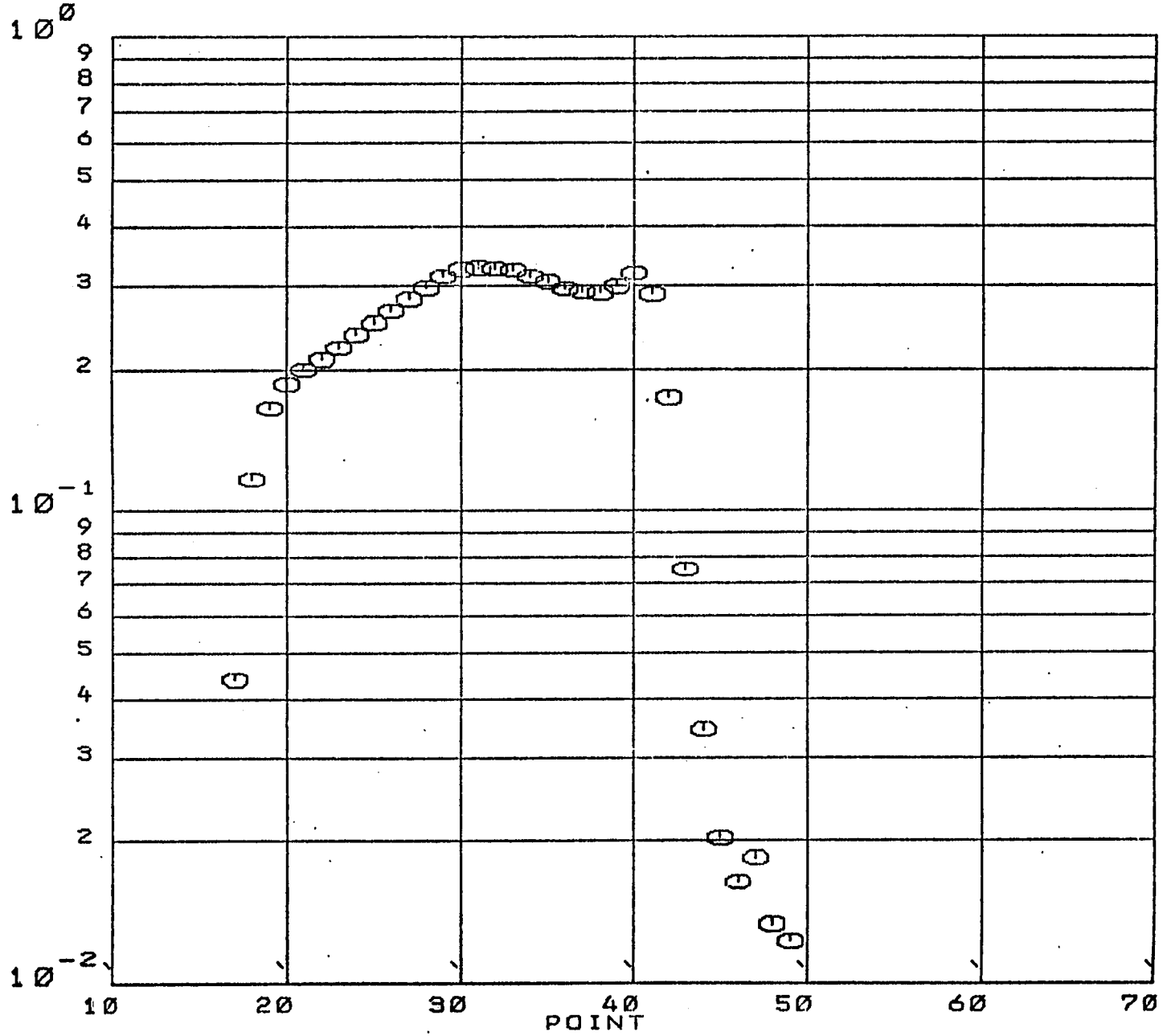
C-72 318

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.52
ALPHA 29.95
LINE 51

GROUP 44



H(.9TO)
/HRFR

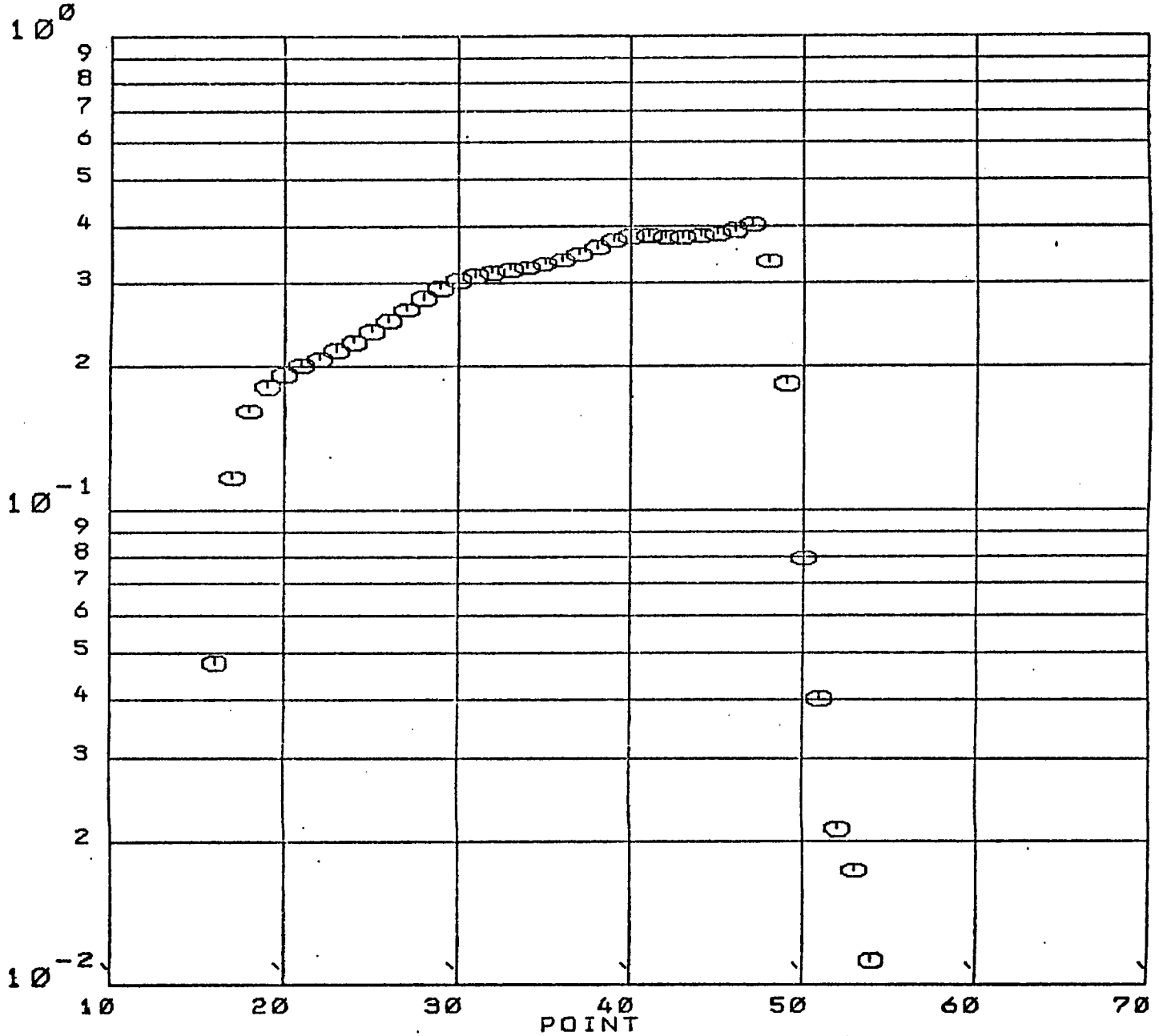
C-73 319

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.52
ALPHA 29.95
LINE 56

GROUP 44



C-74 20

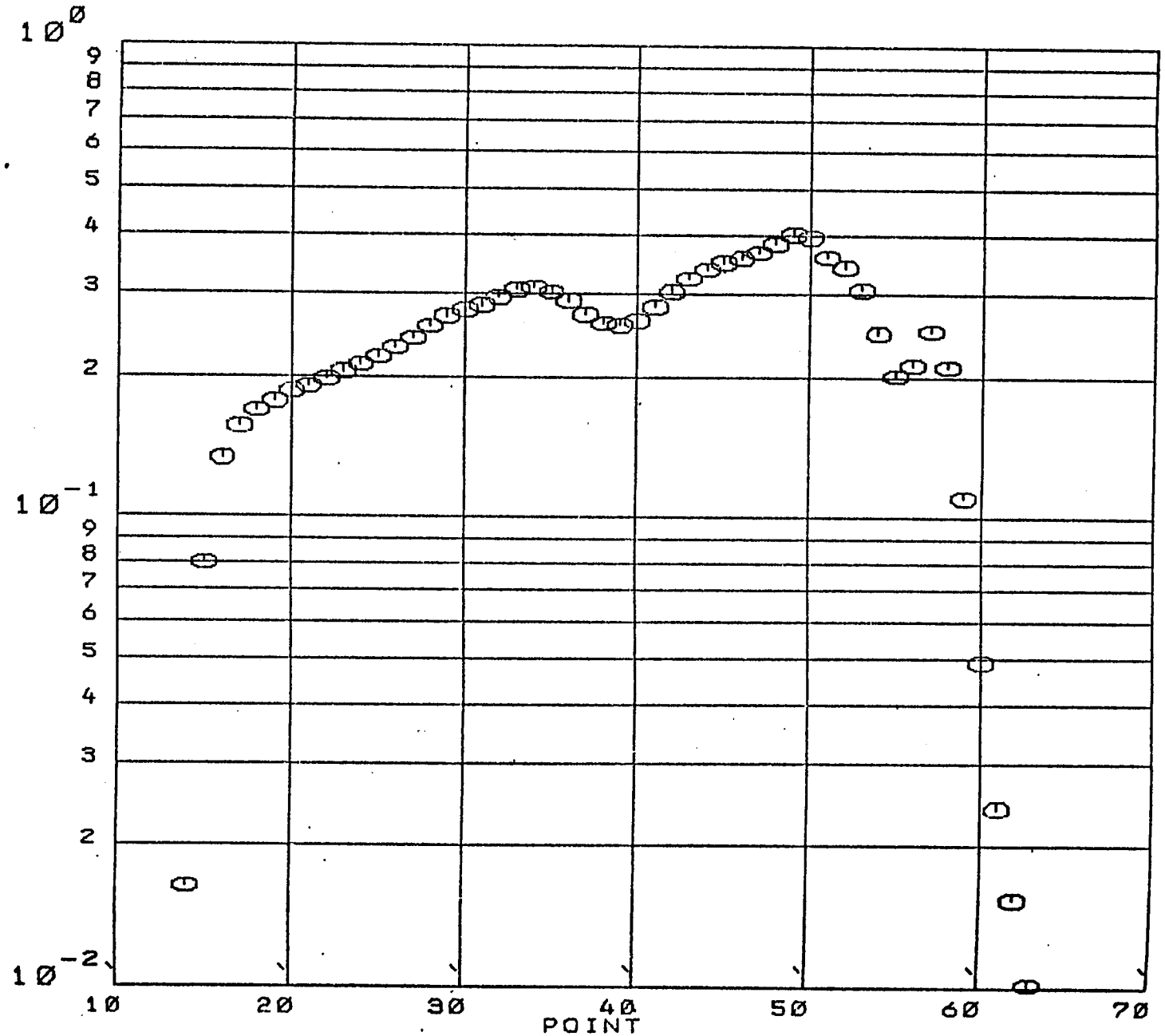
H(.9TO)
/HRFR

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

RE/FT	1.52
ALPHA	29.95
LINE	63

GROUP 44



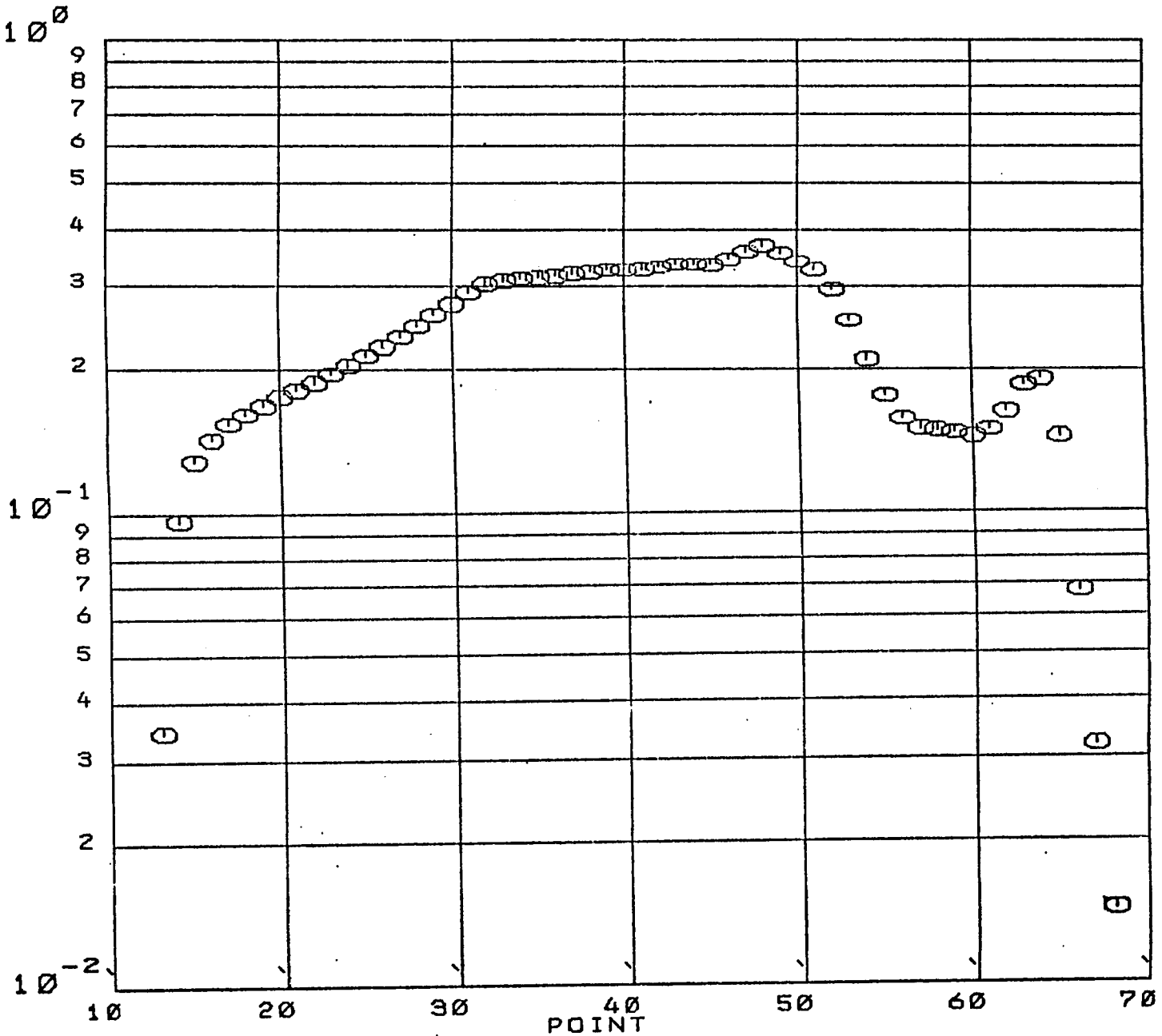
H(.9TO)
/HAFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

RE/FT 1.52
ALPHA 29.95
LINE 68

GROUP 44



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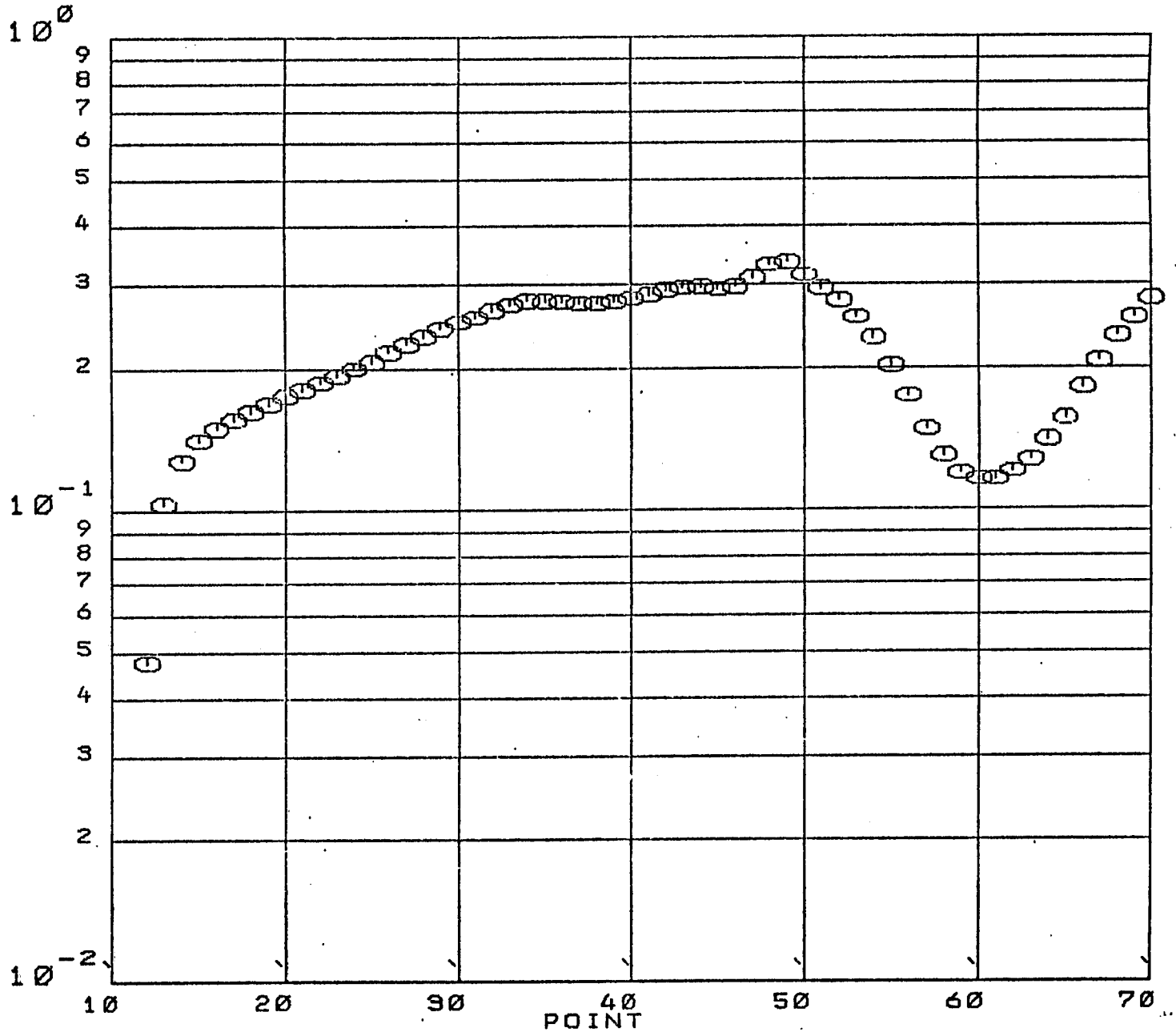
/HAFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

RE/FT 1.52
ALPHA 29.95
LINE 74

GROUP 44



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/HAFA

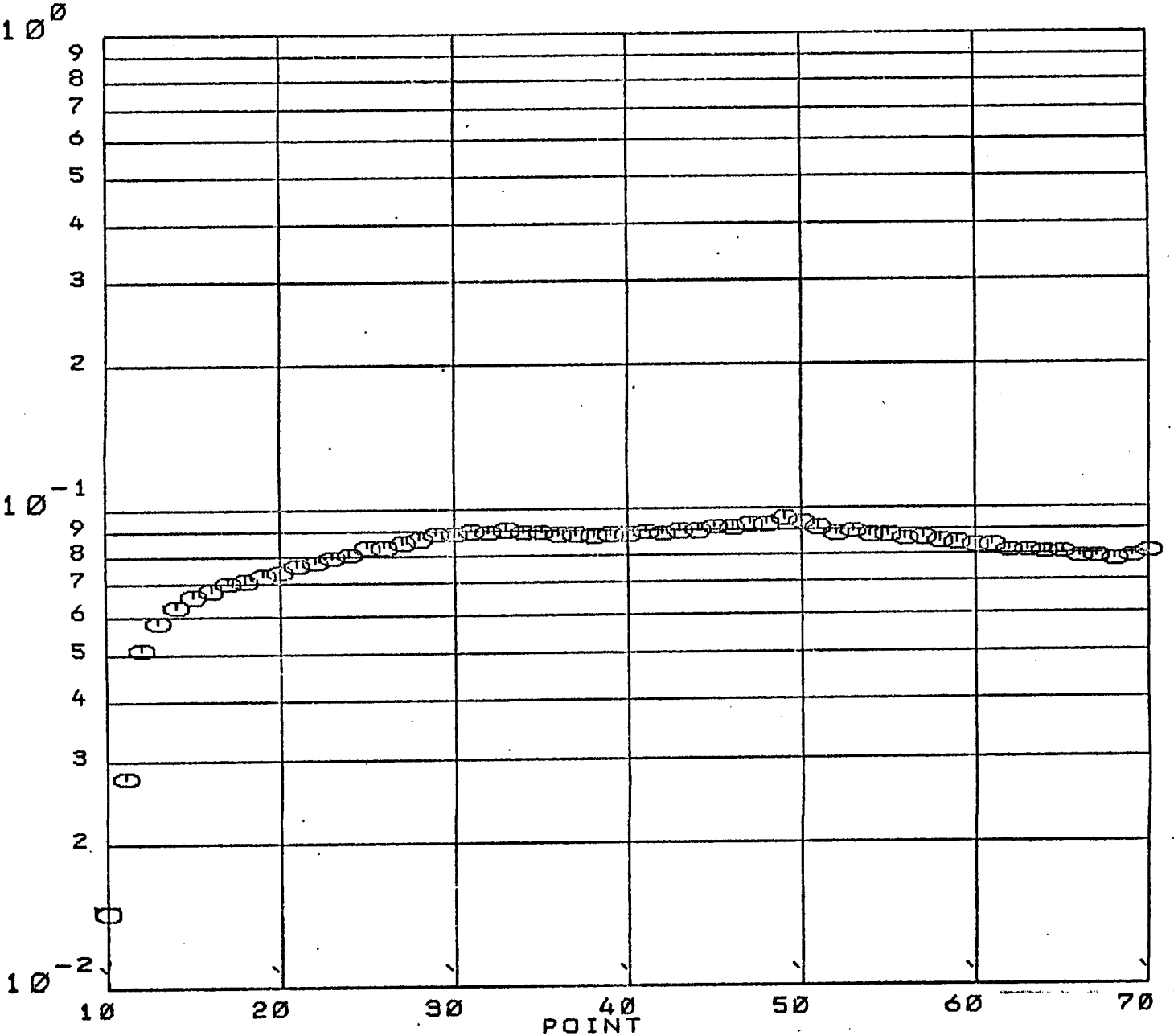
C-77 323

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.52
ALPHA 29.95
LINE 80

GROUP 44



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/HAFA

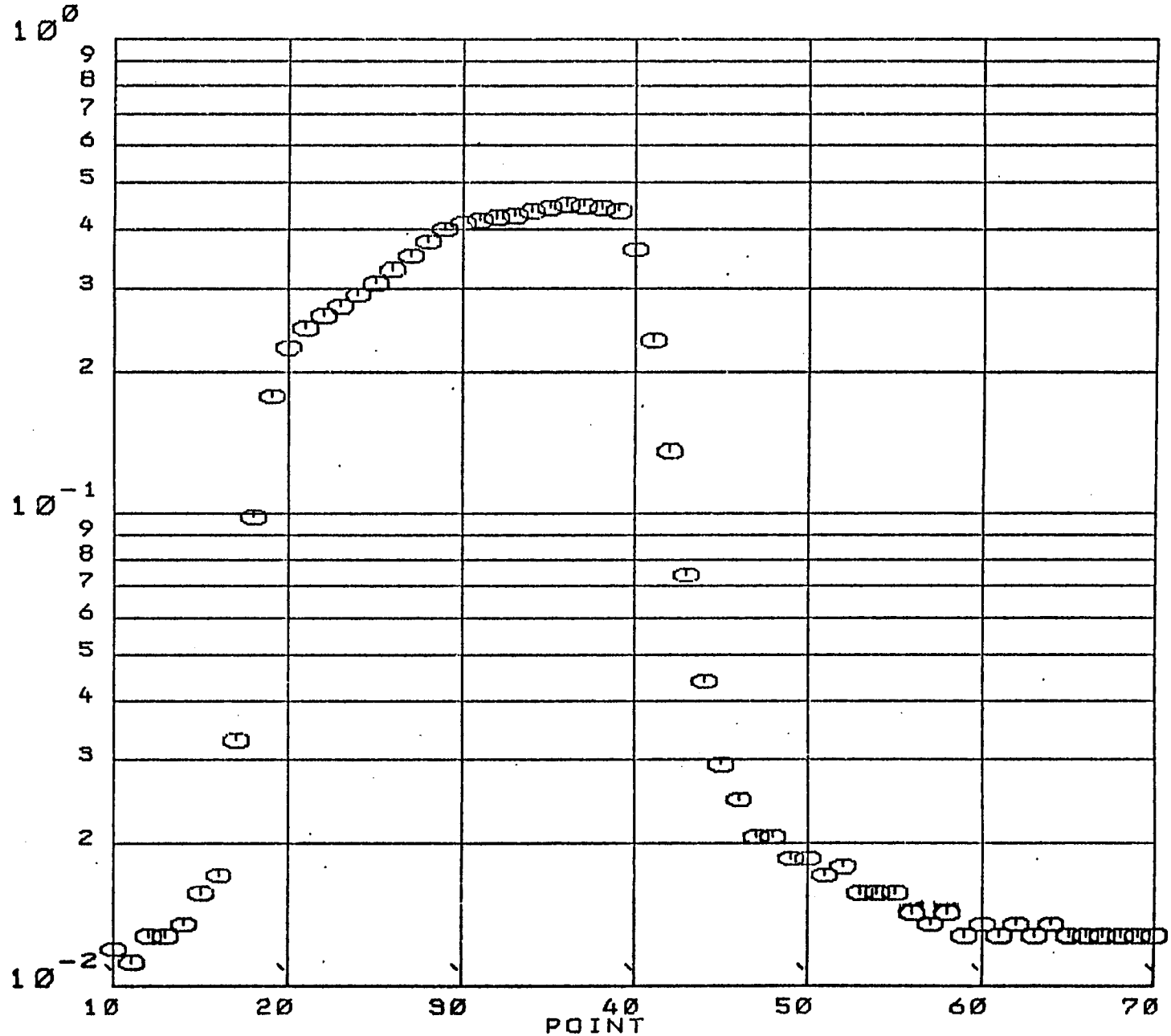
C-78-14

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.50
ALPHA 40.01
LINE 51

GROUP 45



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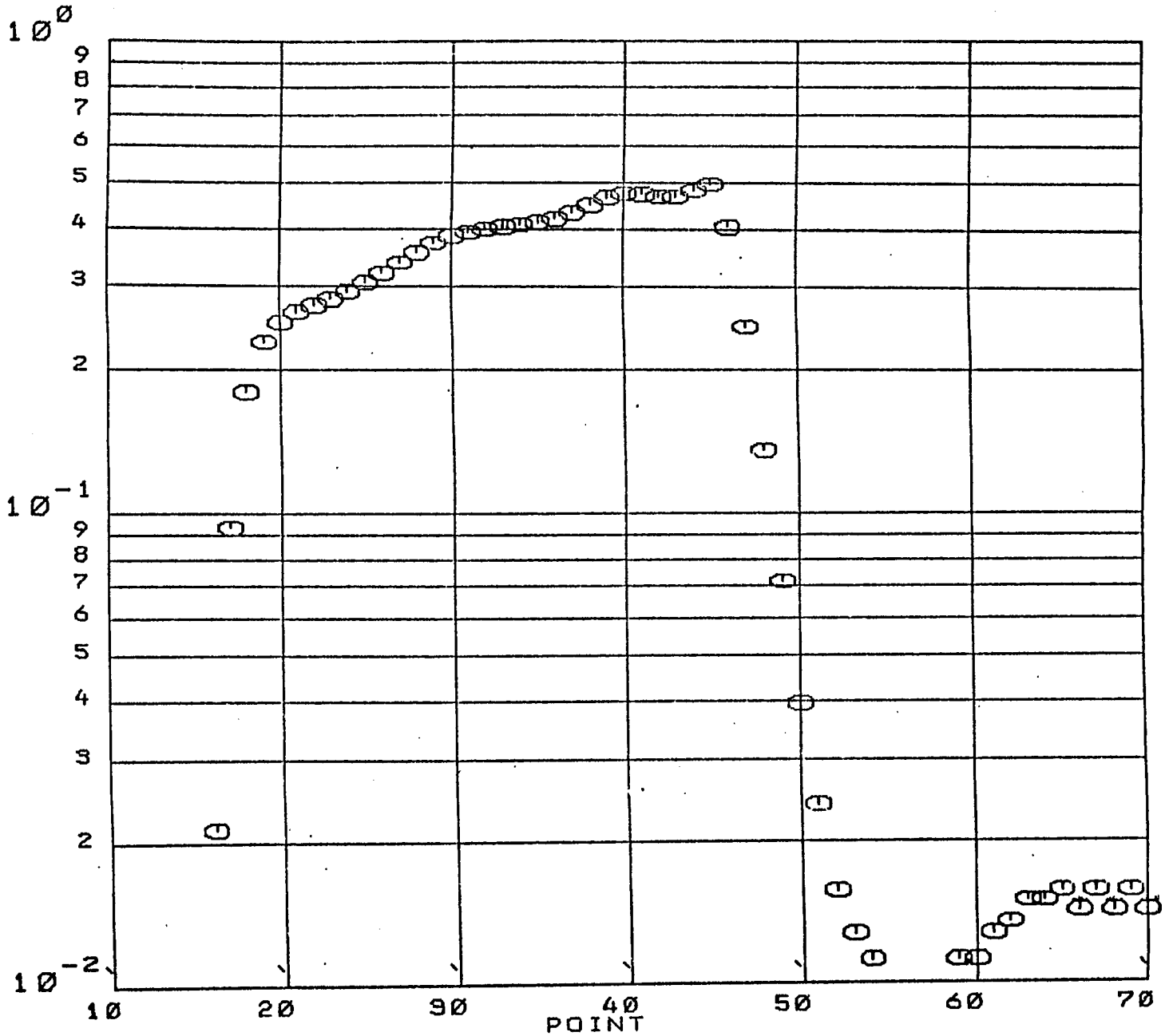
/HAFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.50
ALPHA 40.01
LINE 56

GROUP 45



C-80,26

H(.9TO)

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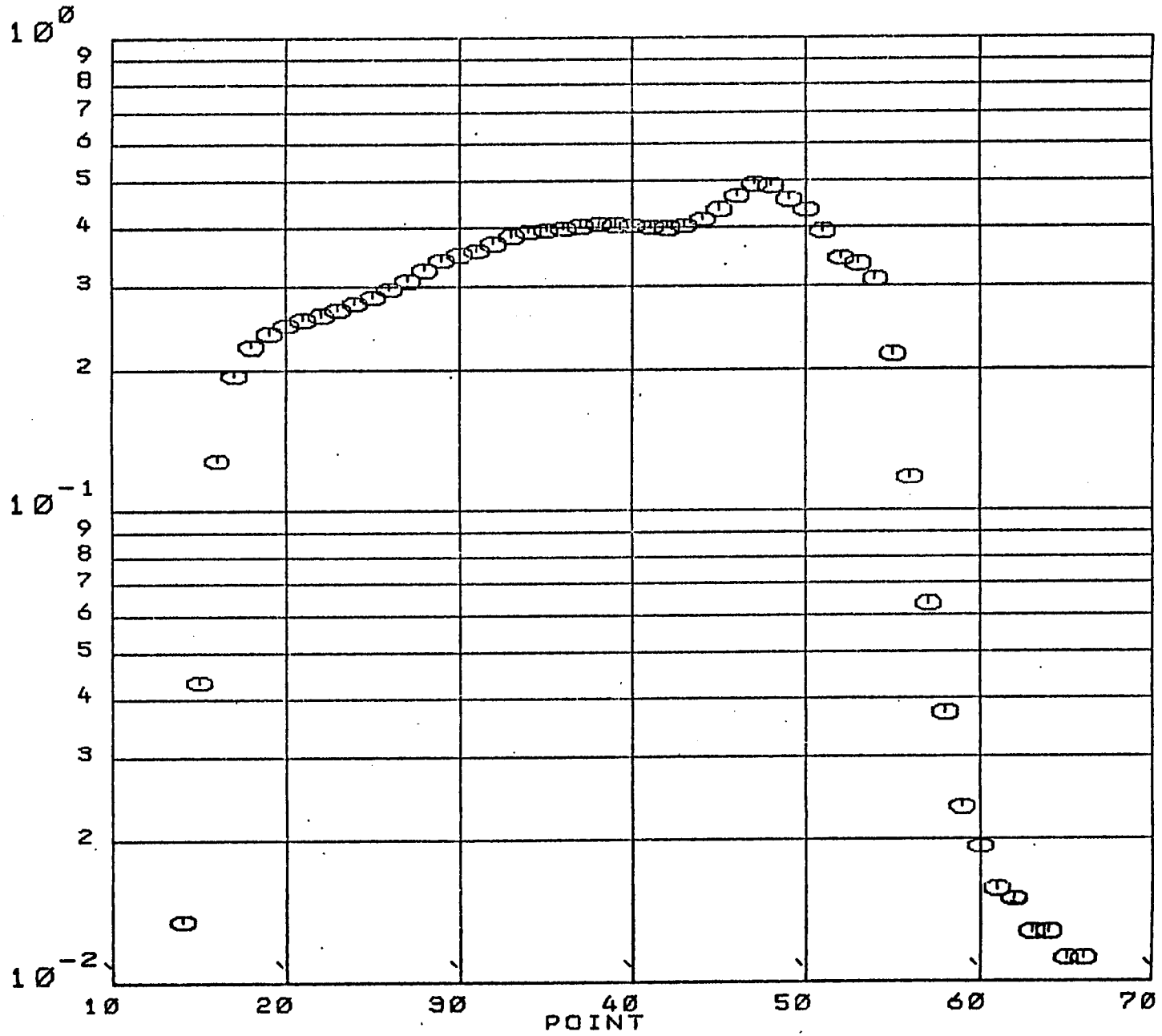
ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI 0H90

RE/FT 1.50
ALPHA 40.01
LINE 63

GROUP 45



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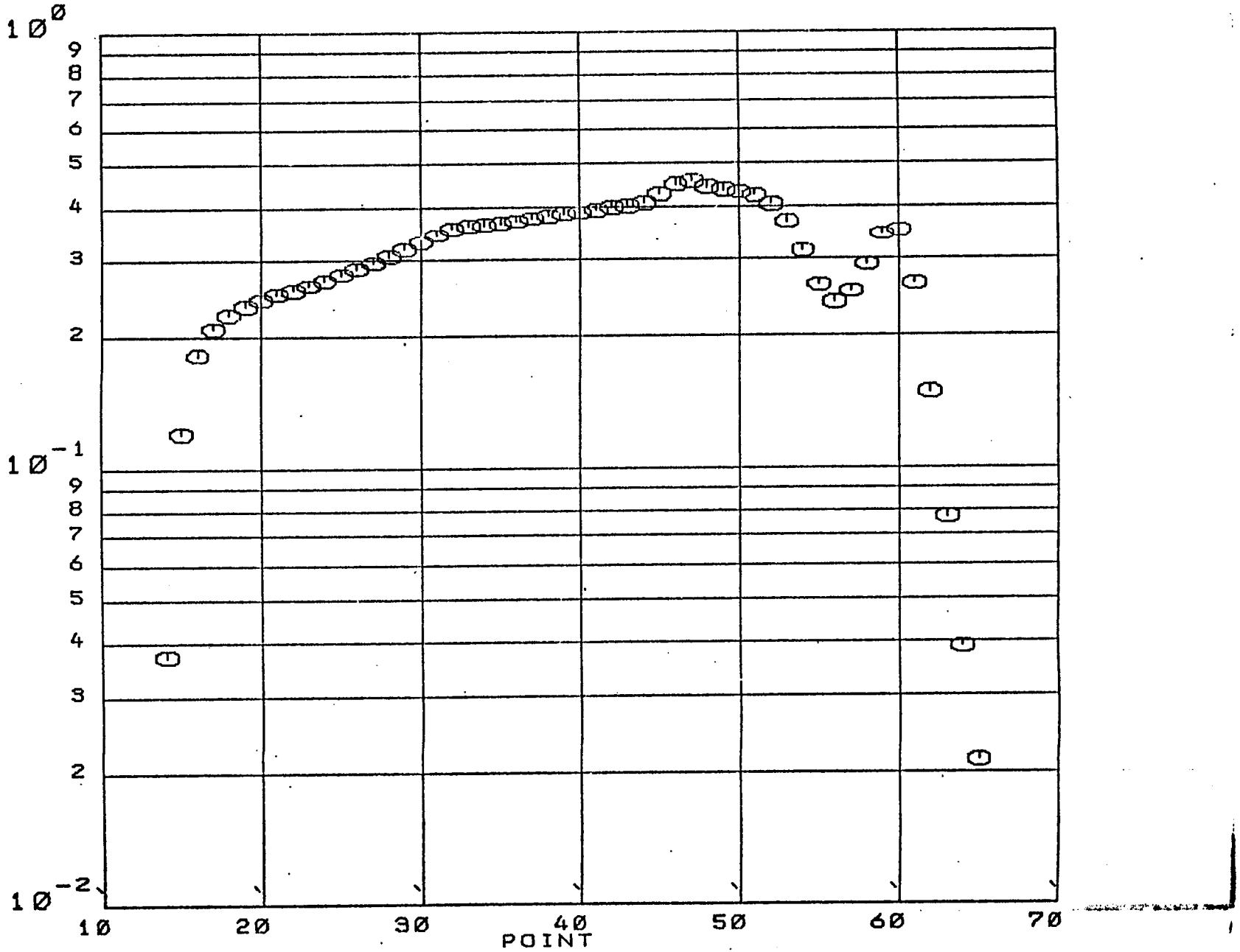
C-81-27

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.50
ALPHA 40.01
LINE 68

GROUP 45



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/HAFA

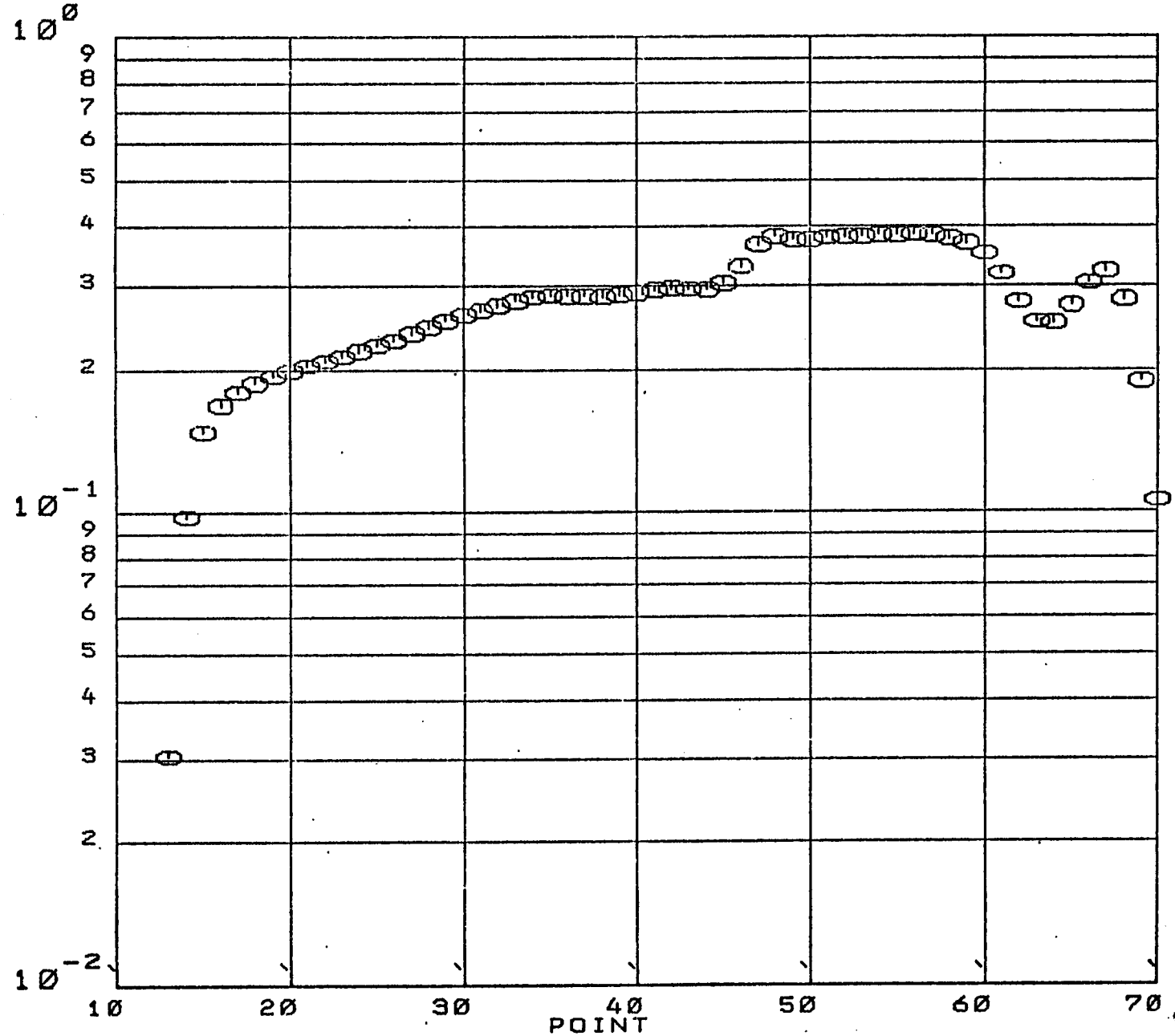
C-82
C78

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3/3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.50
ALPHA 40.01
LINE 74

GROUP 45



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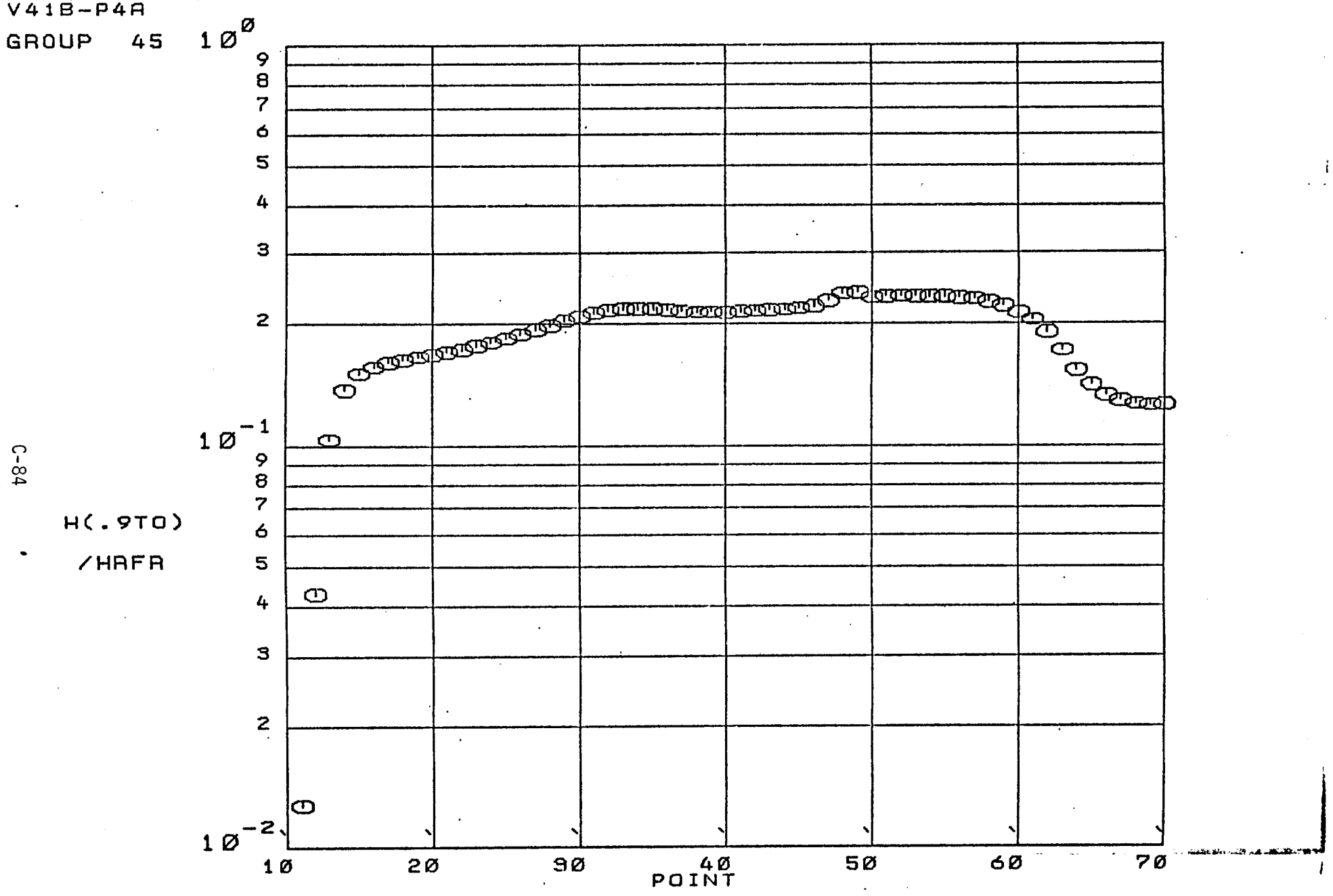
/HAFA

C-83
C7J


ARO,INC(AEDC)
ARNOLD AFS, TN
DATE 3/3/78
V41B-P4A
NASA/RI OH90
AE/FT 1.50
ALPHA 40.01
LINE 80
GROUP 45
10^0
9
8
7
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5
4
3
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10^-1
9
8
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2
10^-2
H(.9TO)
/HAFR
10
20
90
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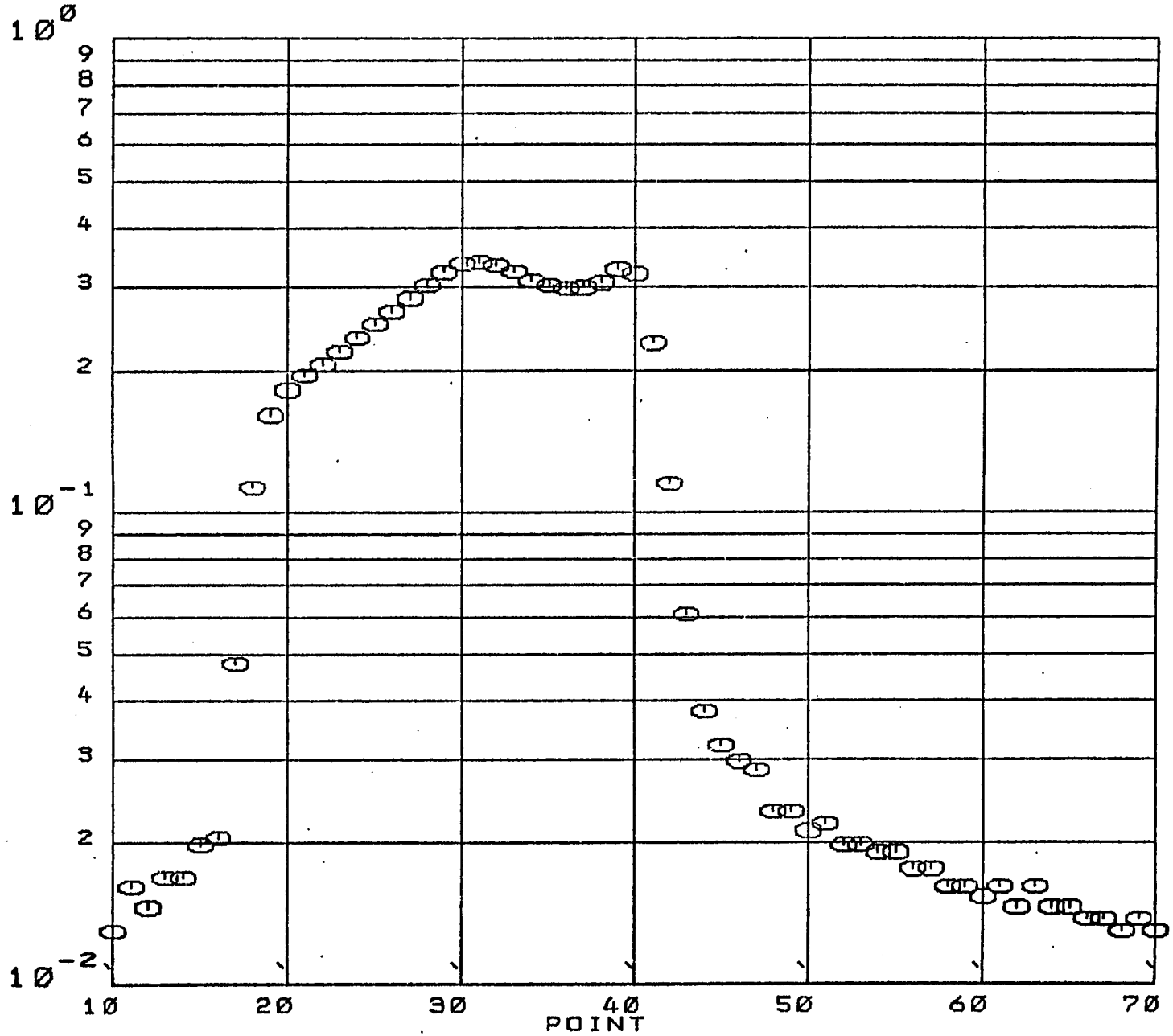
POINT

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI 0H90

RE/FT 1.97
ALPHA 30.03
LINE 51

GROUP 46



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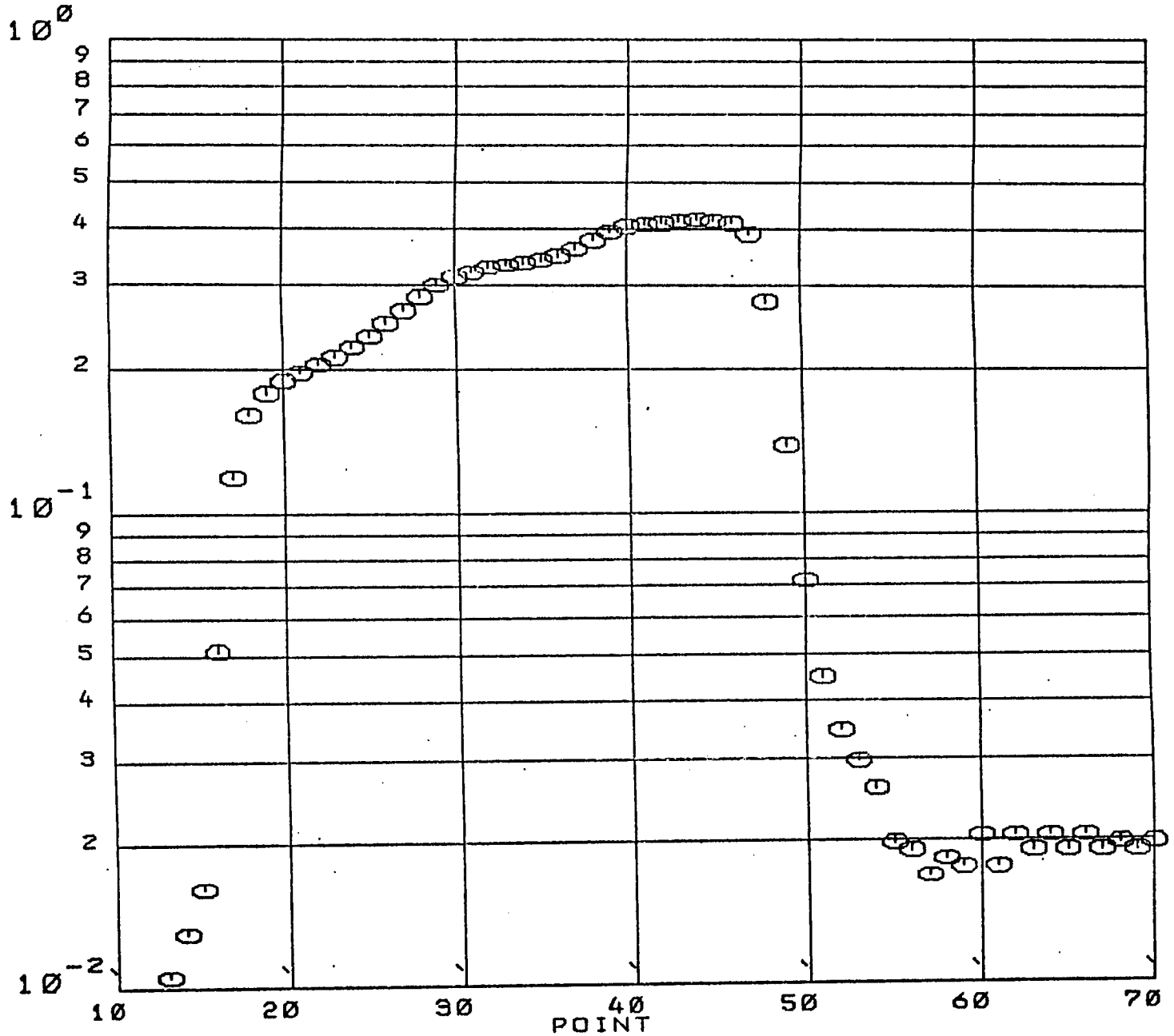
/HRFR

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI 0H90

RE/FT 1.97
ALPHA 30.09
LINE 56

GROUP 46



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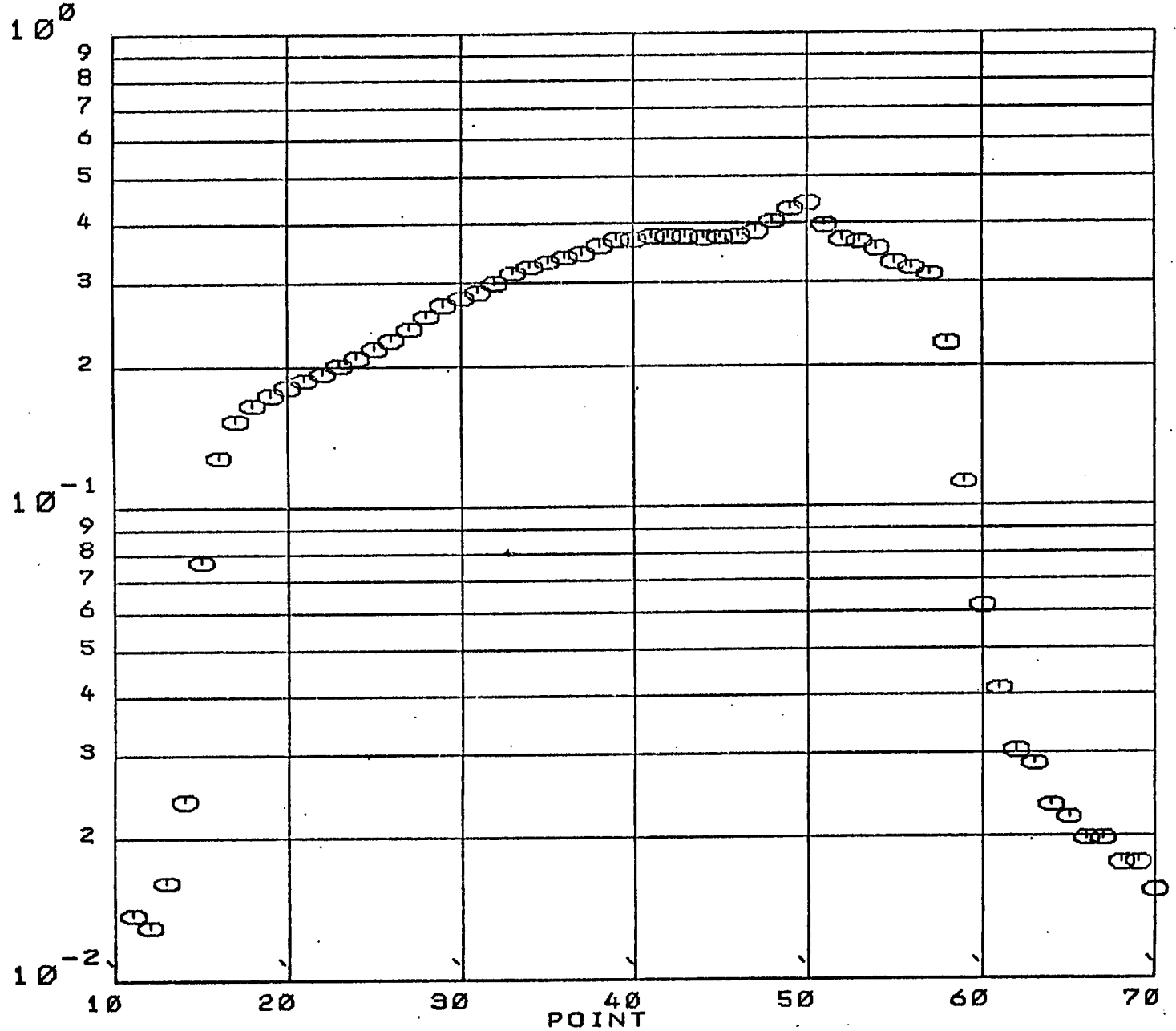
/HRFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.97
ALPHA 90.03
LINE 63

GROUP 46



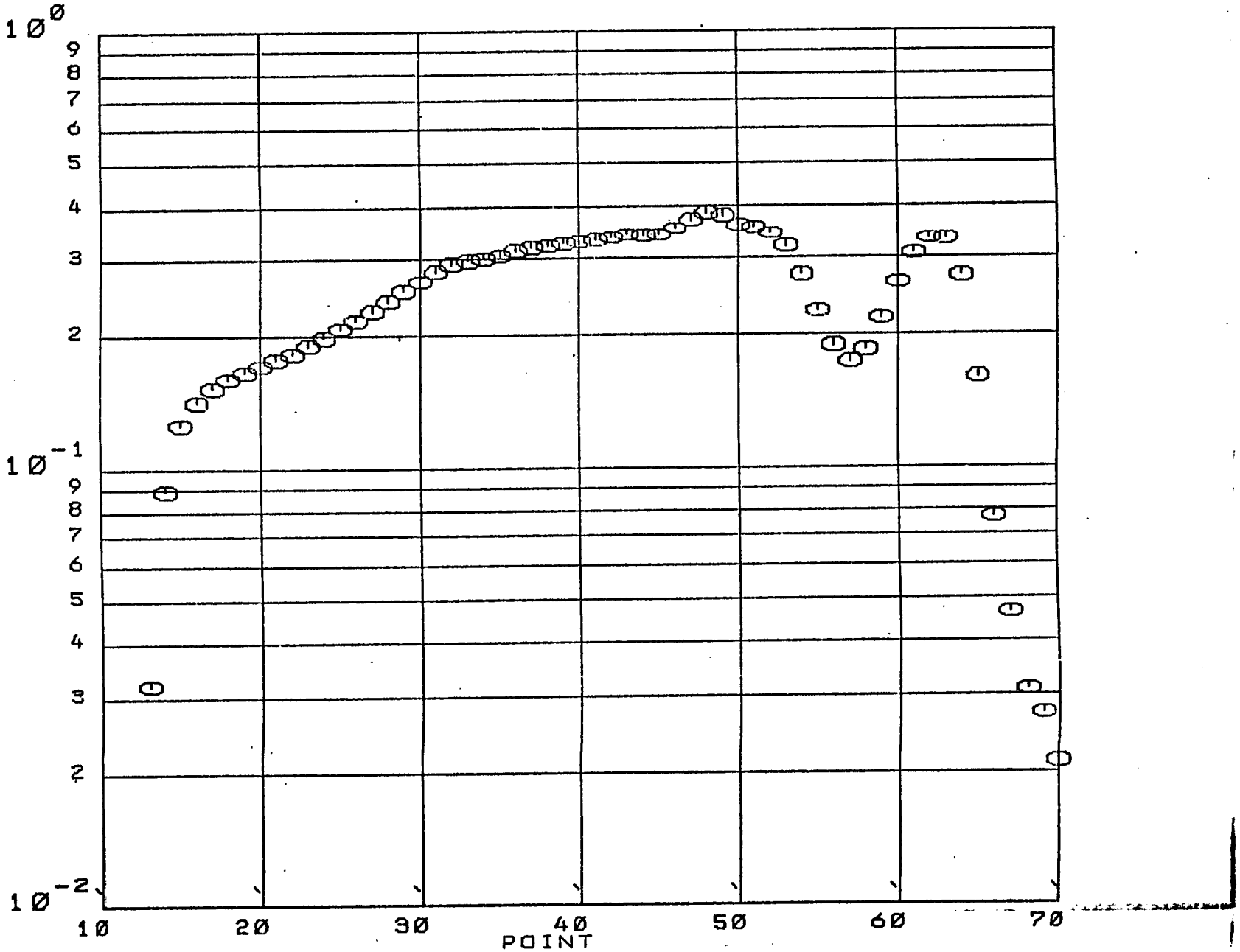
H(.9TO)
/HAFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.97
ALPHA 30.03
LINE 68

GROUP 46



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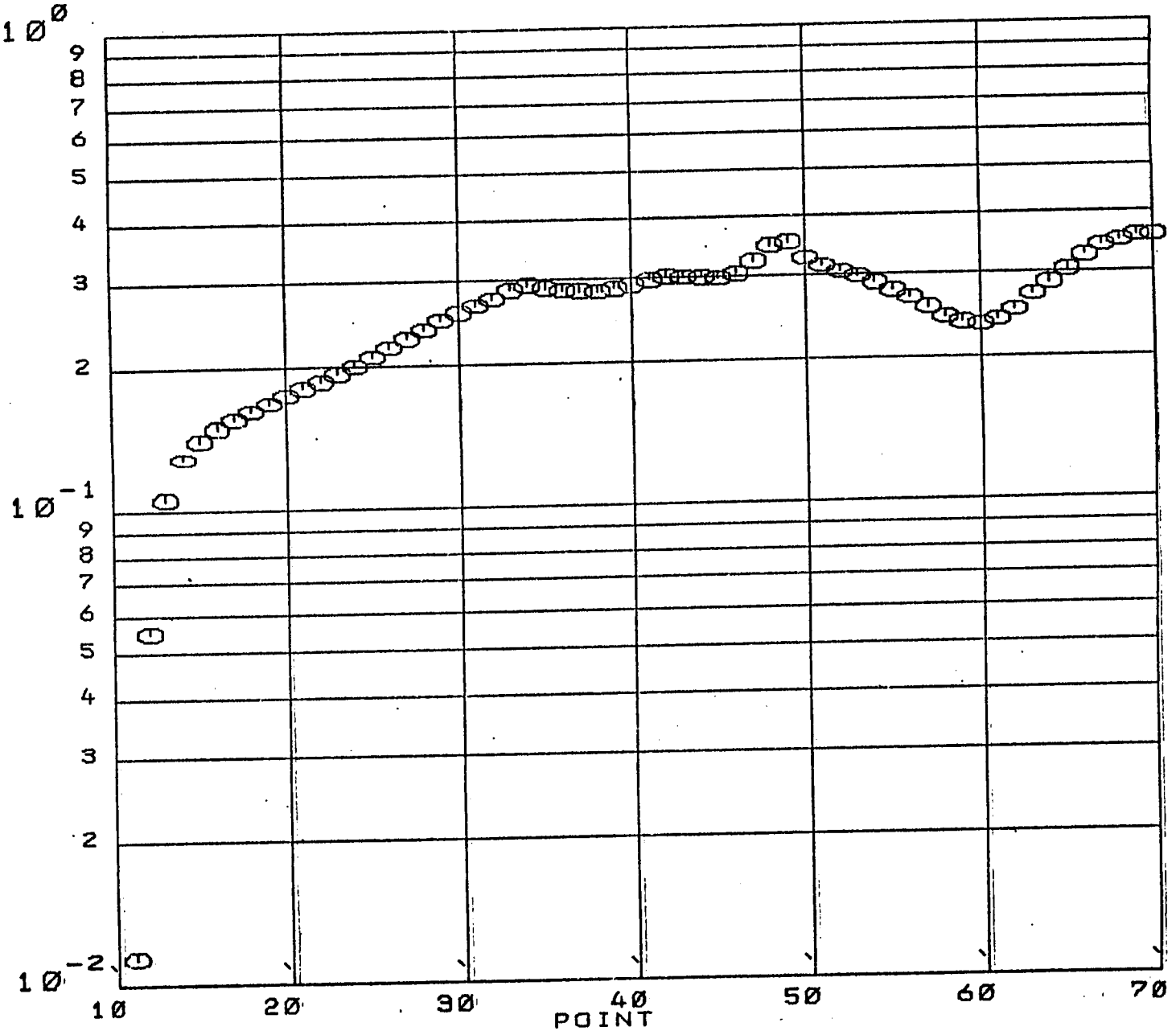
/HAFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

RE/FT 1.97
ALPHA 30.03
LINE 74

GROUP 46



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/HAFA

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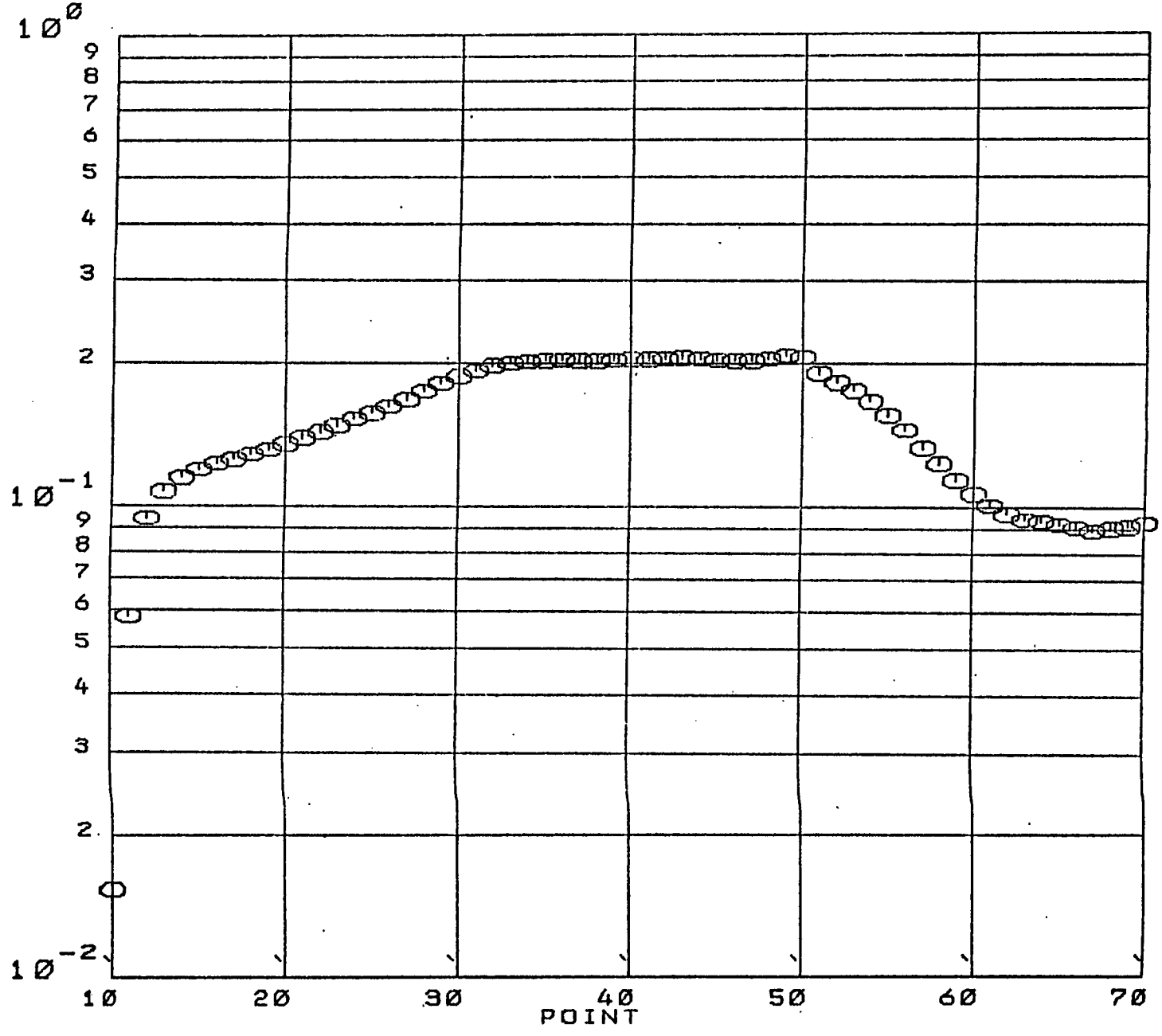
ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3/3 /78
V41B-P4A

NASA/RI OH90

RE/FT 1.97
ALPHA 30.03
LINE 80

GROUP 46



C-90 336

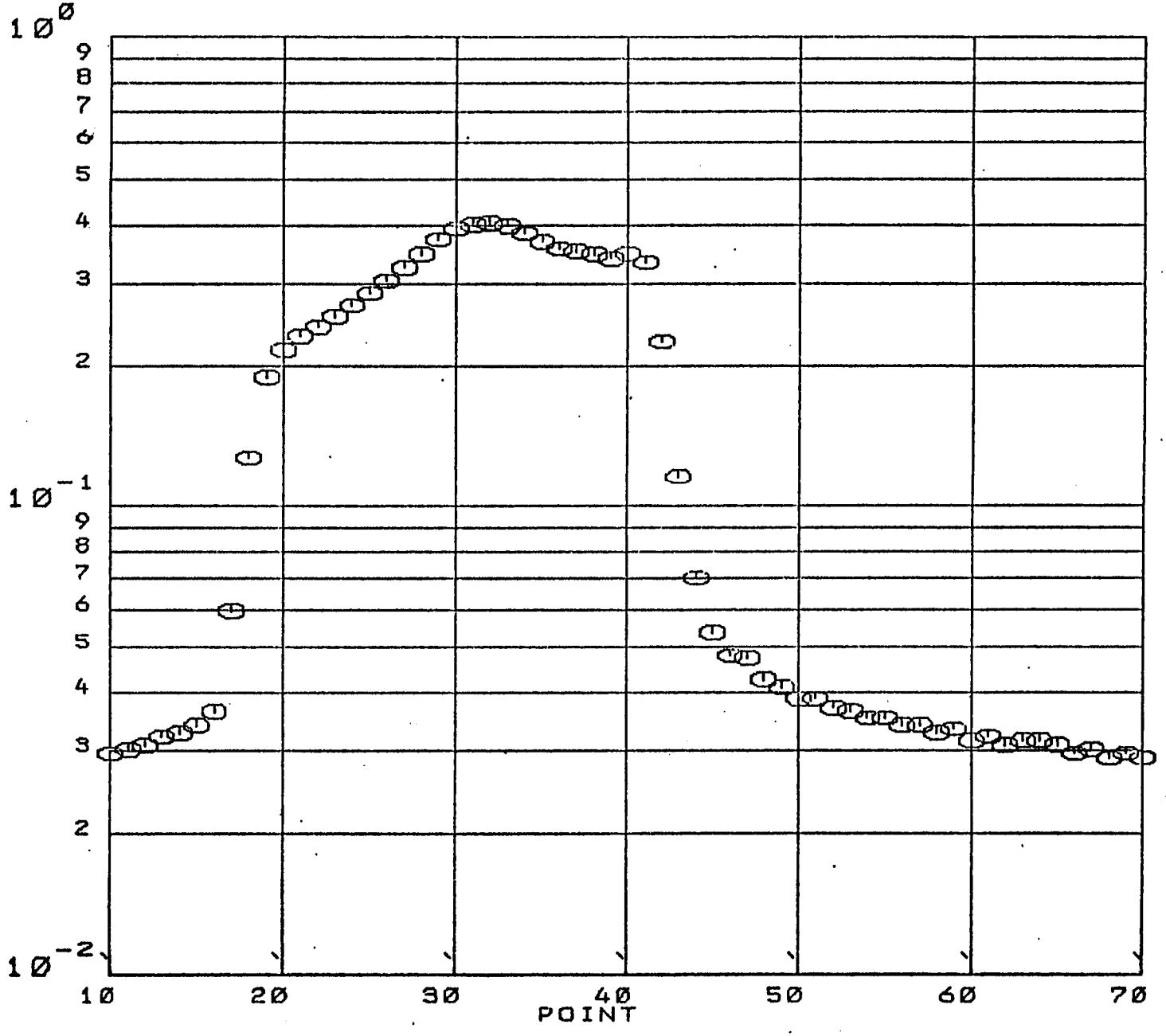
H(.9TO)
/HRFR

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 2.98
ALPHA 29.96
LINE 51

GROUP 53



H(.9TO)
/HAFA

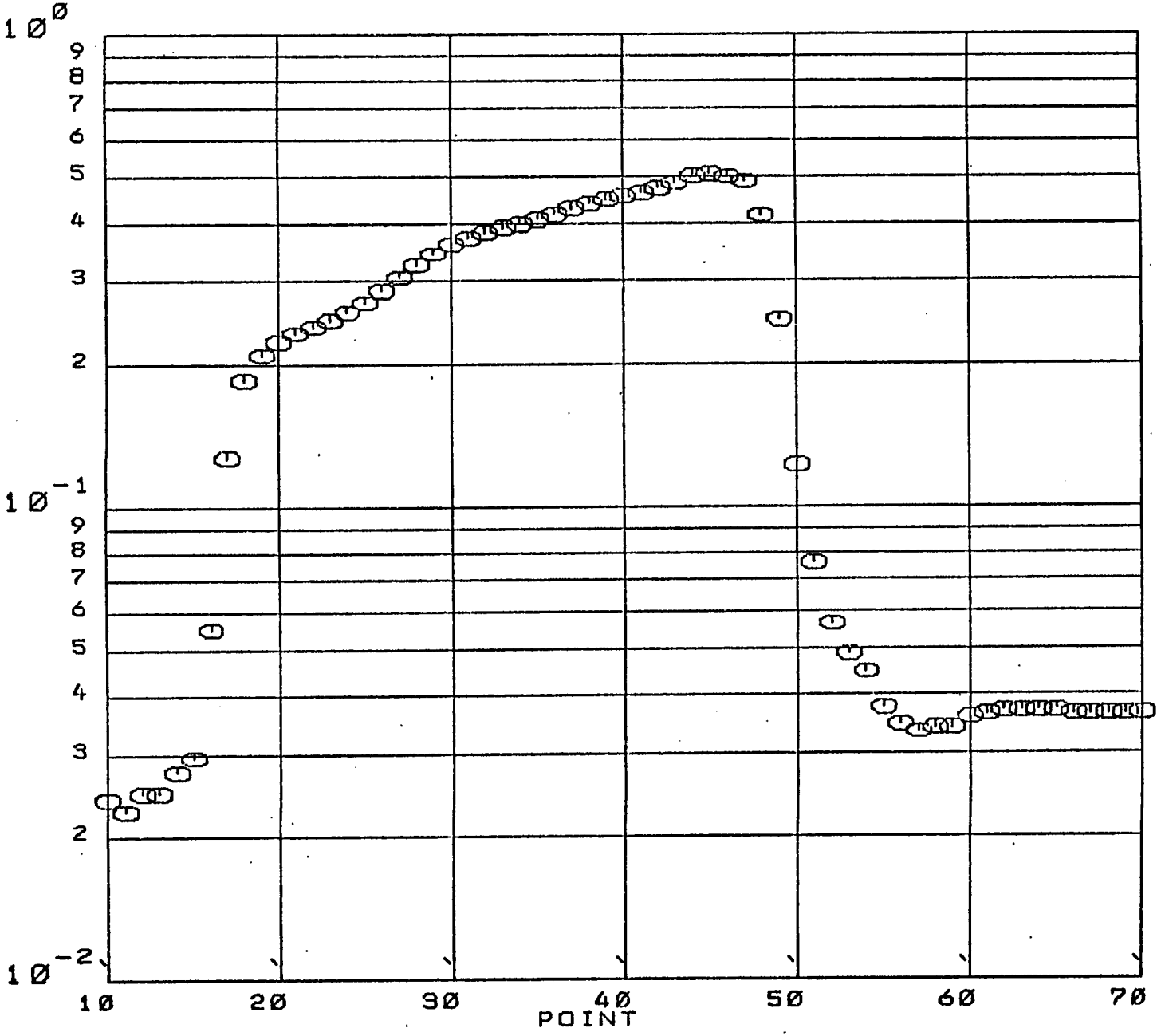
C-91 7

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH9Ø

RE/FT 2.98
ALPHA 29.96
LINE 56

GROUP 53



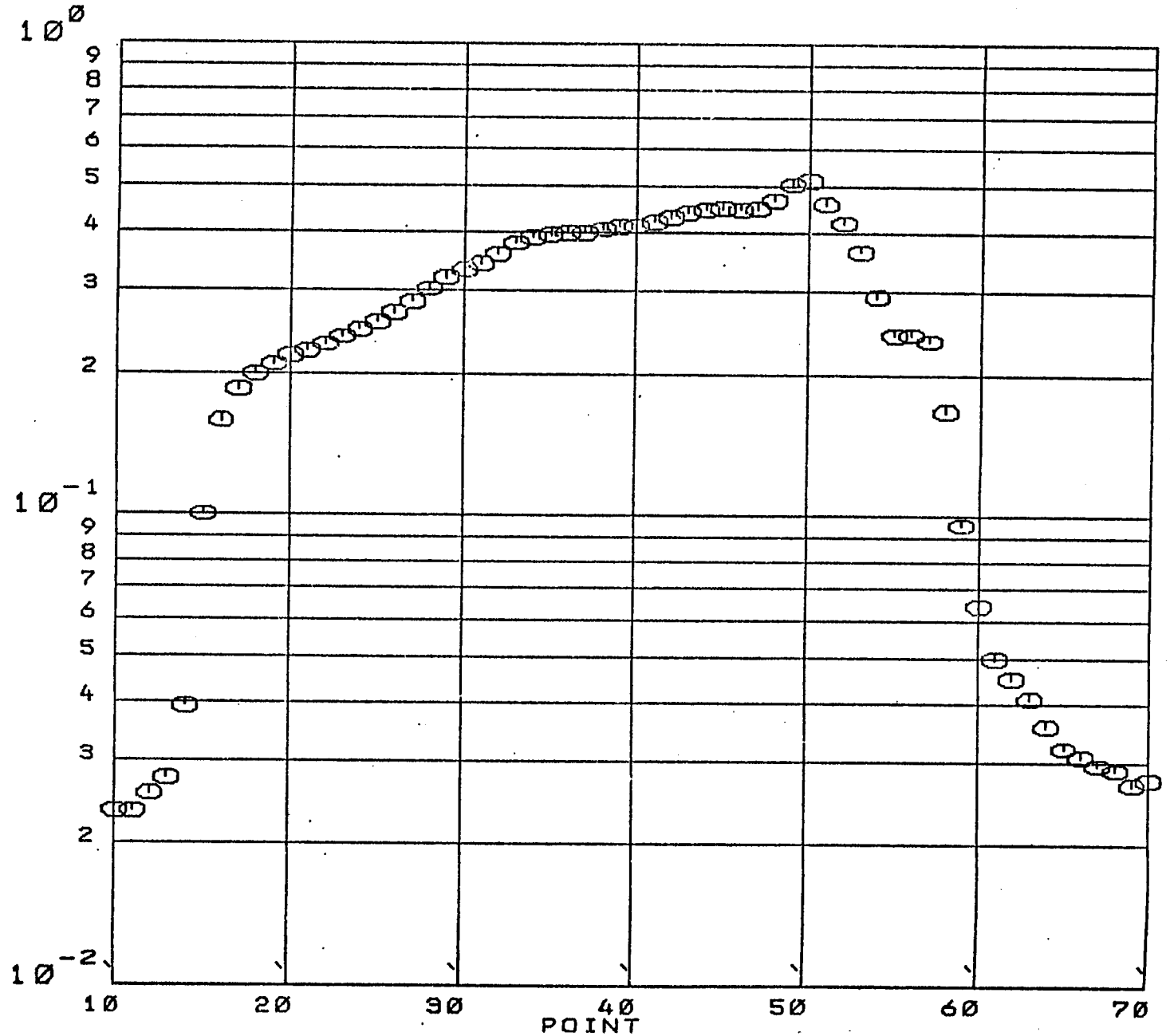
H(.9TO)
/HAFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3/3/78
V41B-P4A

NASA/AI OH90

RE/FT	2.98
ALPHA	29.96
LINE	63

GROUP 53

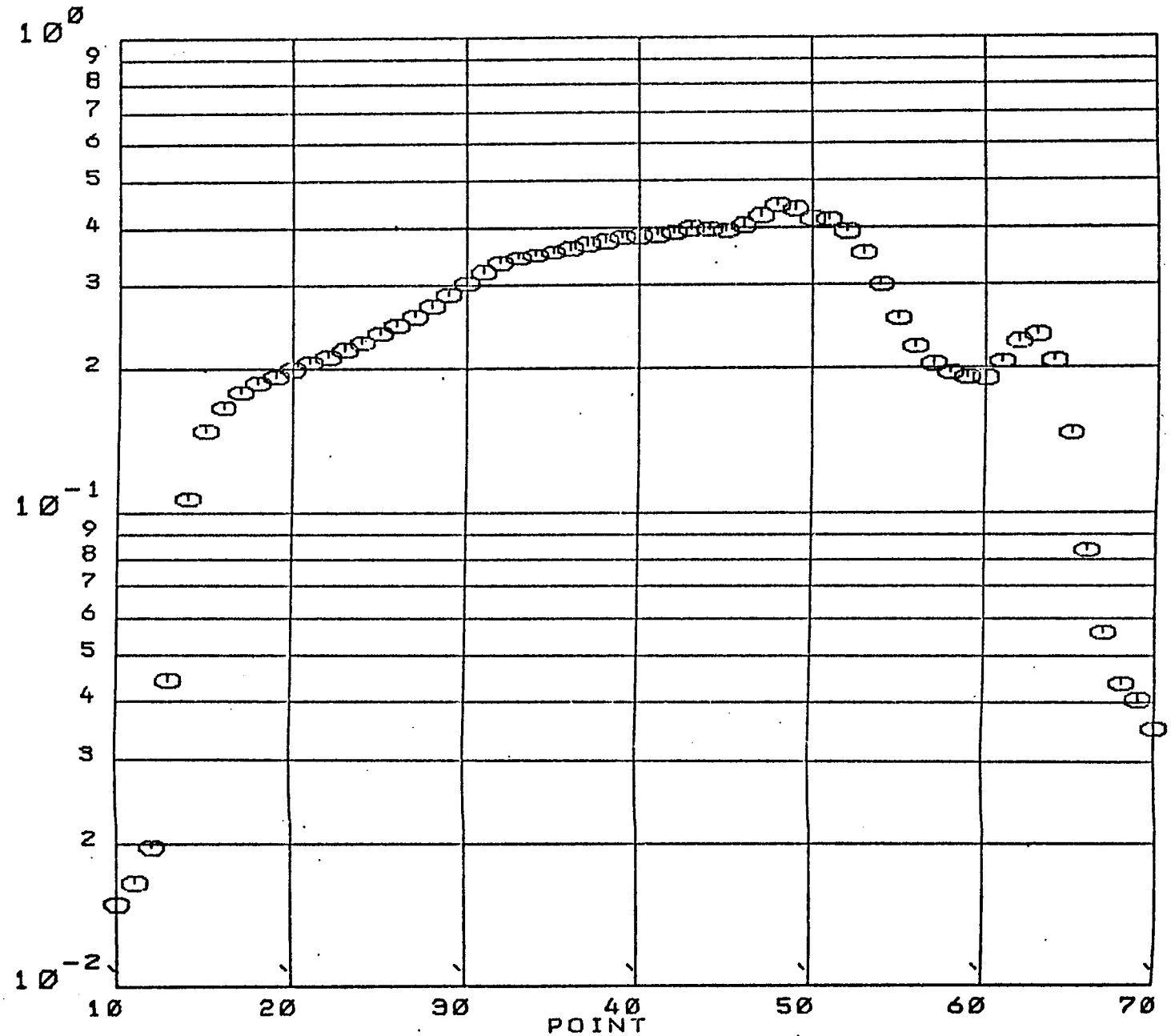


ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

AE/FT 2.98
ALPHA 29.96
LINE 68

GROUP 53



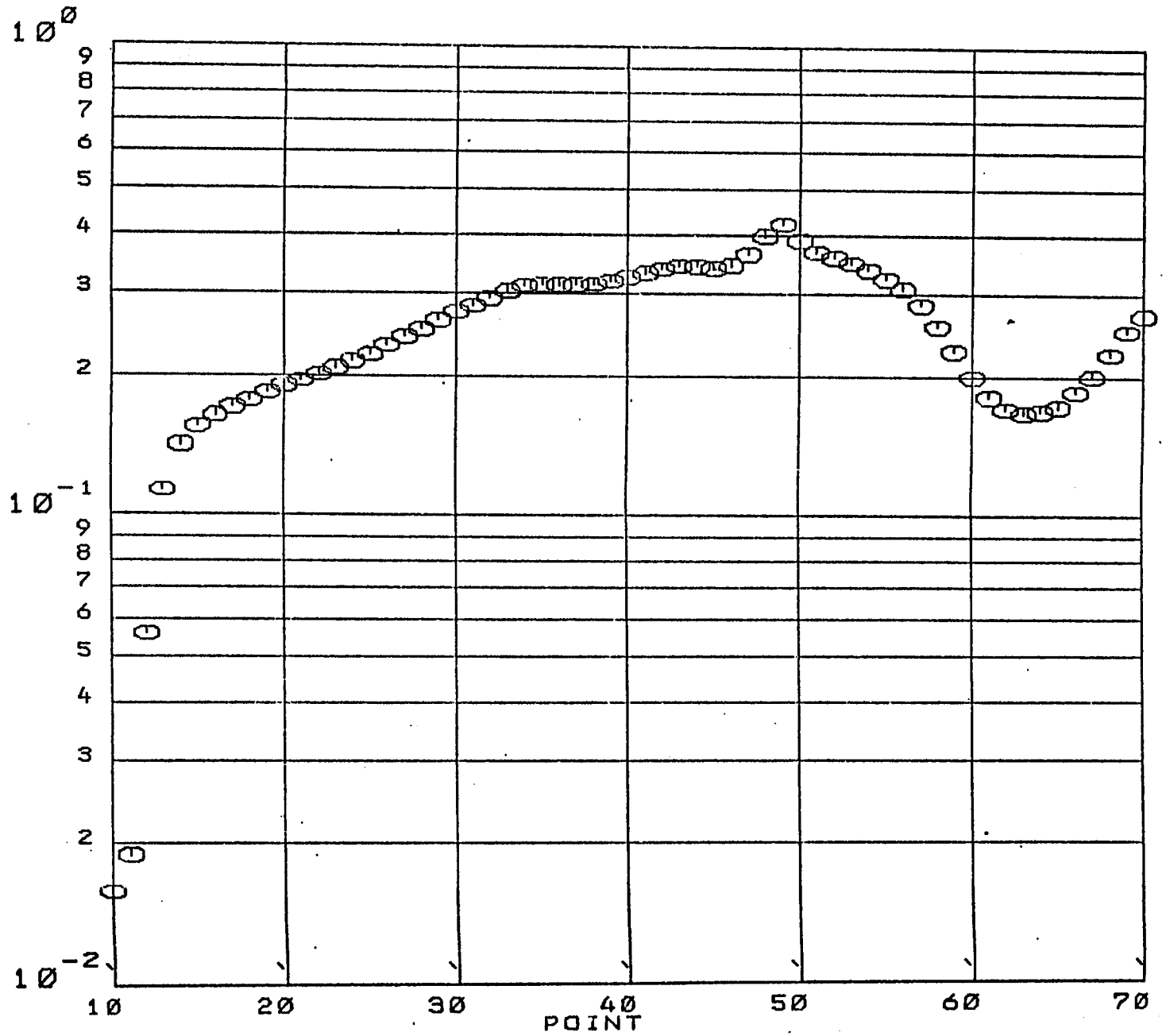
H(.9TO)
/HAFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

RE/FT 2.98
ALPHA 29.96
LINE 74

GROUP 53



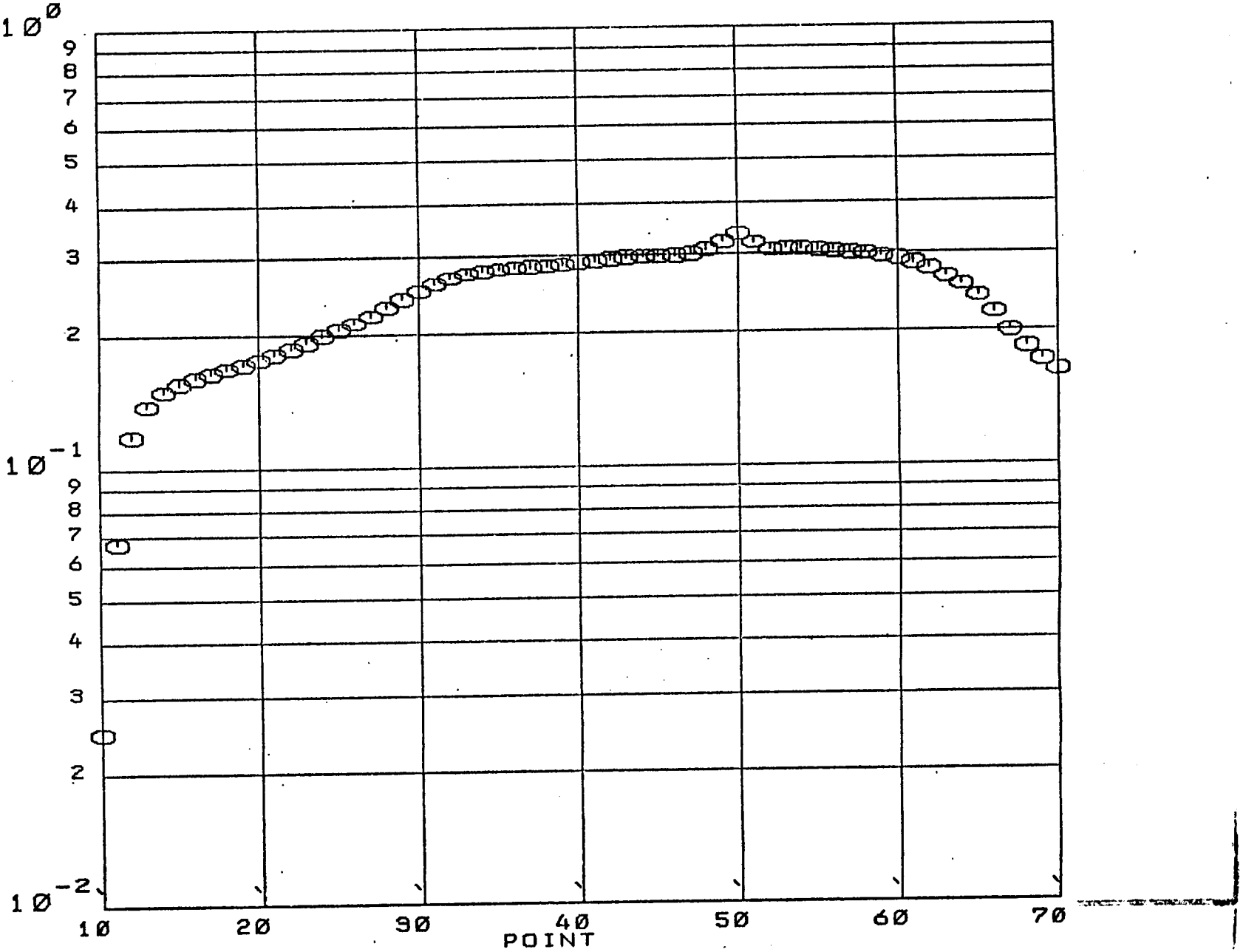
H(.9TO)
/HAFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3/3/78
V41B-P4A

NASA/AI OH90

RE/FT 2.98
ALPHA 29.96
LINE 80

GROUP 53



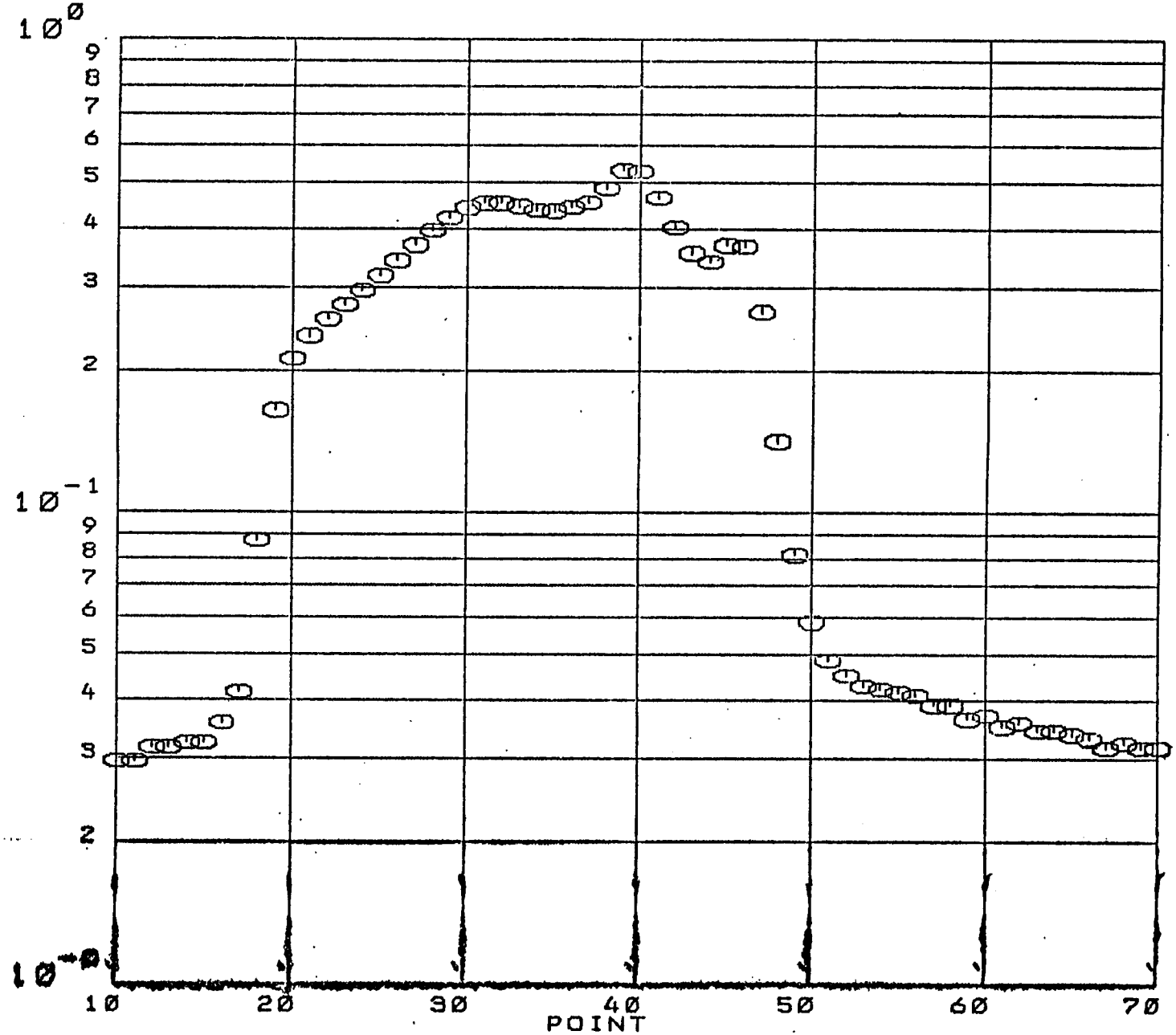
H(.9TO)
/HAFR

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

RE/FT 2.97
ALPHA 30.04
LINE 51

GROUP 69



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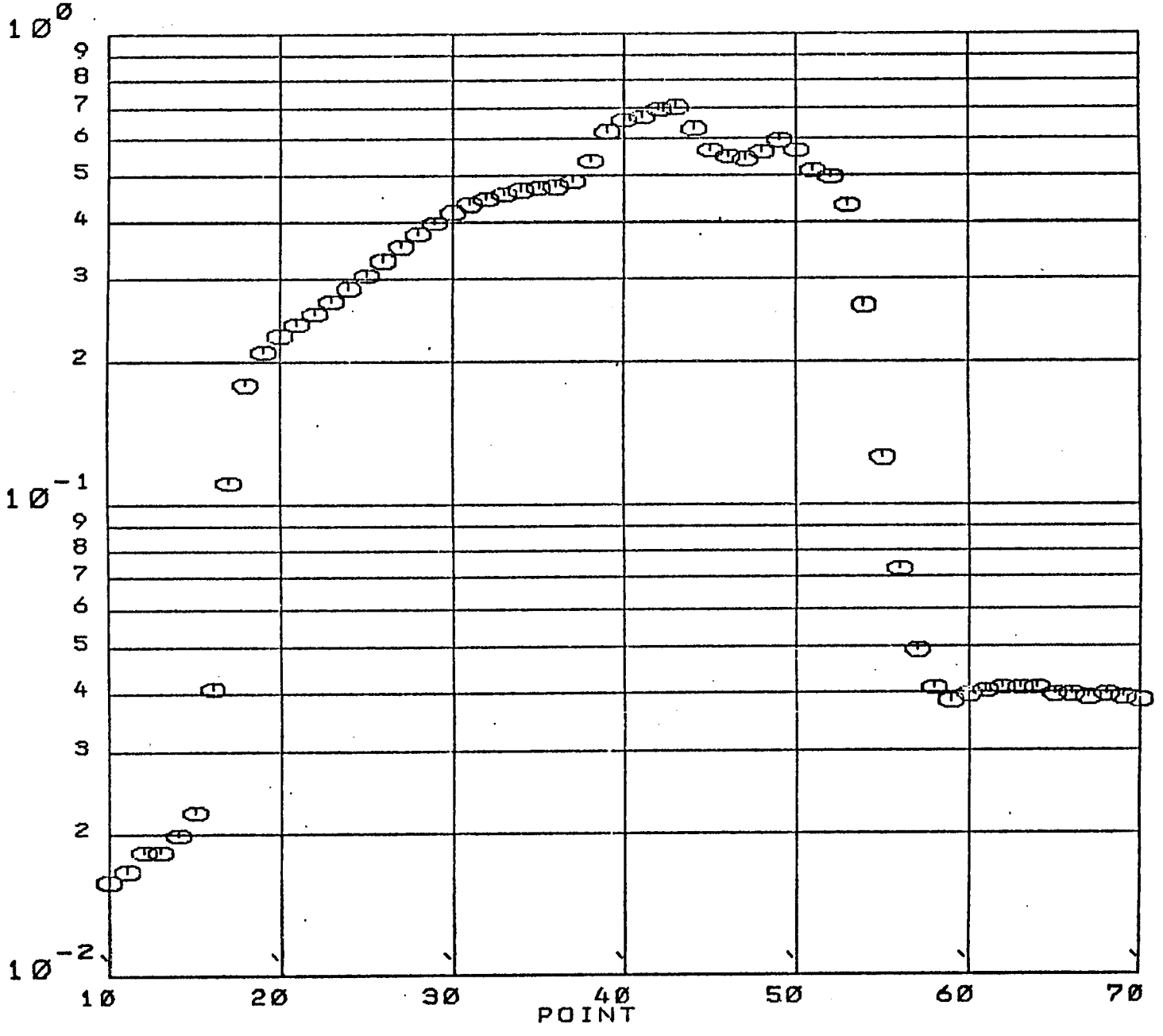
C-97 343

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI 0H90

RE/FT 2.97
ALPHA 90.04
LINE 56

GROUP 69



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/HAFR

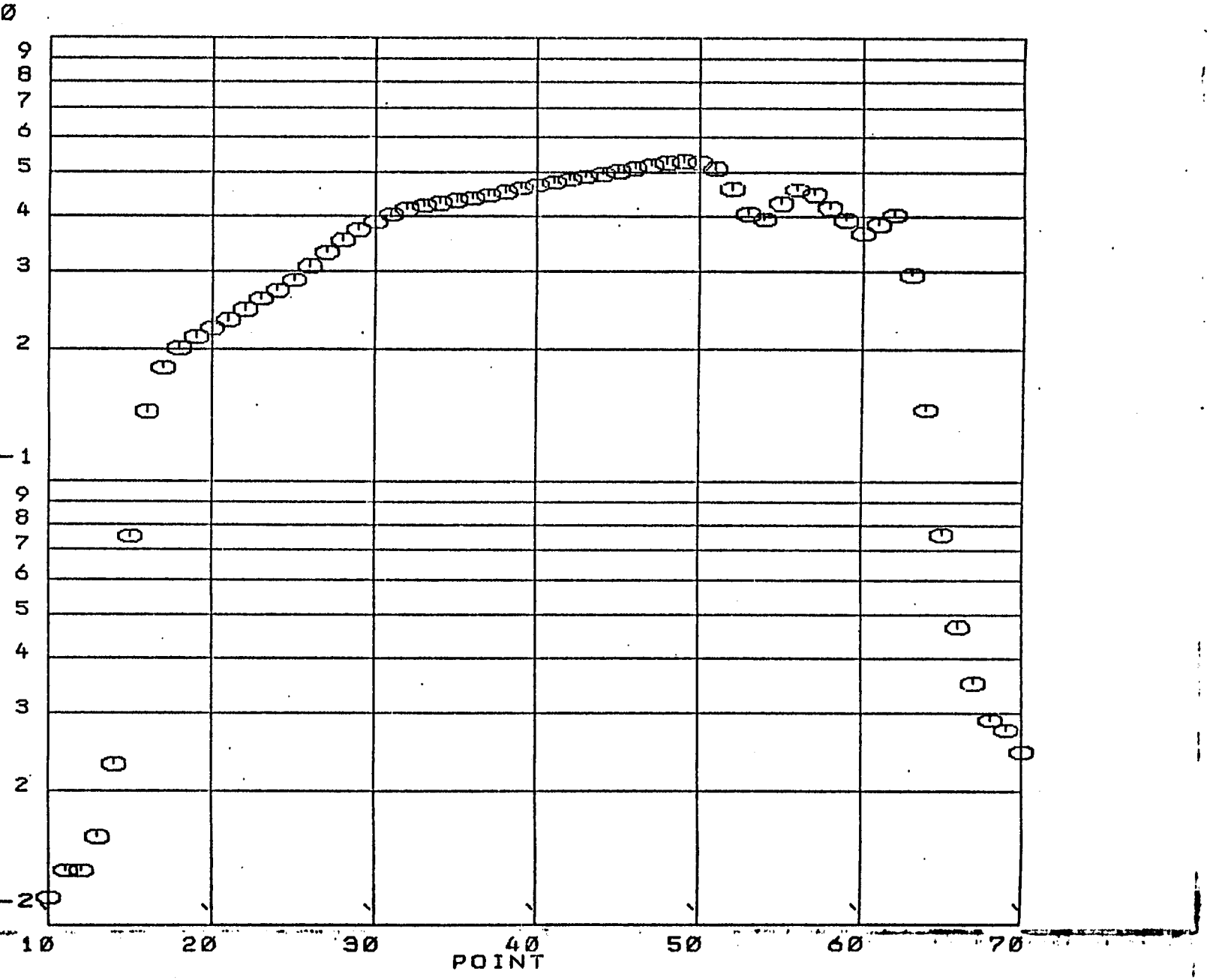
C-98

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 2.97
ALPHA 30.04
LINE 63

GROUP 69



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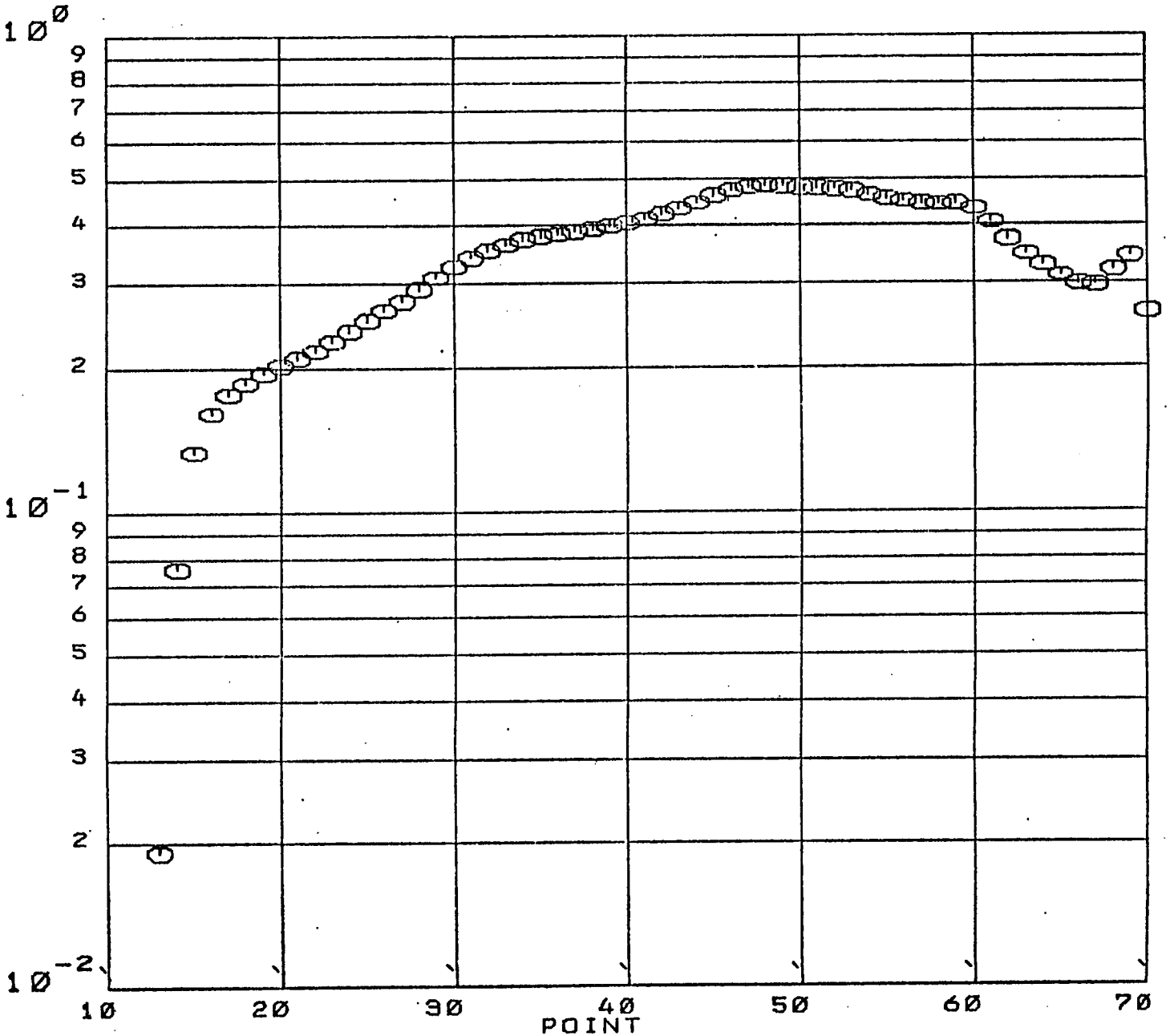
ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

AE/FT 2.97
ALPHA 30.04
LINE 68

GROUP 69



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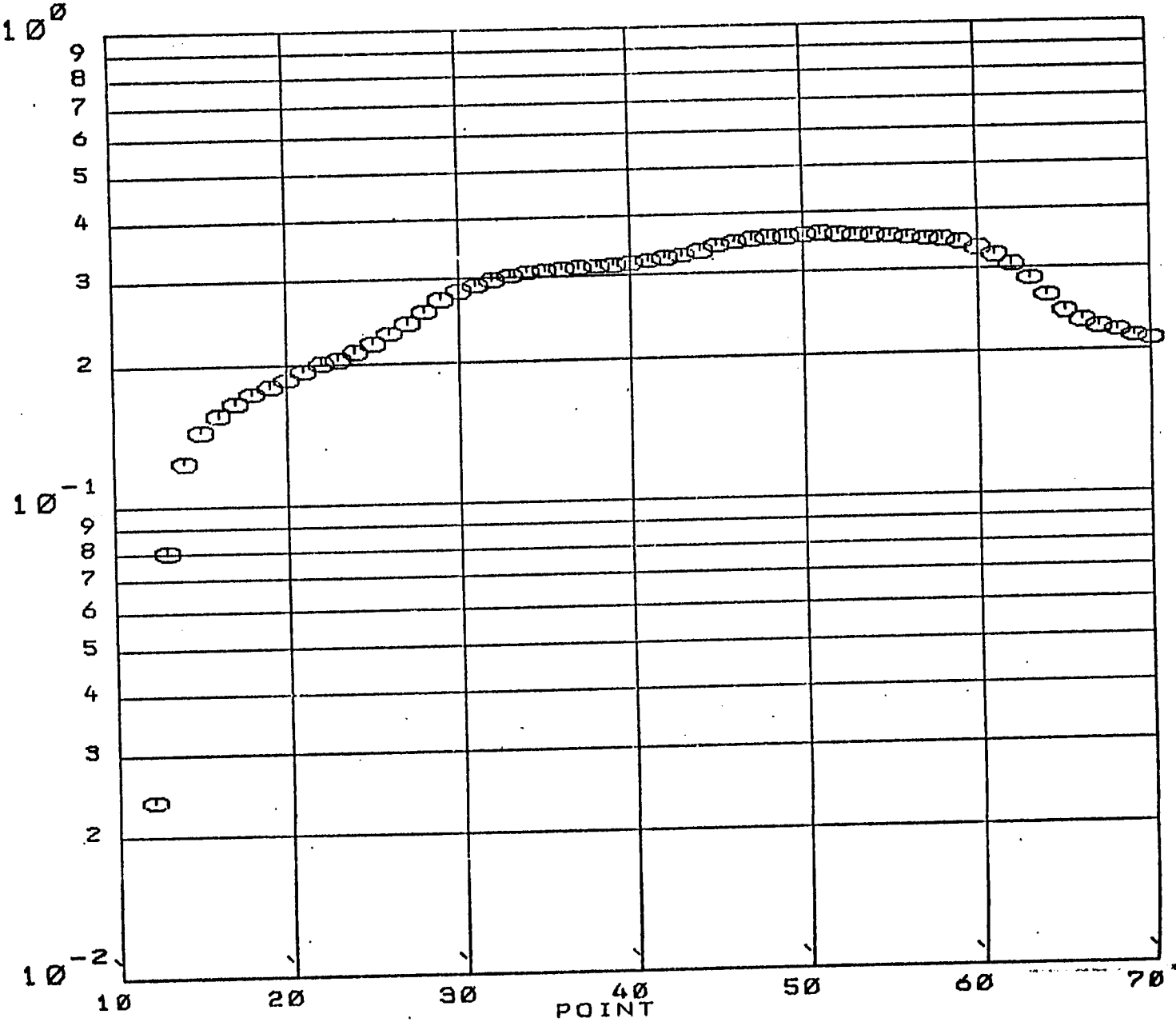
/HAFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

RE/FT 2.97
ALPHA 30.04
LINE 74

GROUP 69



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ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

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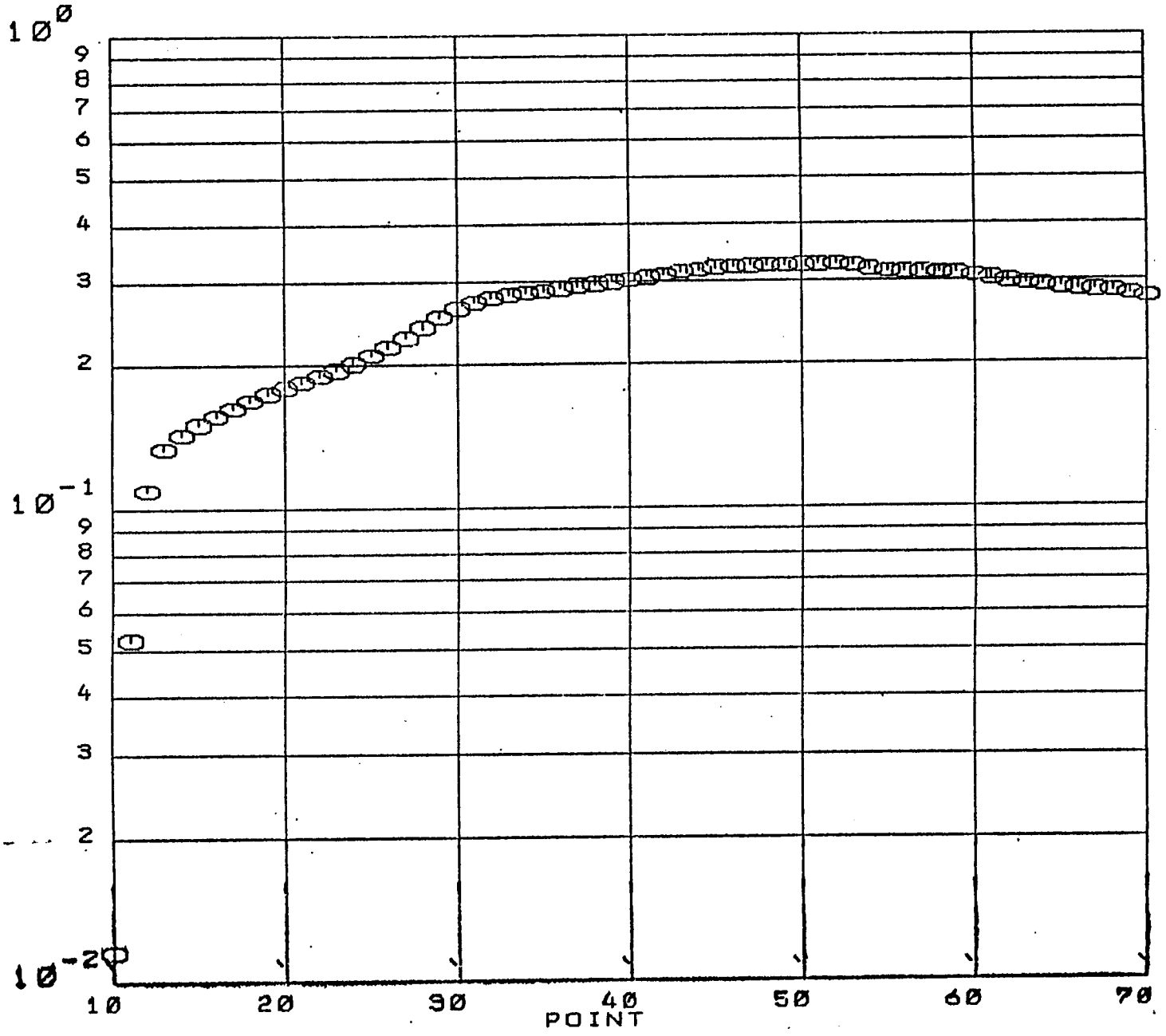
ALPHA 30.04
LINE 80

GROUP 69



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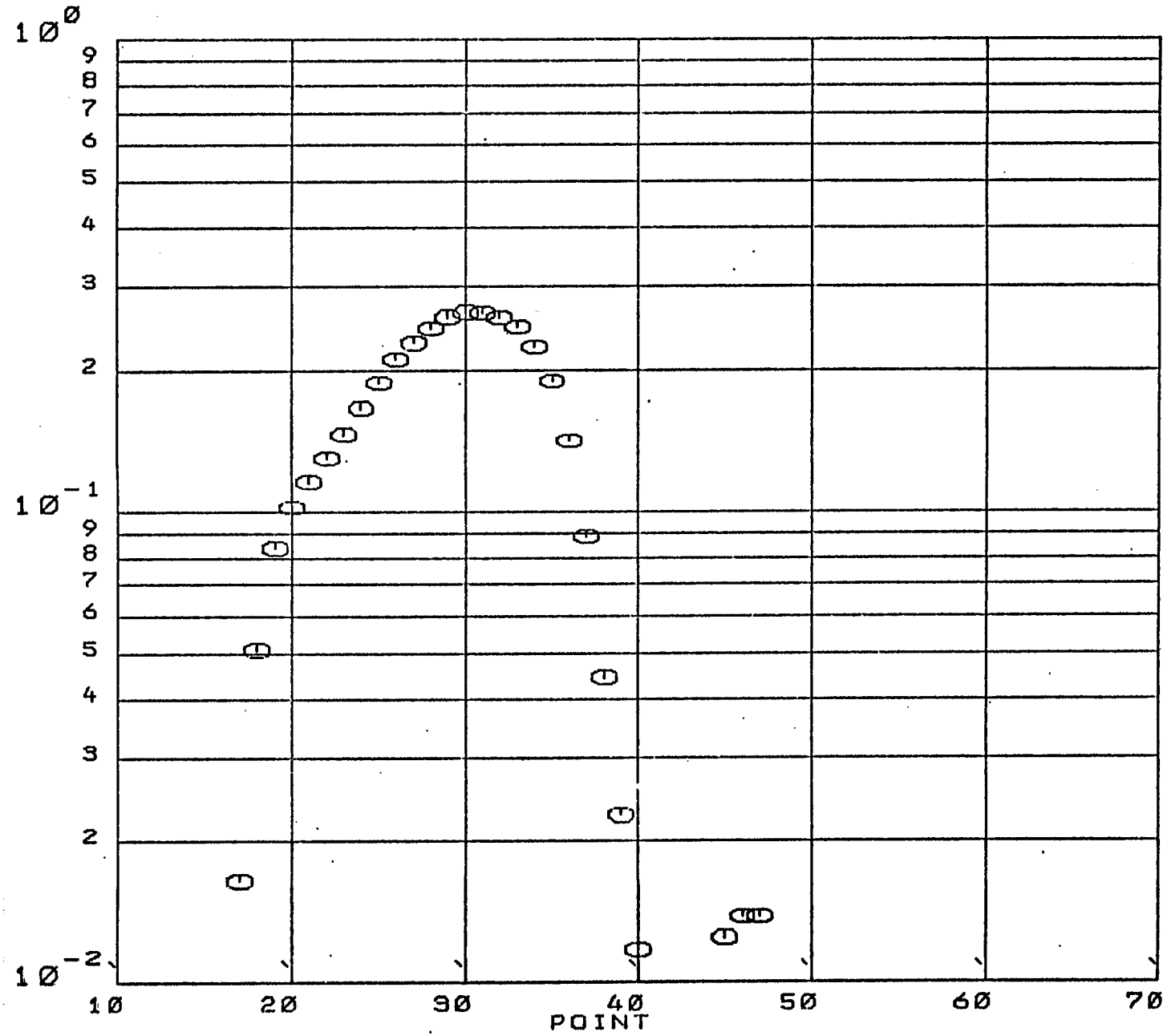
ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.01
ALPHA 30.06
LINE 51

GROUP 89



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/HAFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.01
ALPHA 30.06
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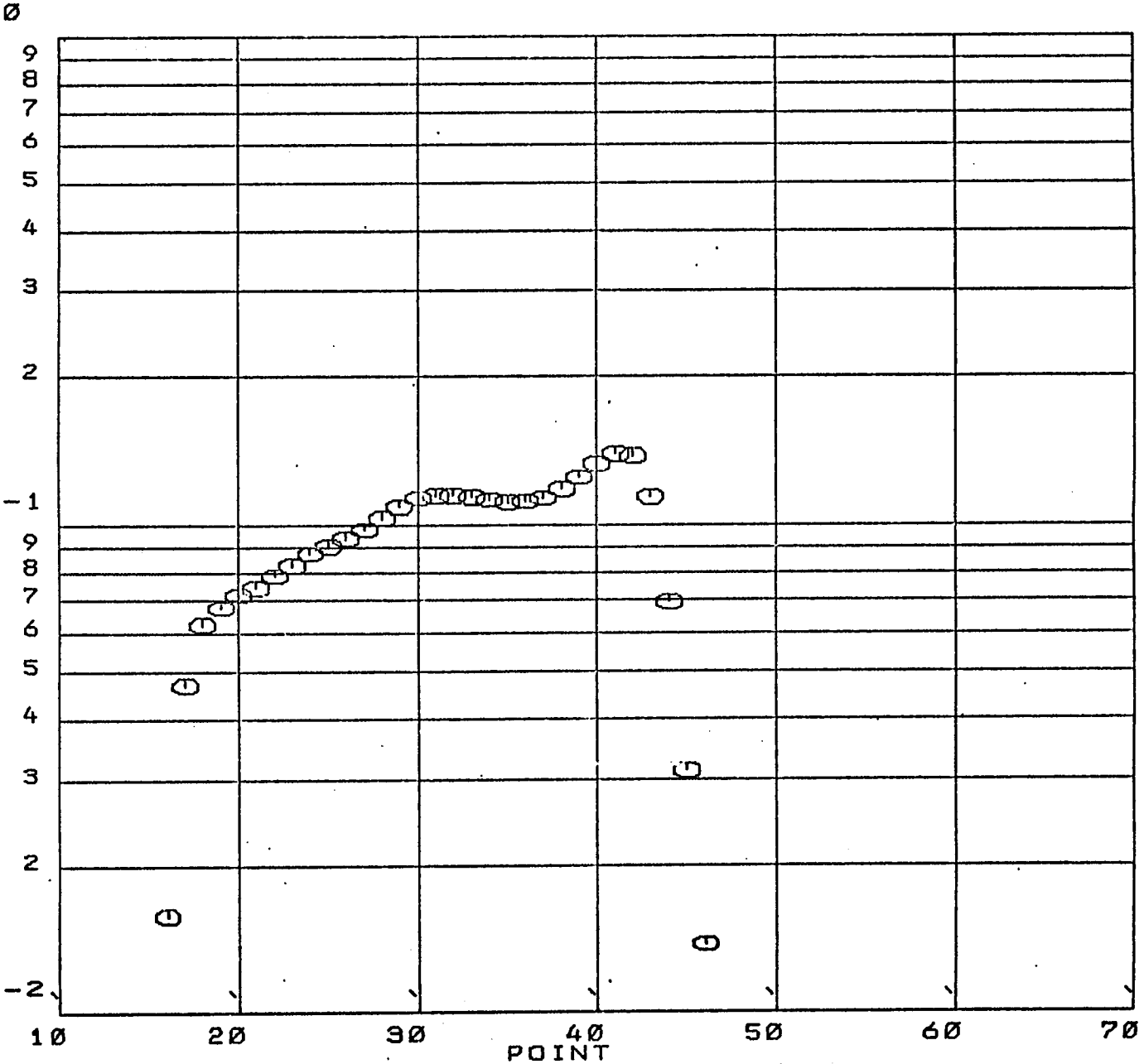
GROUP 89



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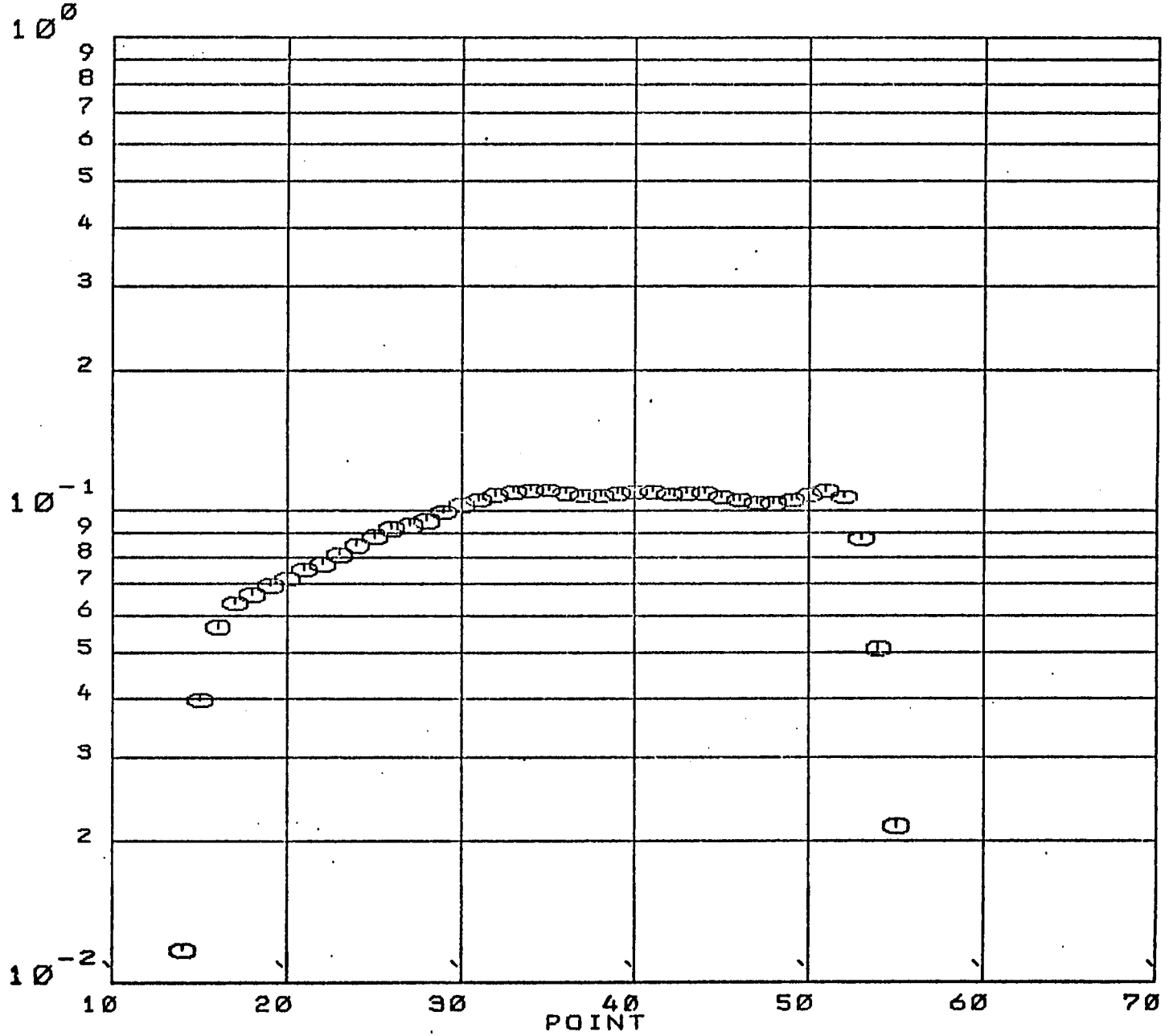
ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.01
ALPHA 30.06
LINE 63

GROUP 89



AAO, INC(AEDC)
AANOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.01
ALPHA 30.06
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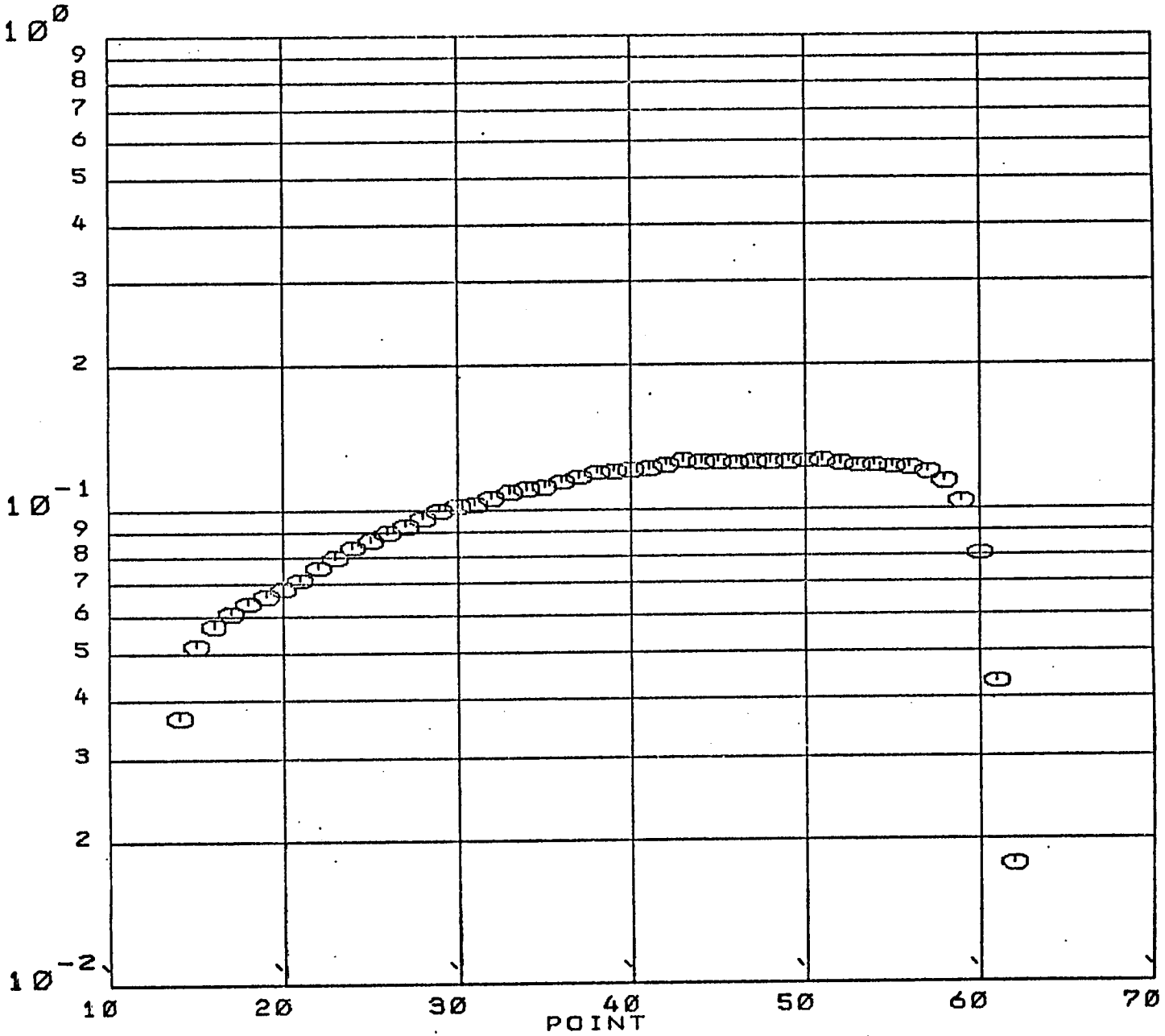
GROUP 89



ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.01
ALPHA 30.06
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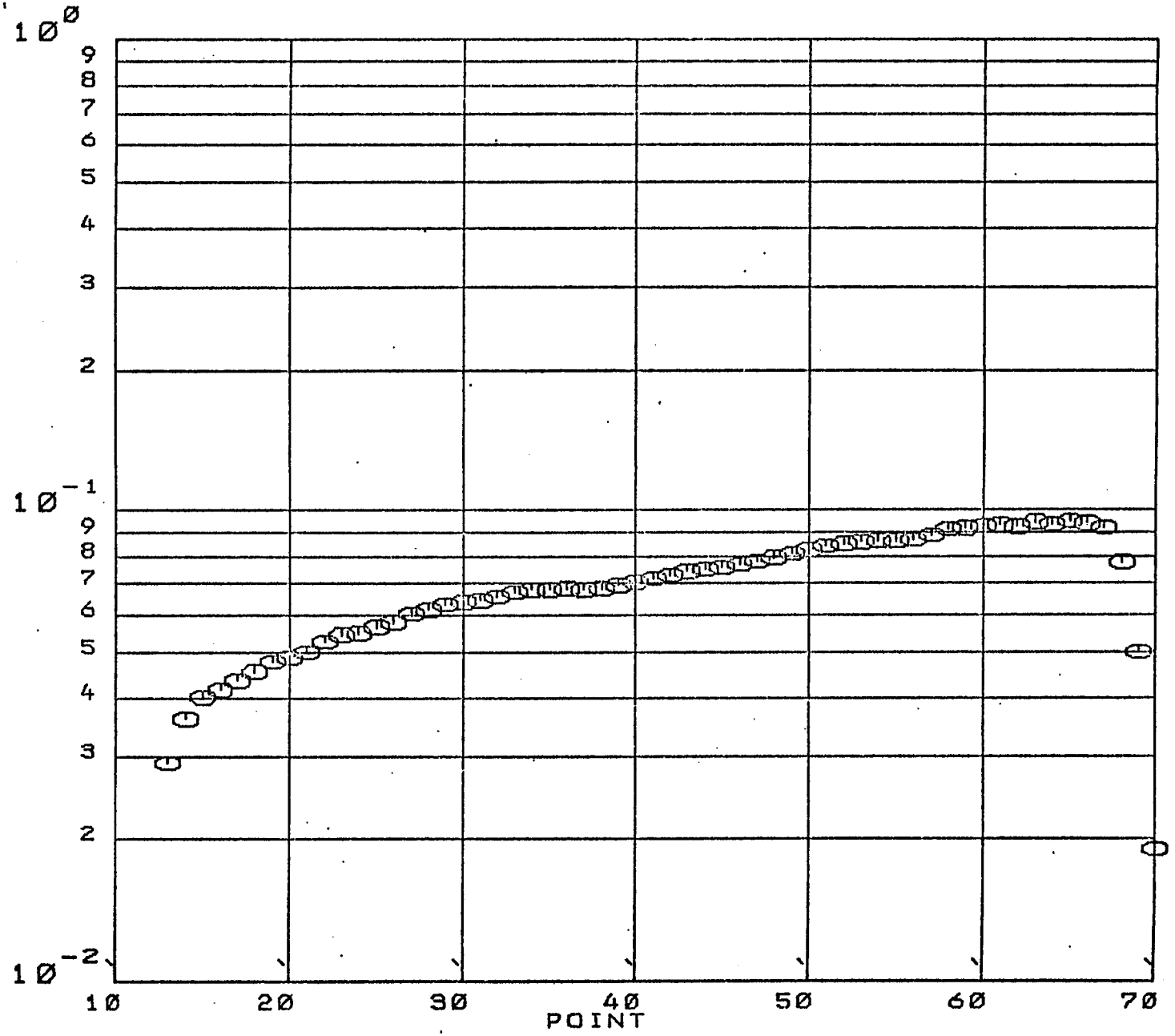
GROUP 89



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/HAFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

AE/FT 1.01
ALPHA 30.06
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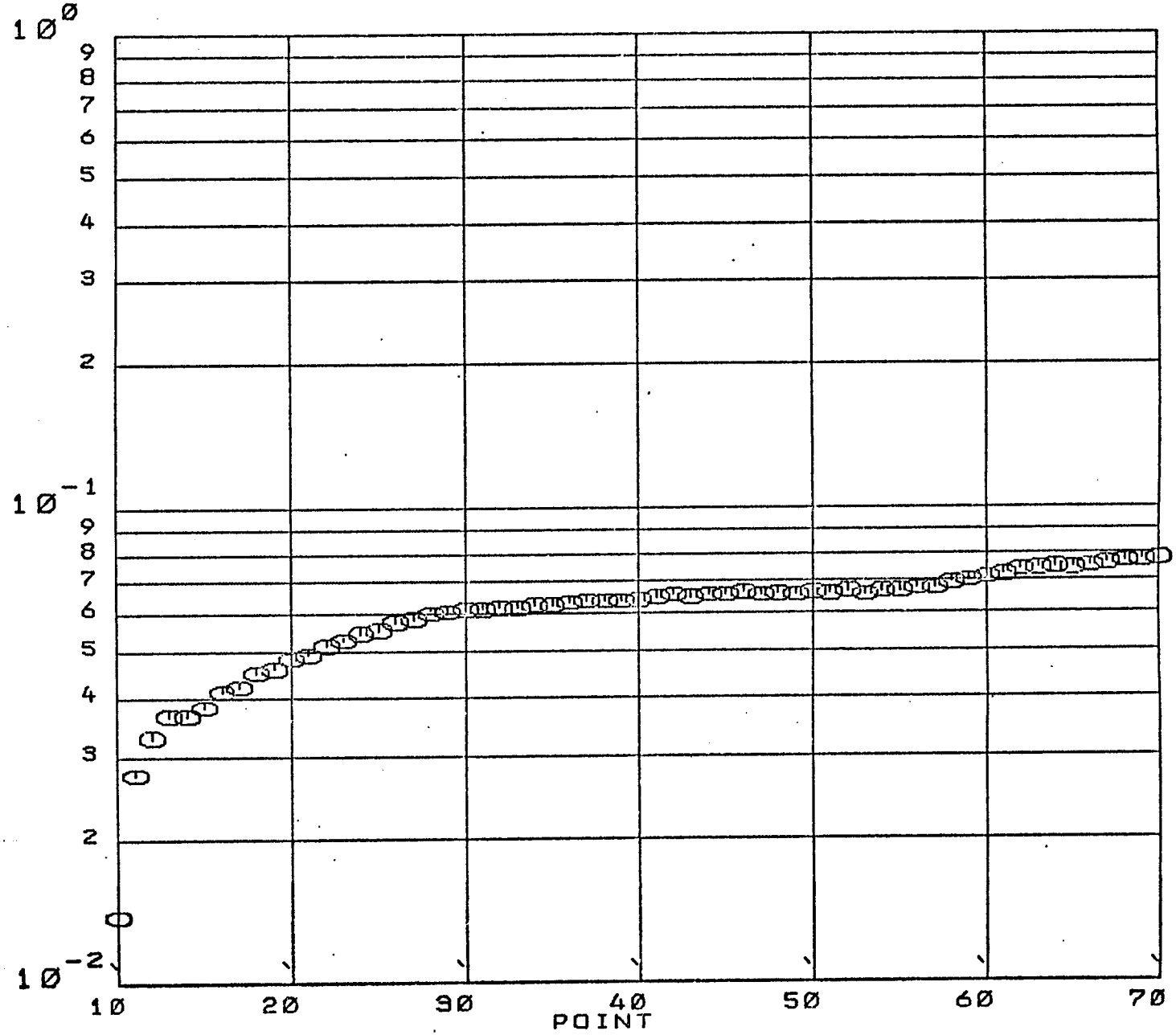
GROUP 89



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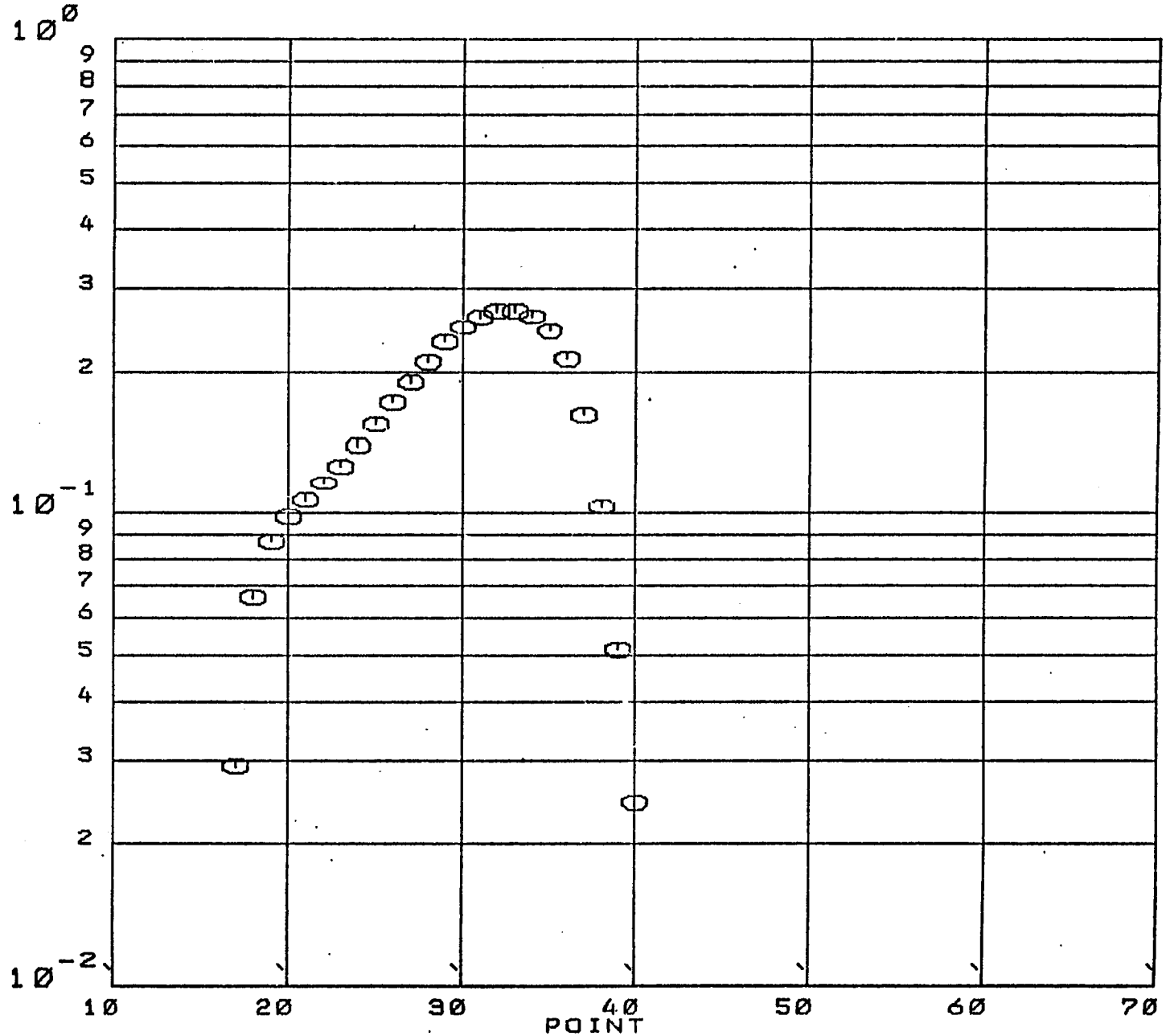
ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.02
ALPHA 90.06
LINE 51

GROUP 90



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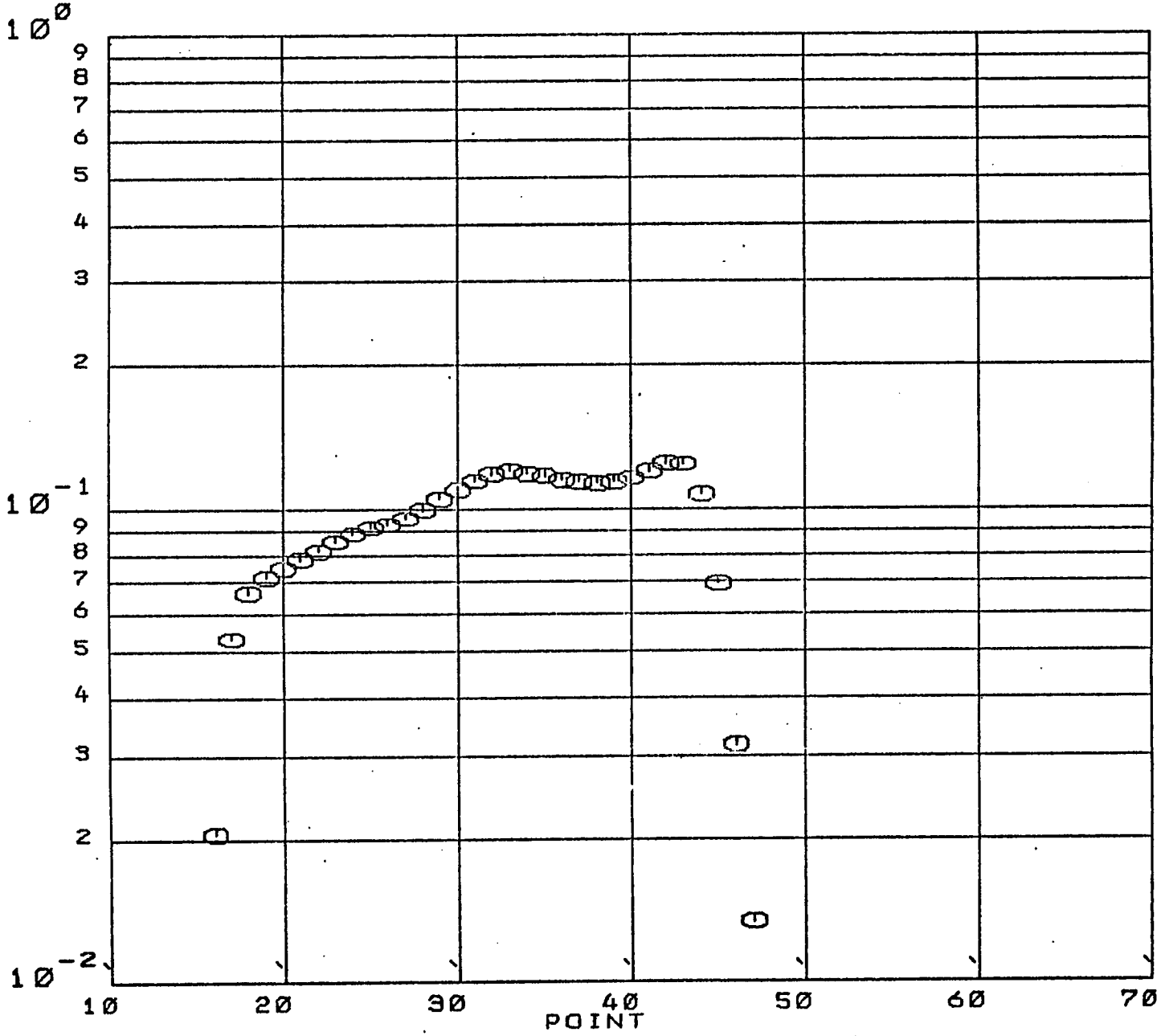
/HAFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.02
ALPHA 30.06
LINE 56

GROUP 90



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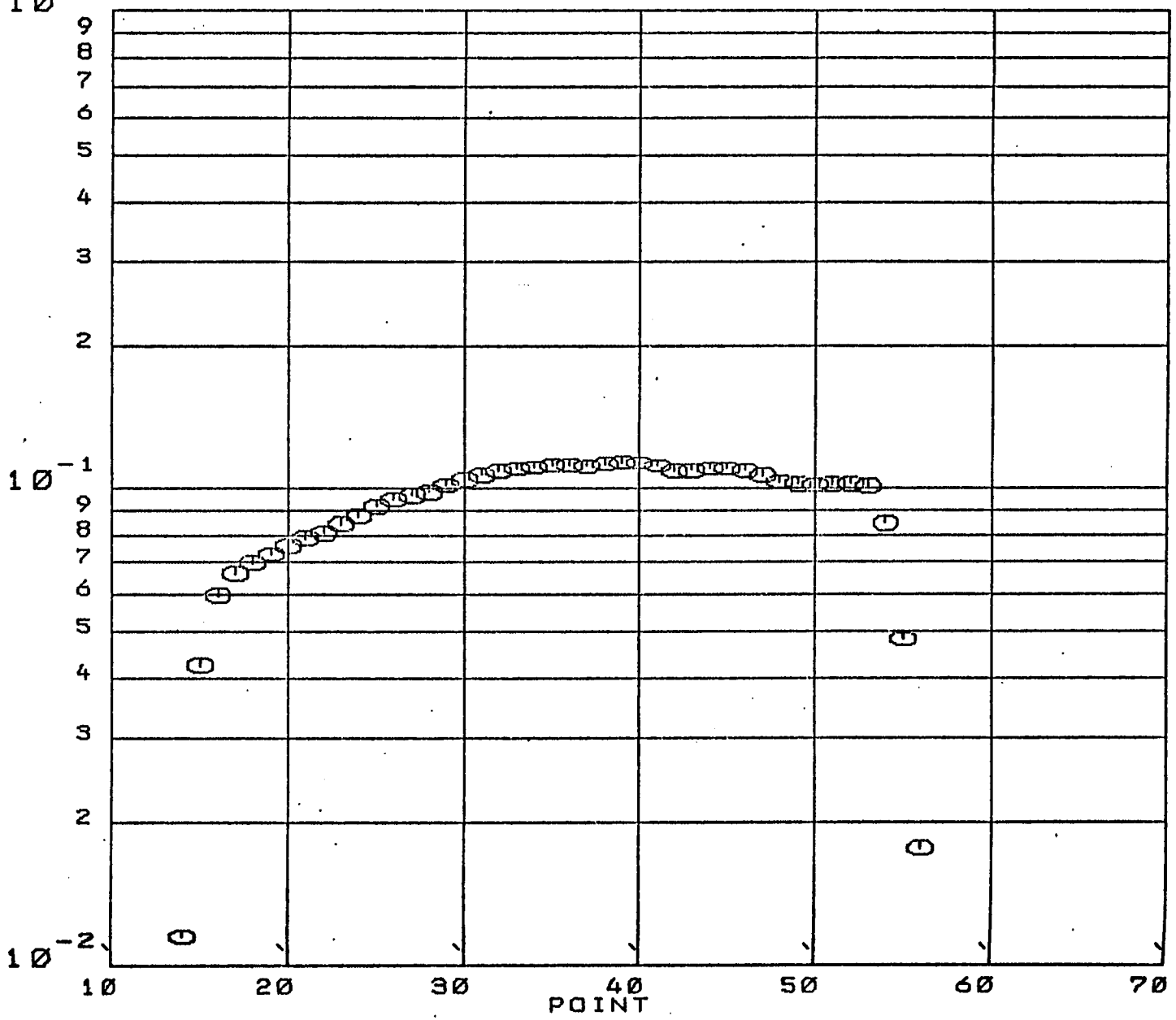
ARO, INC (AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

AE/FT 1.02
ALPHA 30.06
LINE 63

GROUP 90 10^{0}



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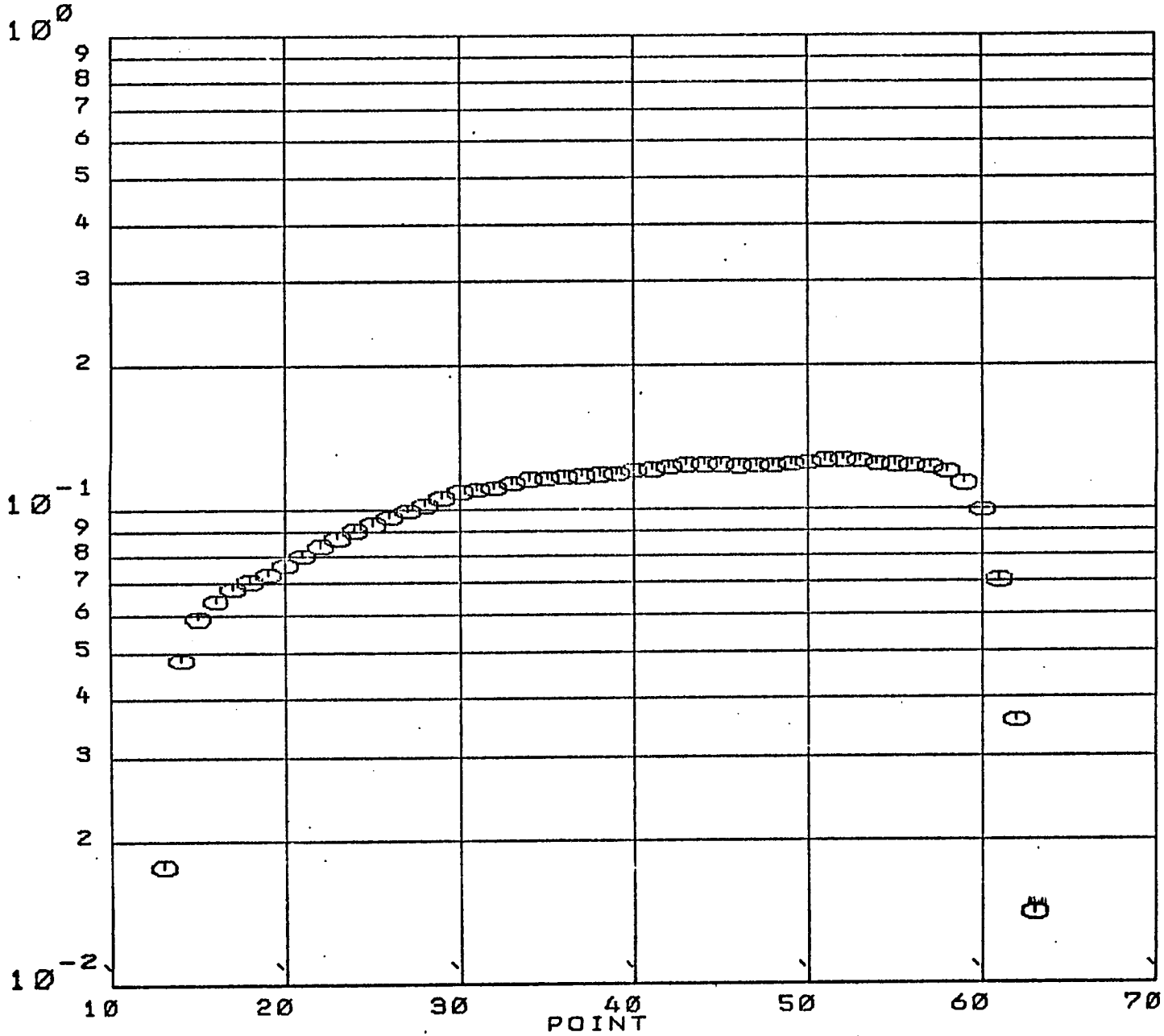
/HAFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.02
ALPHA 90.06
LINE 68

GROUP 90



ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.02
ALPHA 30.06
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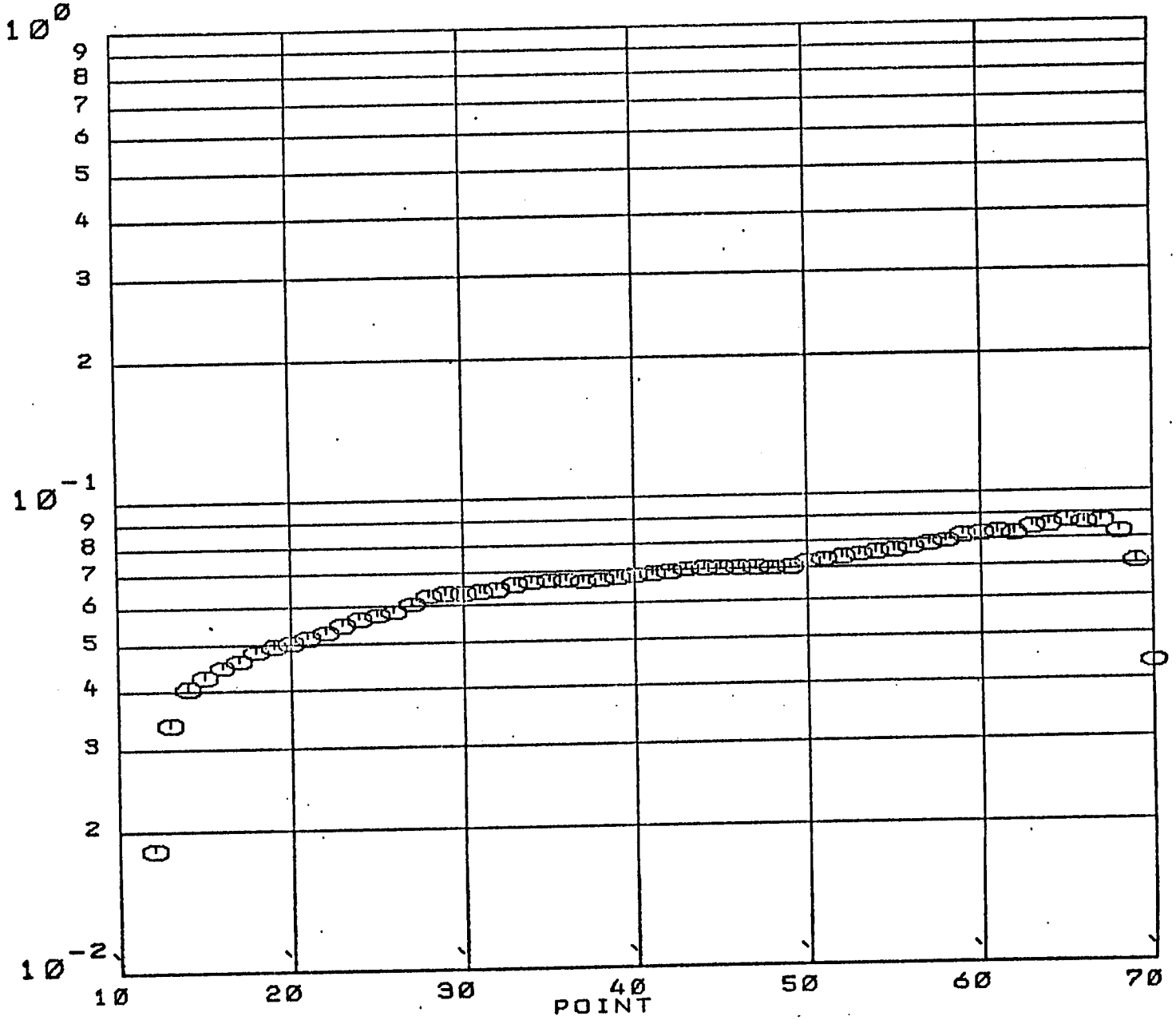
GROUP 90



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ARO,INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

GROUP 90

NASA/RI OH90

RE/FT 1.02
ALPHA 90.06
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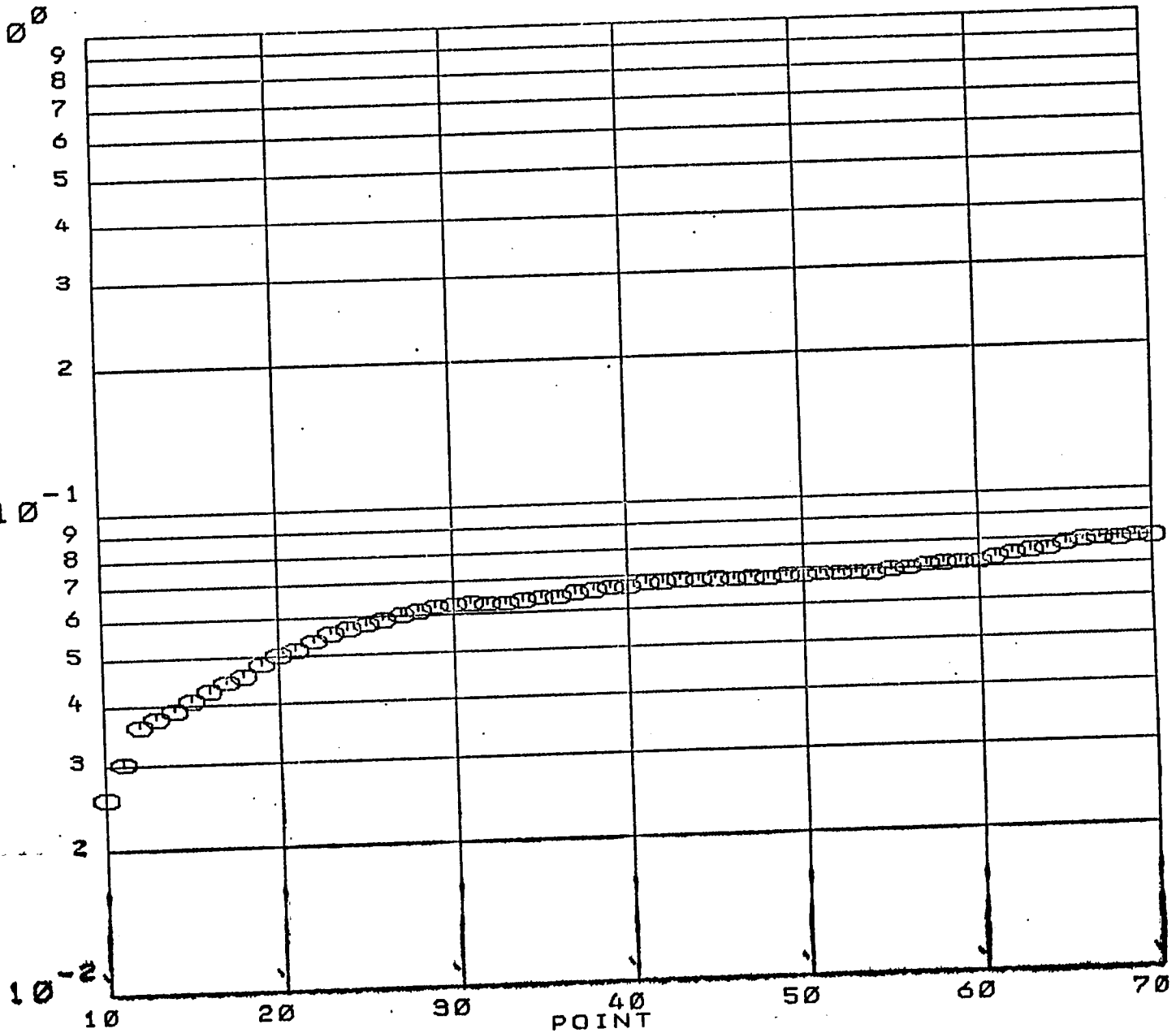

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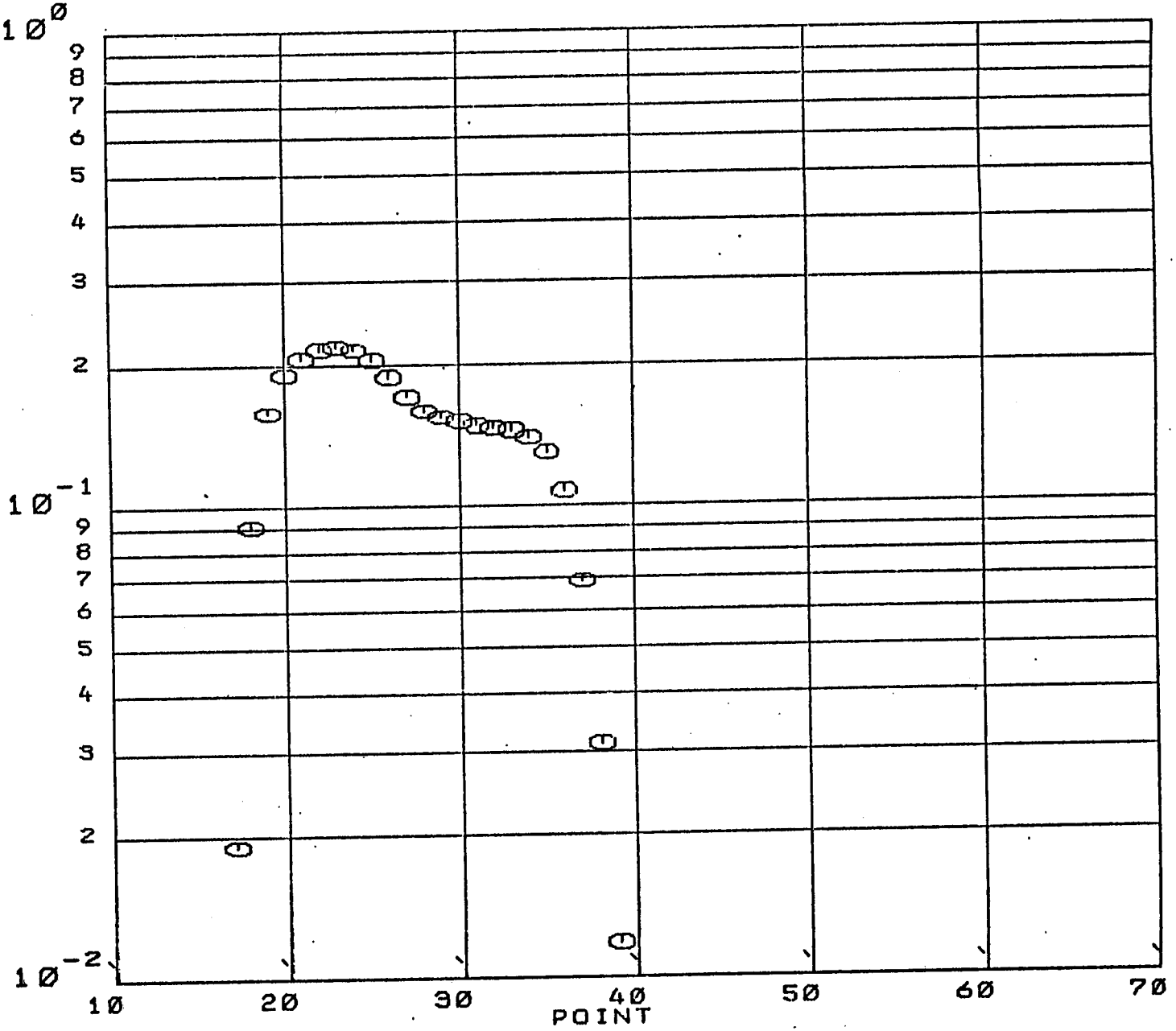
ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.01
ALPHA 40.00
LINE 51

GROUP 91



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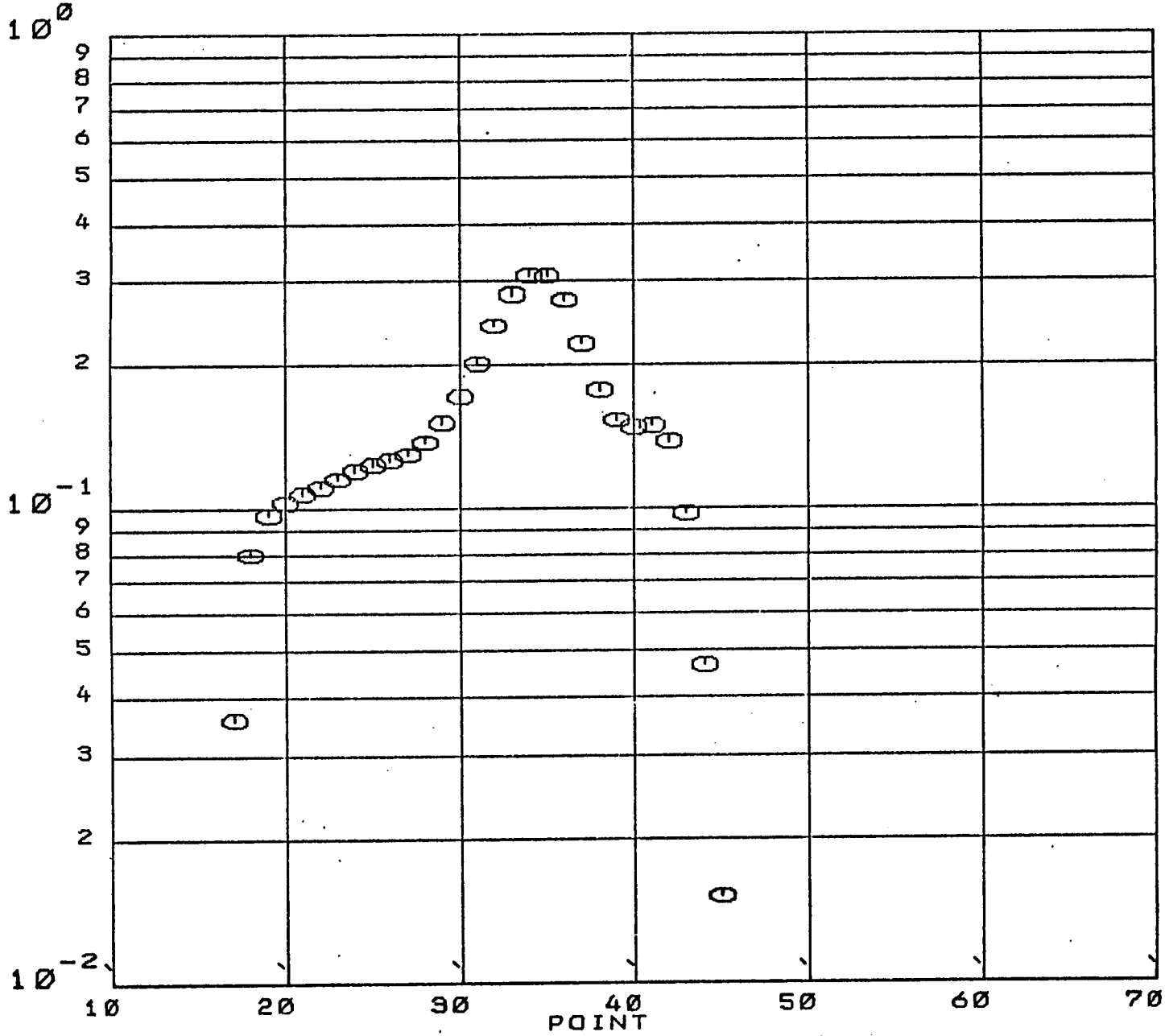
/HAFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.01
ALPHA 40.00
LINE 56

GROUP 91



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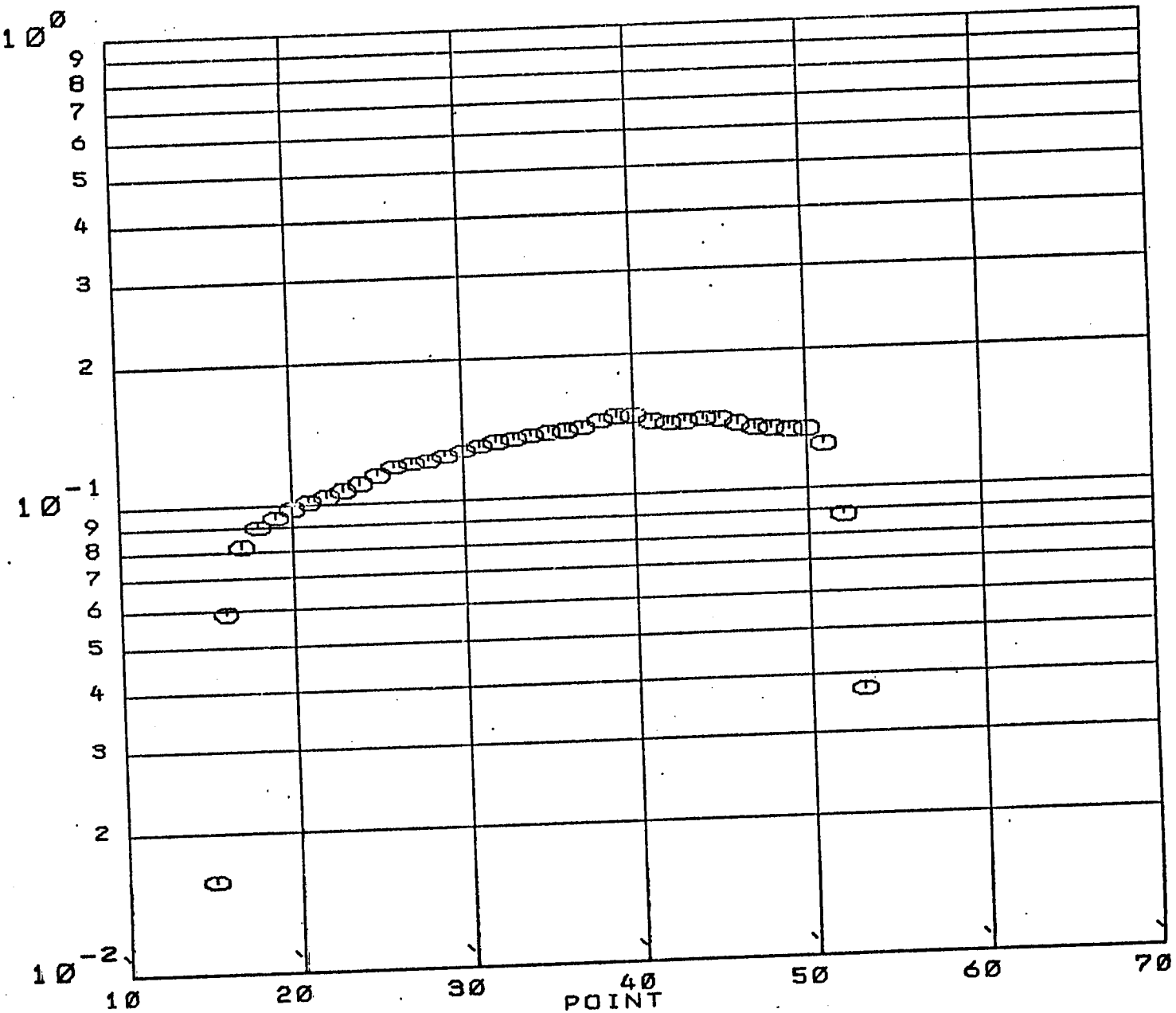
ARO, INC (AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

GROUP 91

NASA/AI OH90

RE/FT 1.01
ALPHA 40.00
LINE 63



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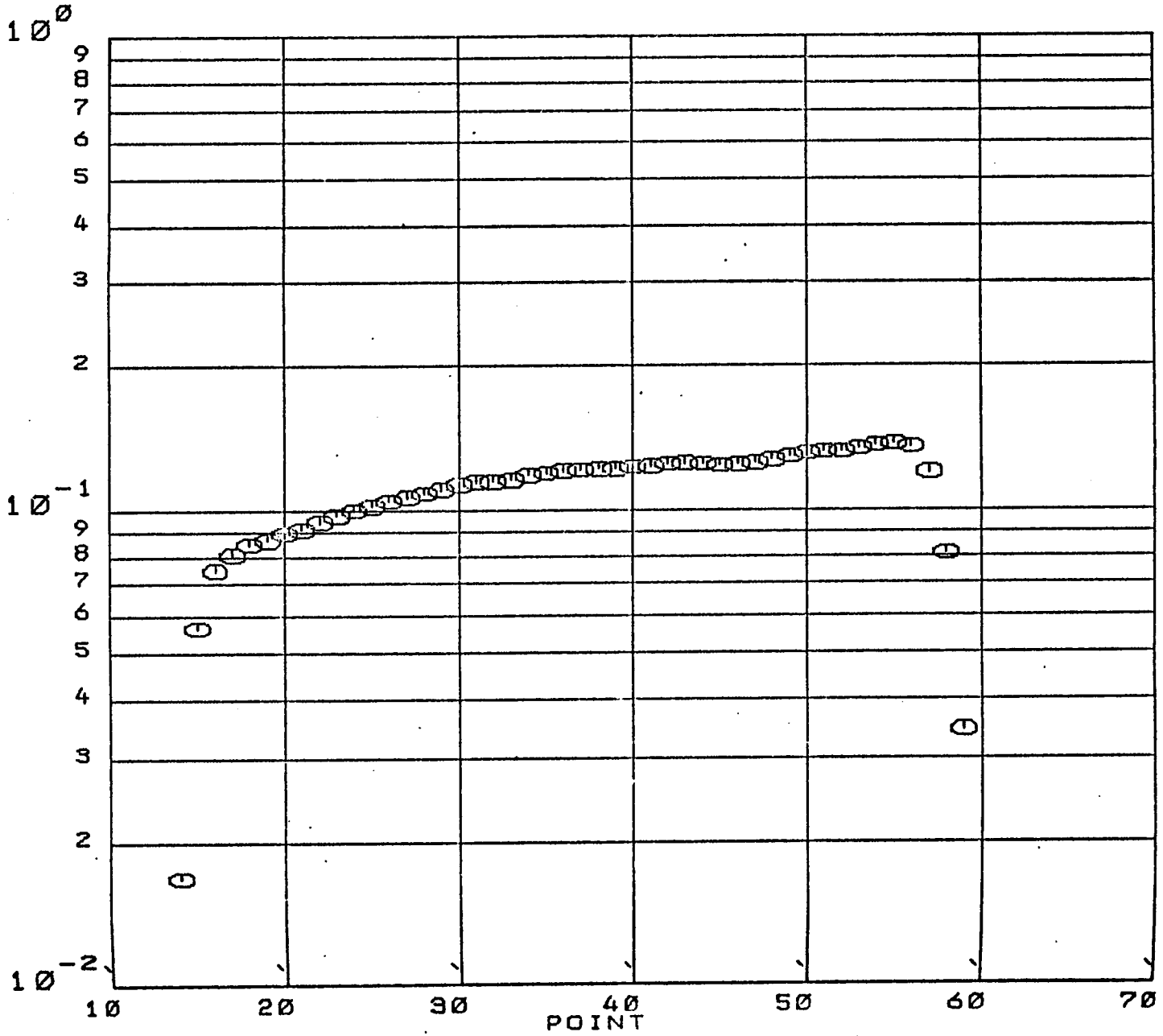
/HAFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.01
ALPHA 40.00
LINE 68

GROUP 91



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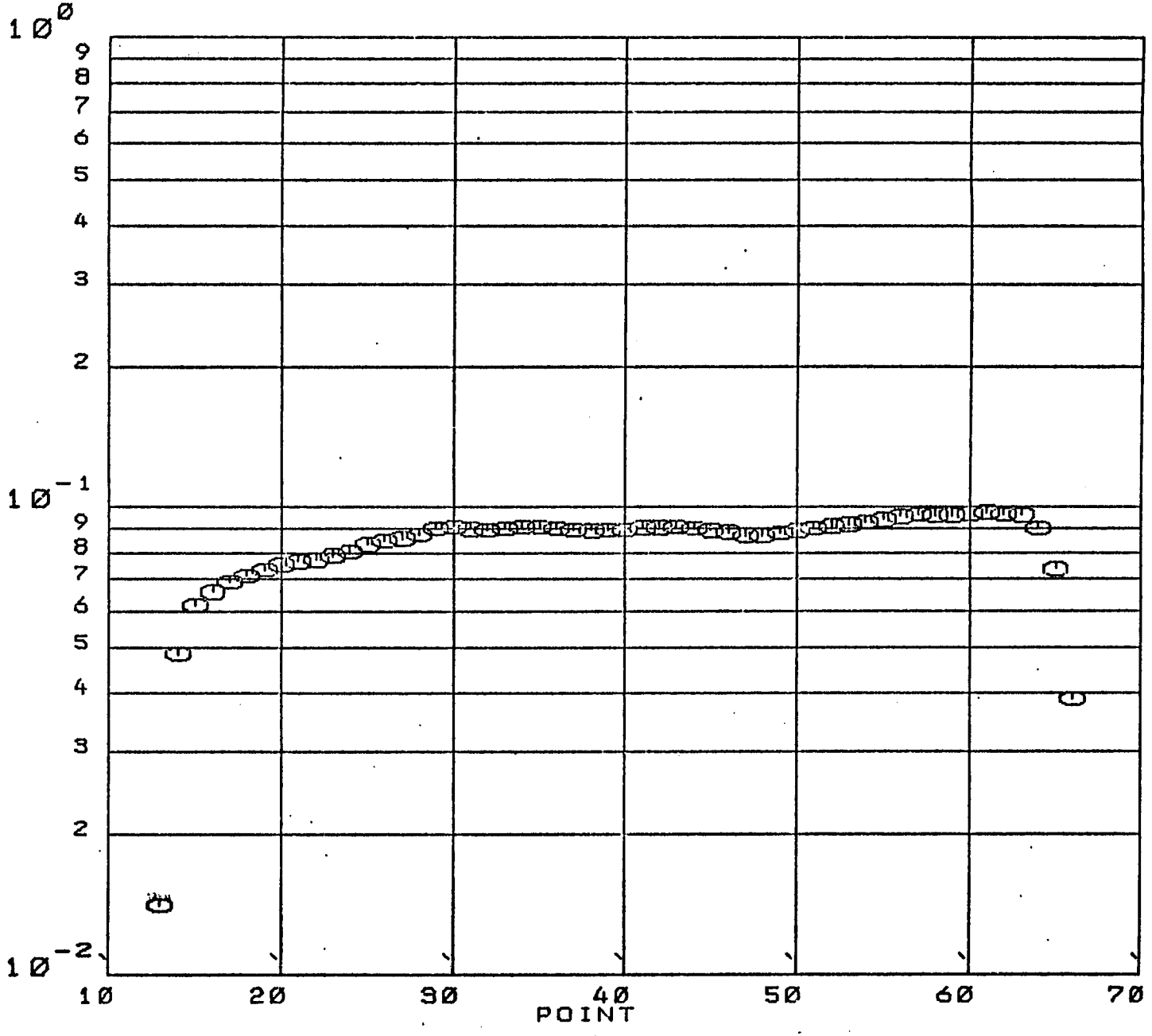
/HAFA

ARO, INC (AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

RE/FT	1.01
ALPHA	40.00
LINE	74

GROUP 91

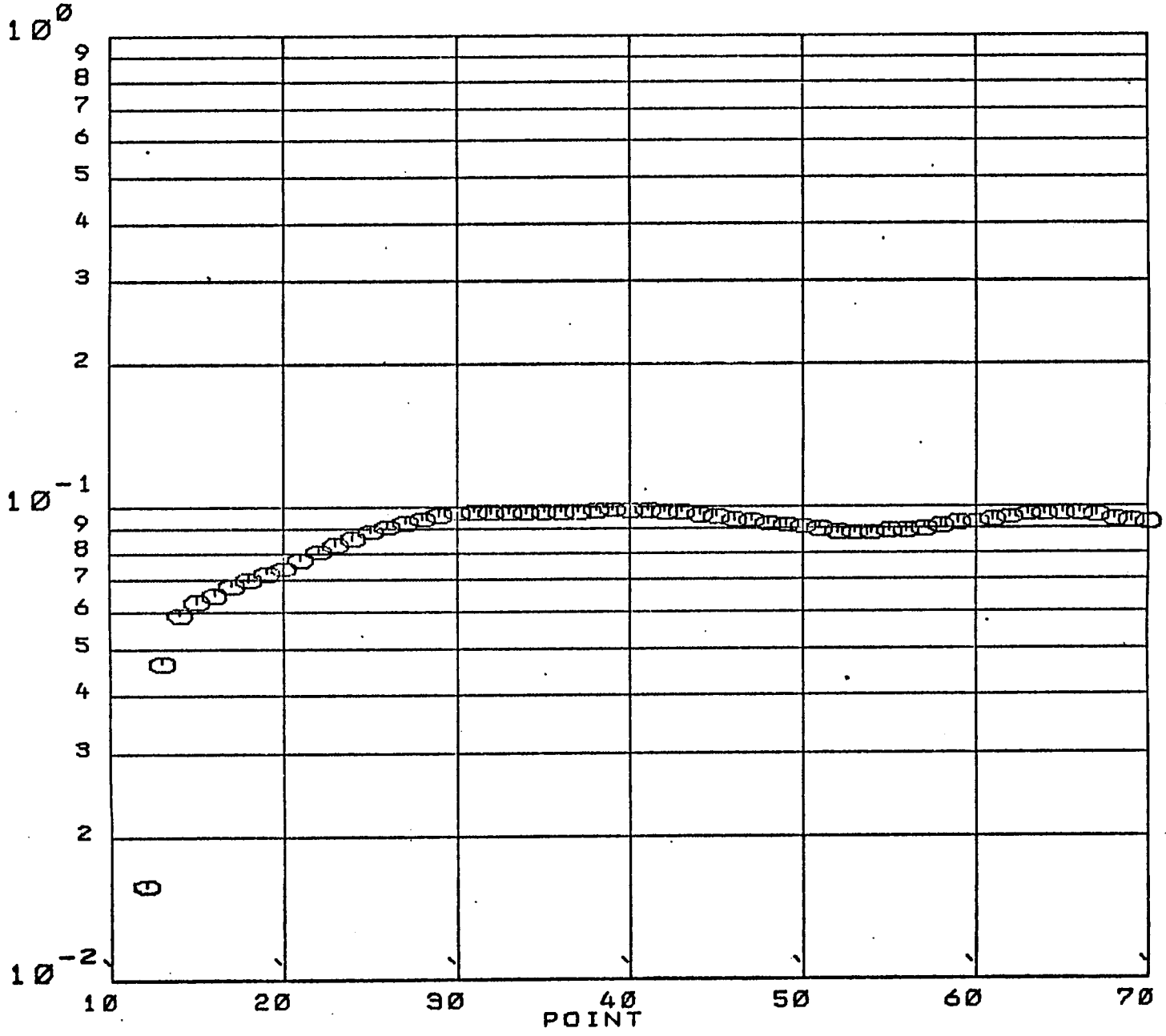


ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.01
ALPHA 40.00
LINE 80

GROUP 91



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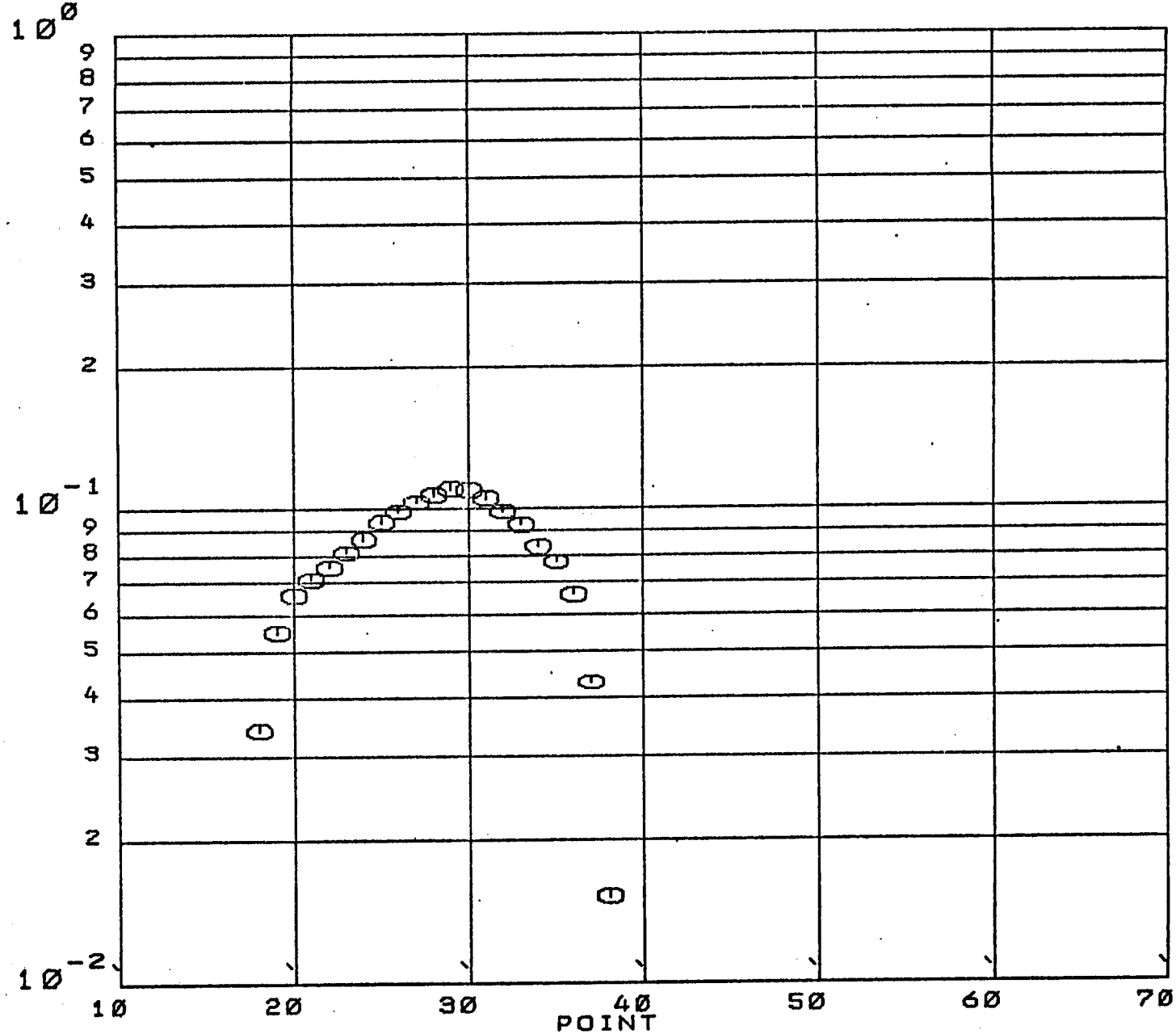
ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3/3/78
V41B-P4A

NASA/AI OH90

RE/FT 0.52
ALPHA 30.06
LINE 51

GROUP 96

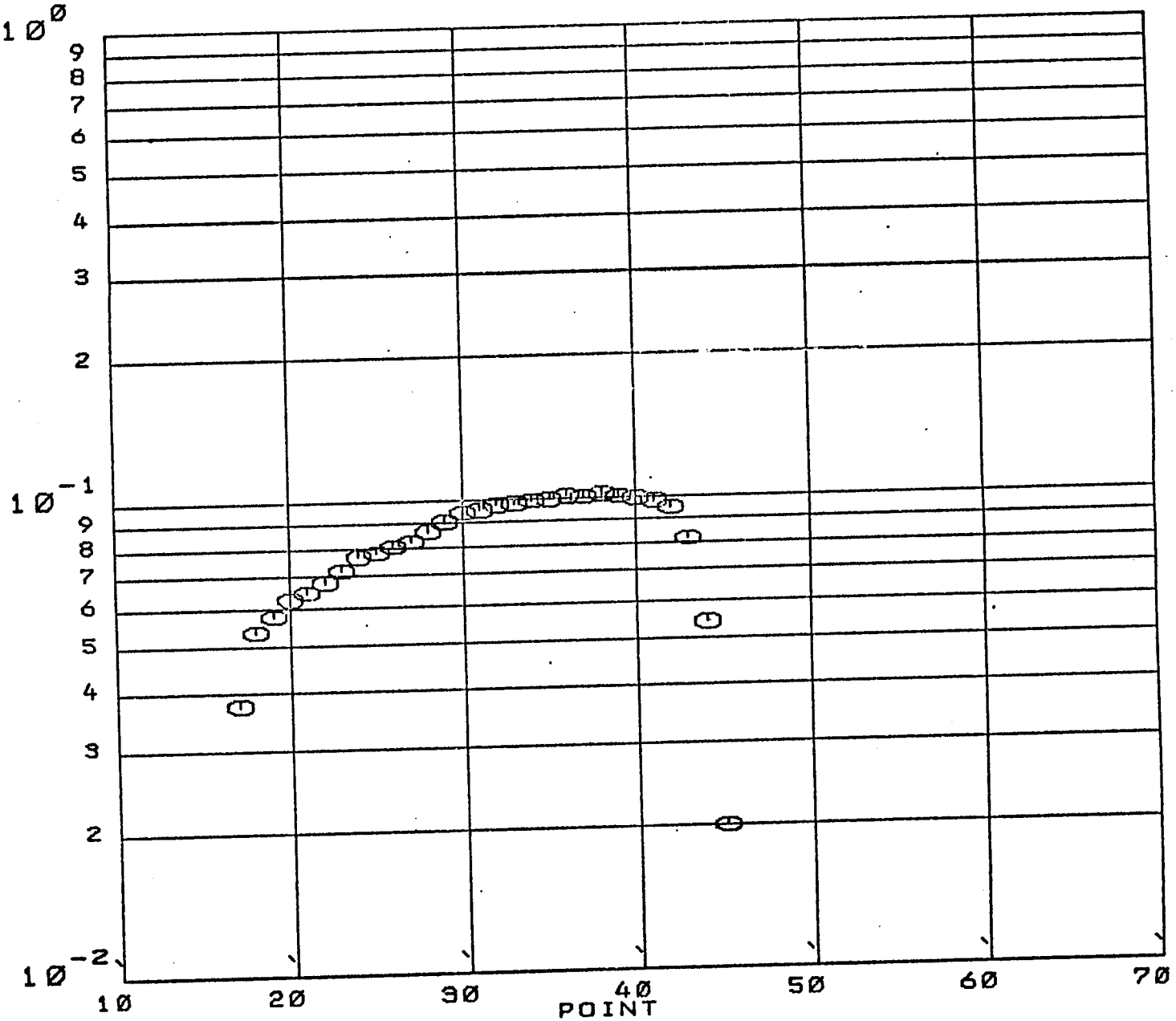


ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 0.52
ALPHA 30.06
LINE 56

GROUP 96



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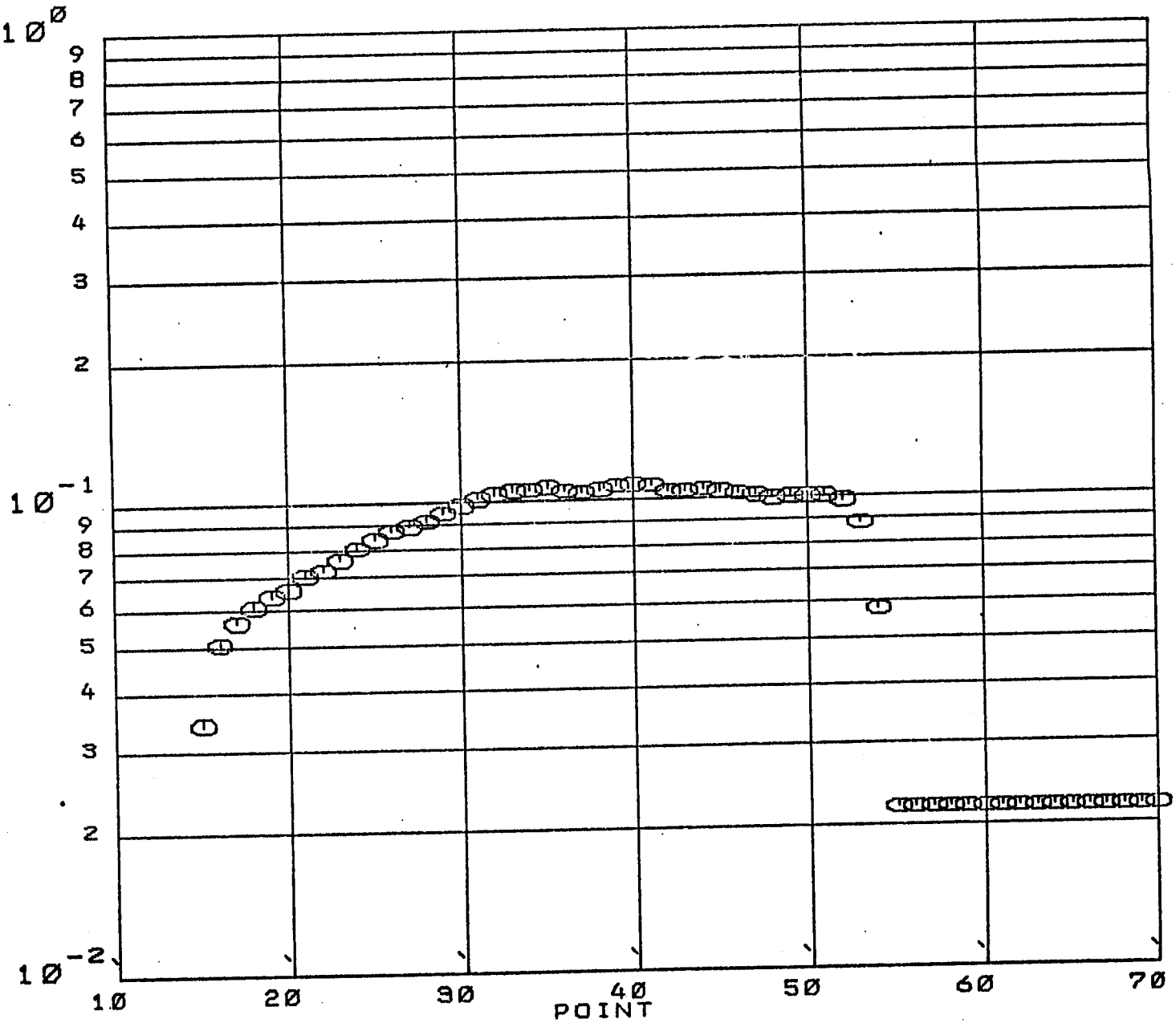
ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 0.52
ALPHA 90.06
LINE 63

GROUP 96



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/HAFA

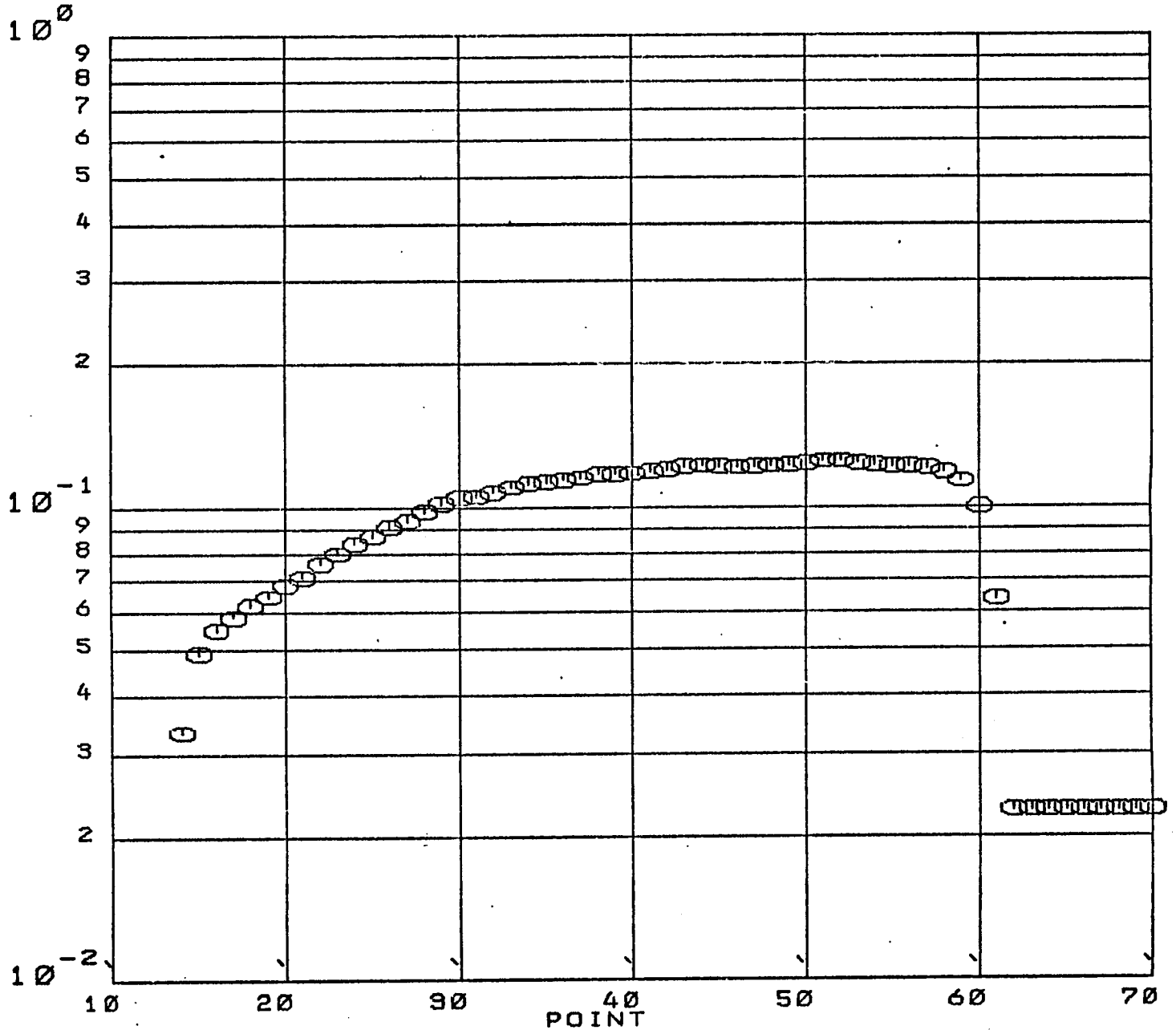
C-123

ARO, INC(AEDC)
AANOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI 0H90

RE/FT 0.52
ALPHA 30.06
LINE 68

GROUP 96



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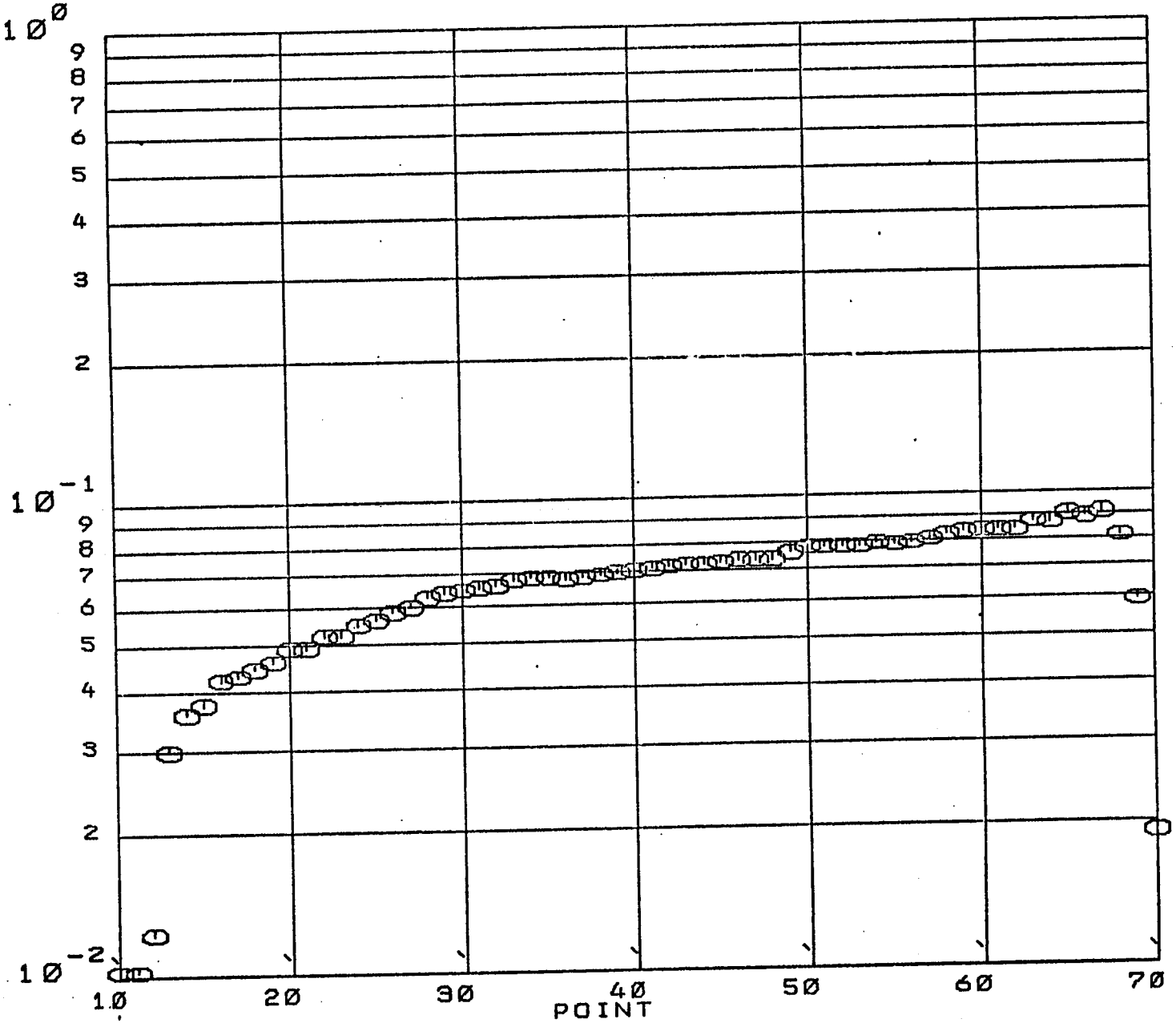
C-124
C-130

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 0.52
ALPHA 30.06
LINE 74

GROUP 96



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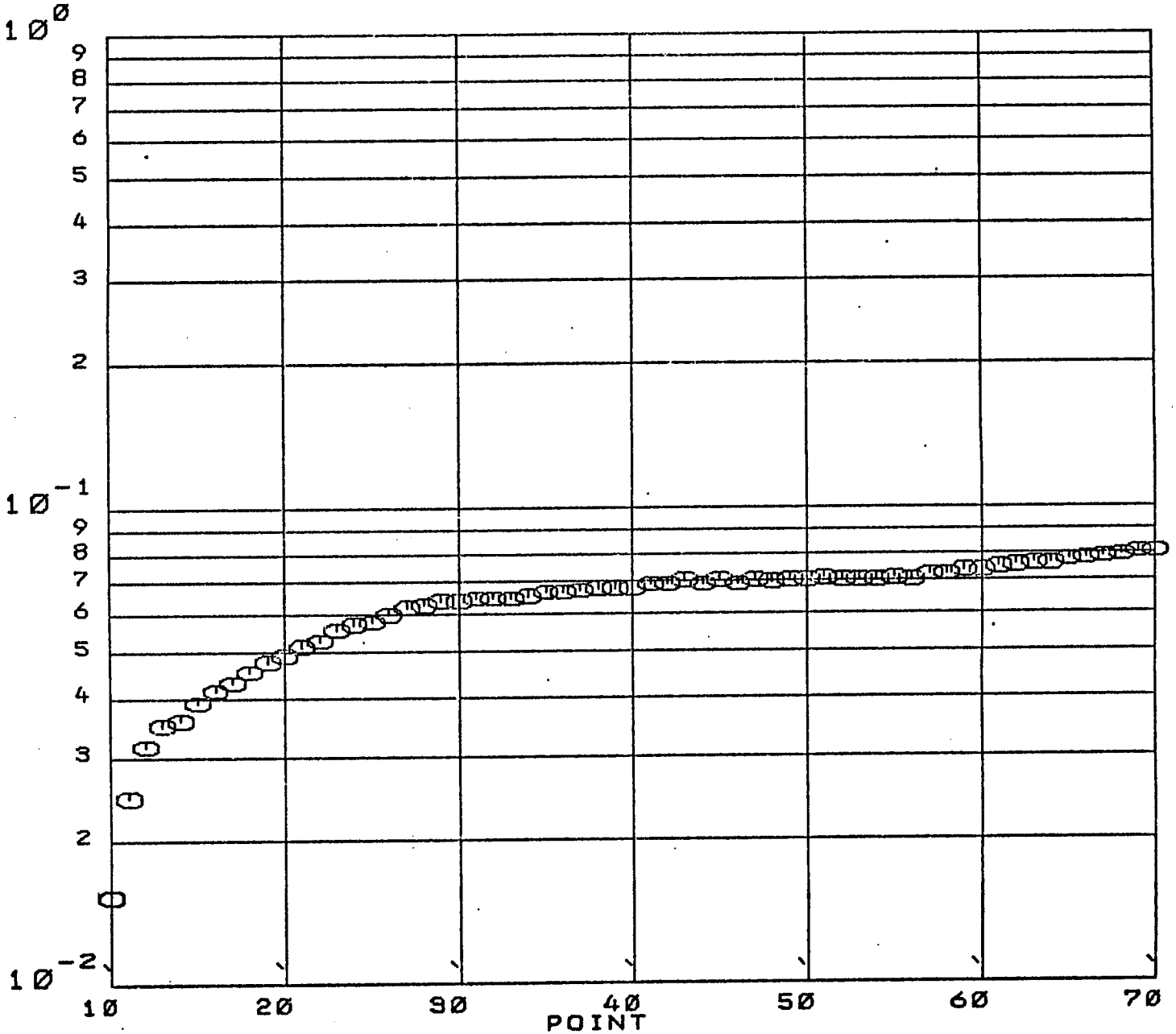
/HAFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 0.52
ALPHA 30.06
LINE 80

GROUP 96

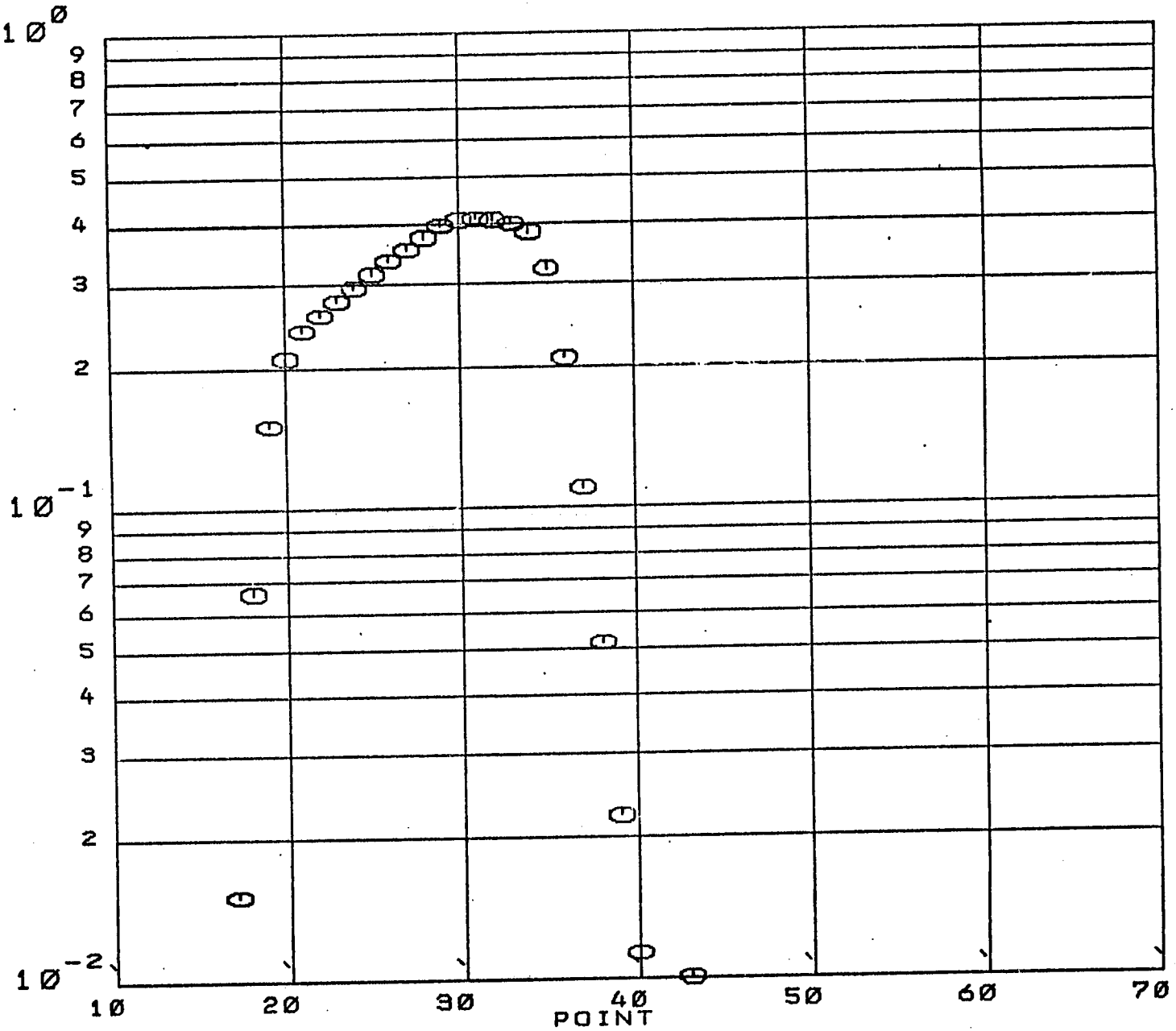


ARO, INC (AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.49
ALPHA 40.04
LINE 51

GROUP 111



H(.9TO)
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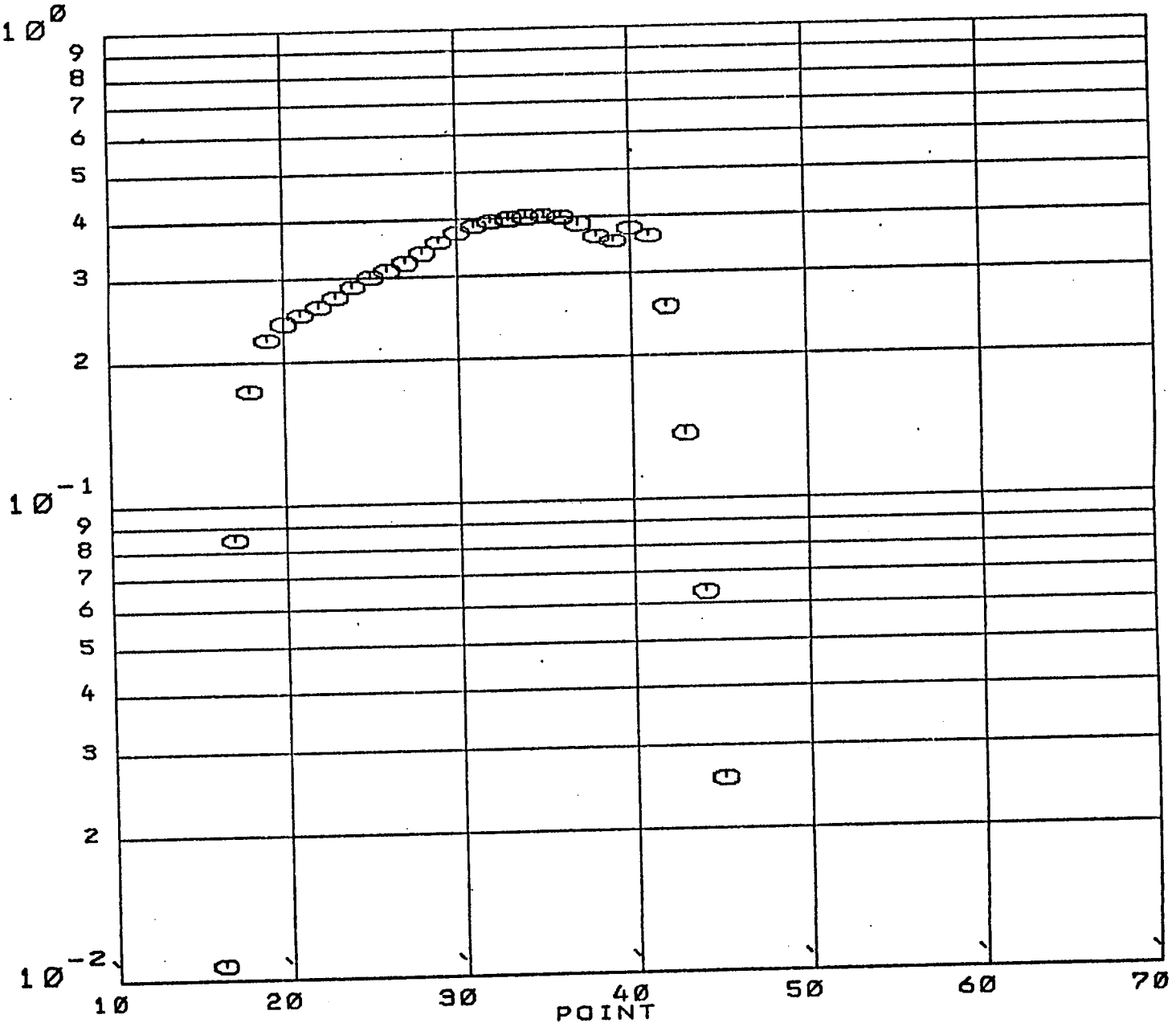
ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI 0H90

RE/FT 1.49
ALPHA 40.04
LINE 56

GROUP 111



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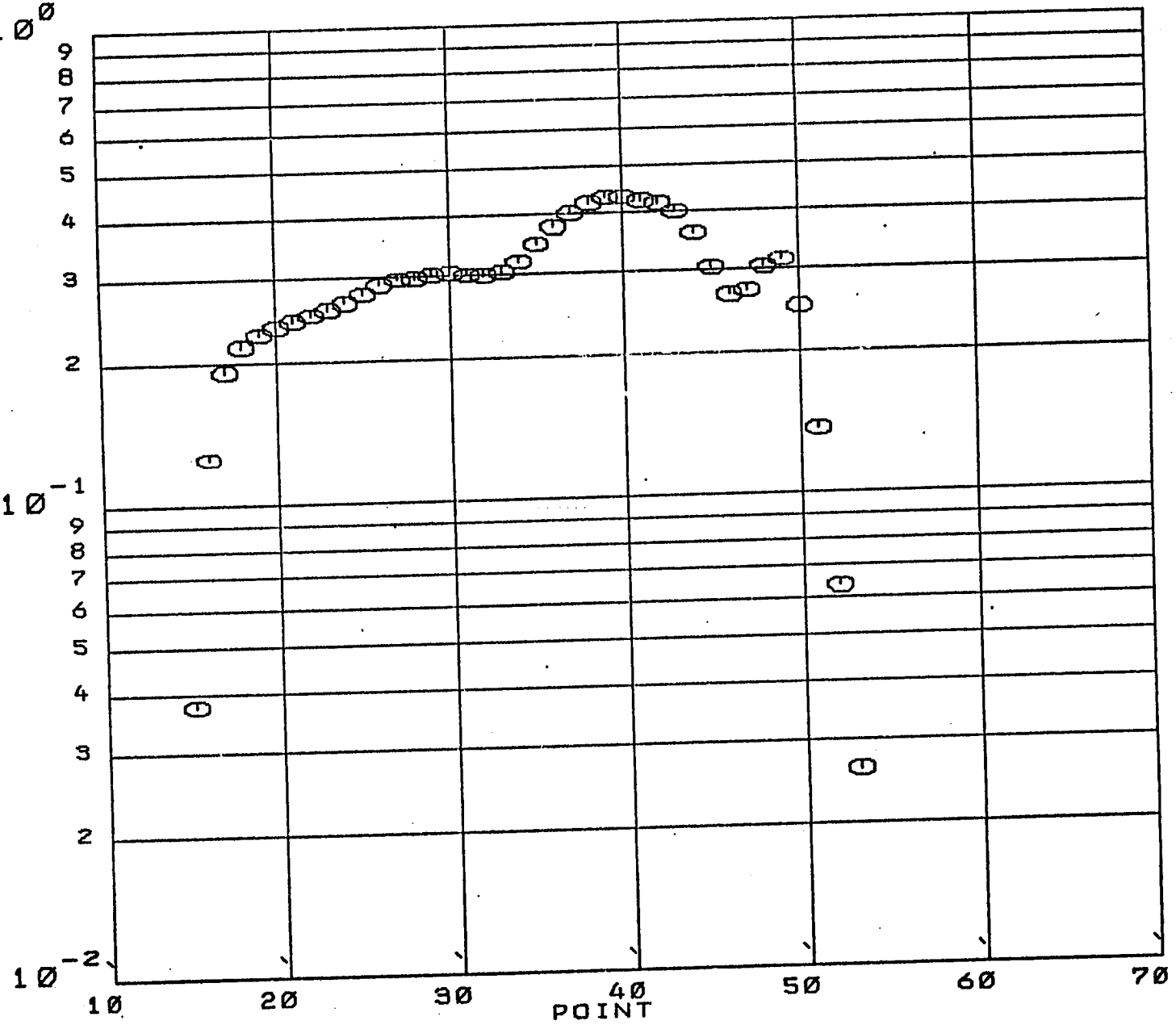
ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

GROUP 111

NASA/AI .OH90

RE/FT 1.49
ALPHA 40.04
LINE 63



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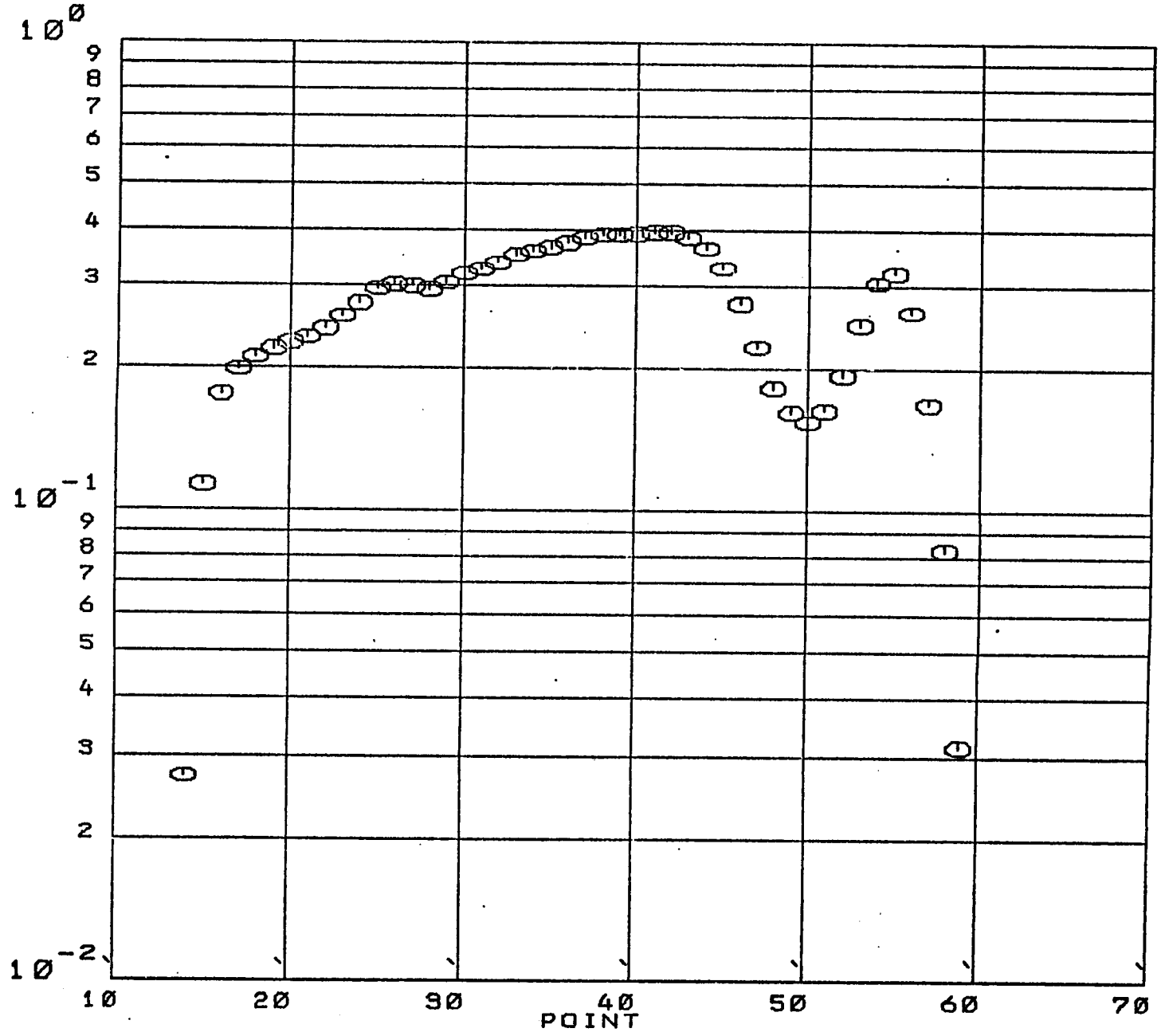
ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI 0H90

RE/FT 1.49
ALPHA 40.04
LINE 68

GROUP 111

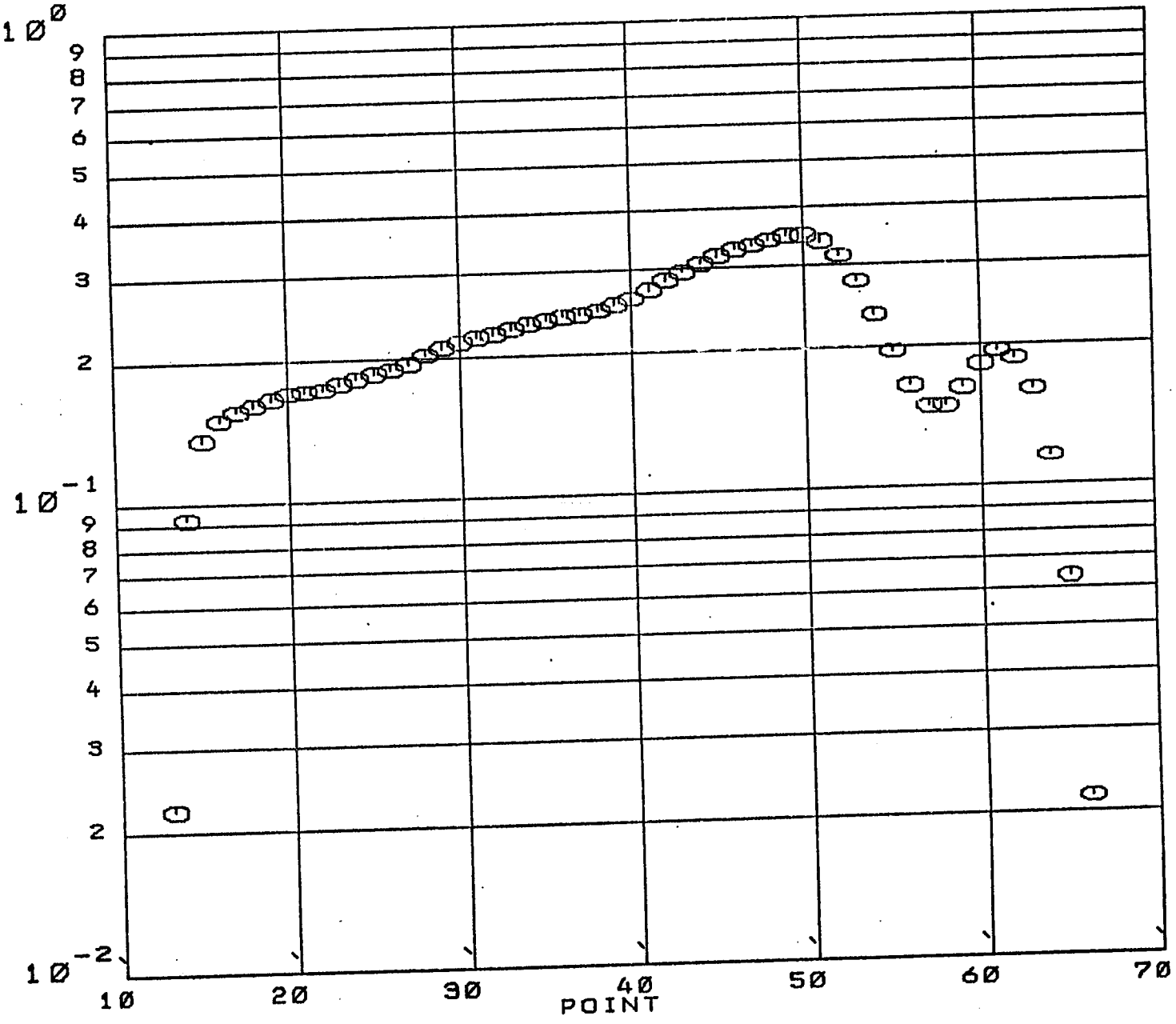


ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

GROUP 111

NASA/AI OH90

RE/FT 1.49
ALPHA 40.04
LINE 74

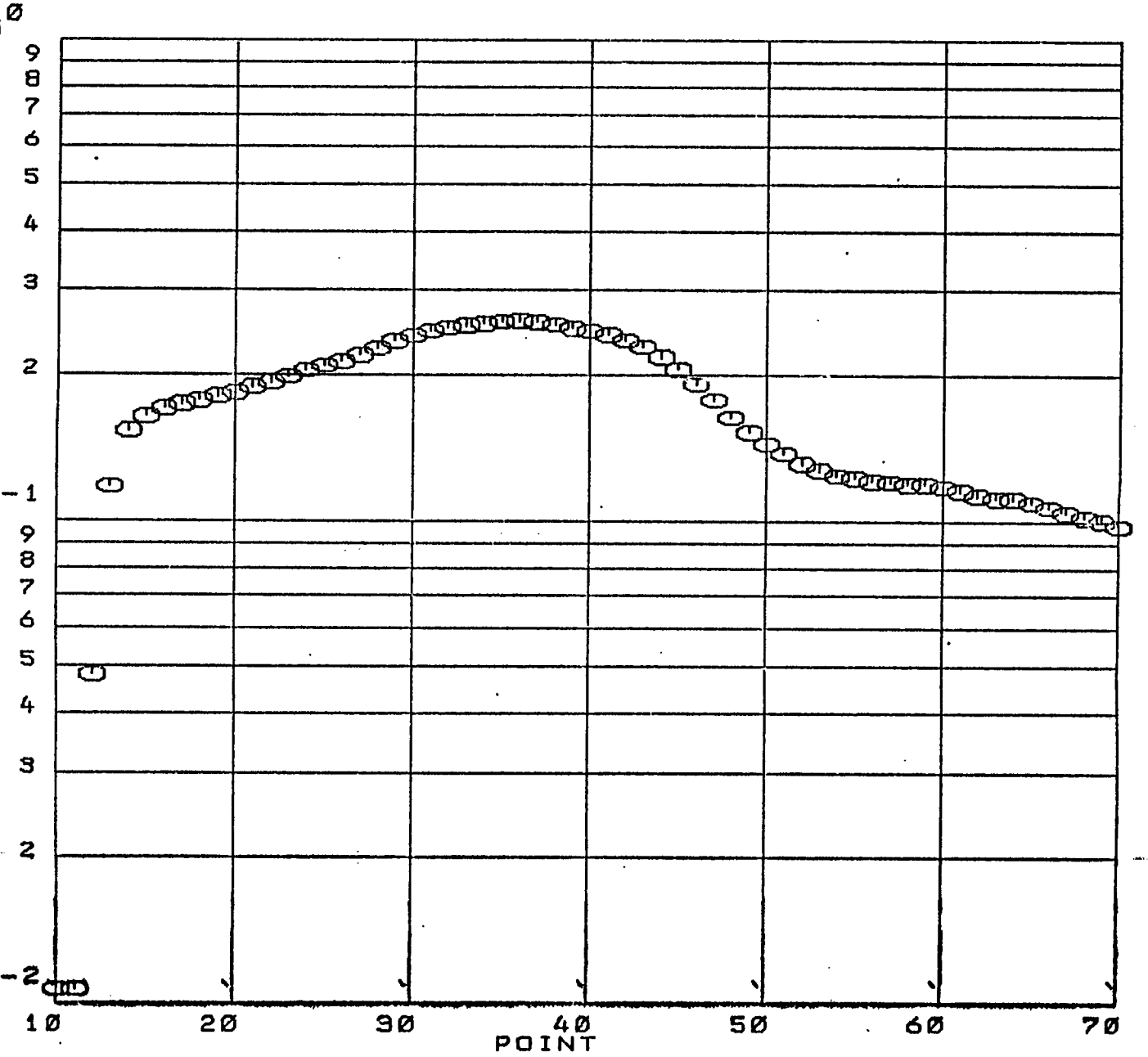


ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.49
ALPHA 40.04
LINE 80

GROUP 111

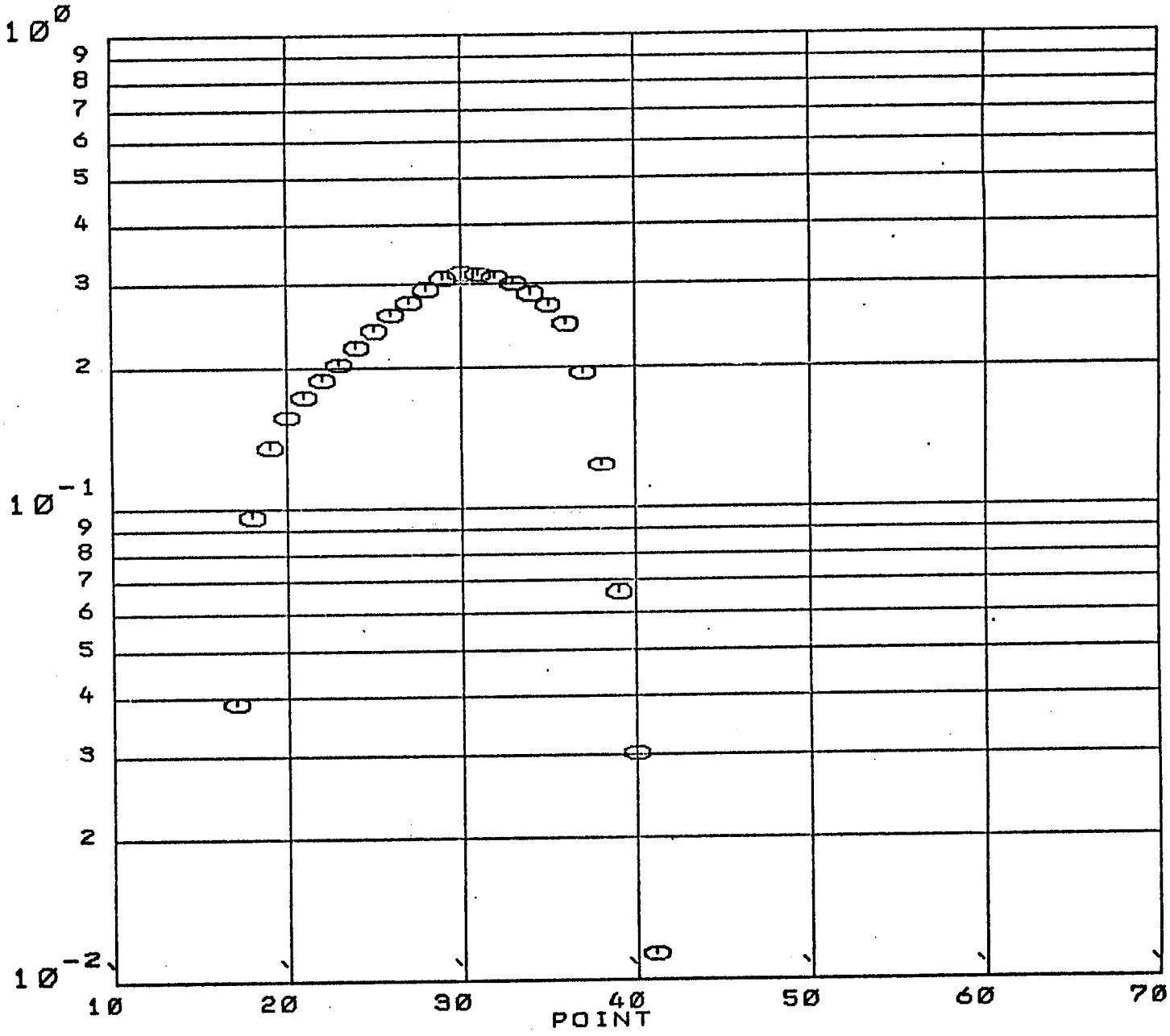


ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.49
ALPHA 29.98
LINE 51

GROUP 112



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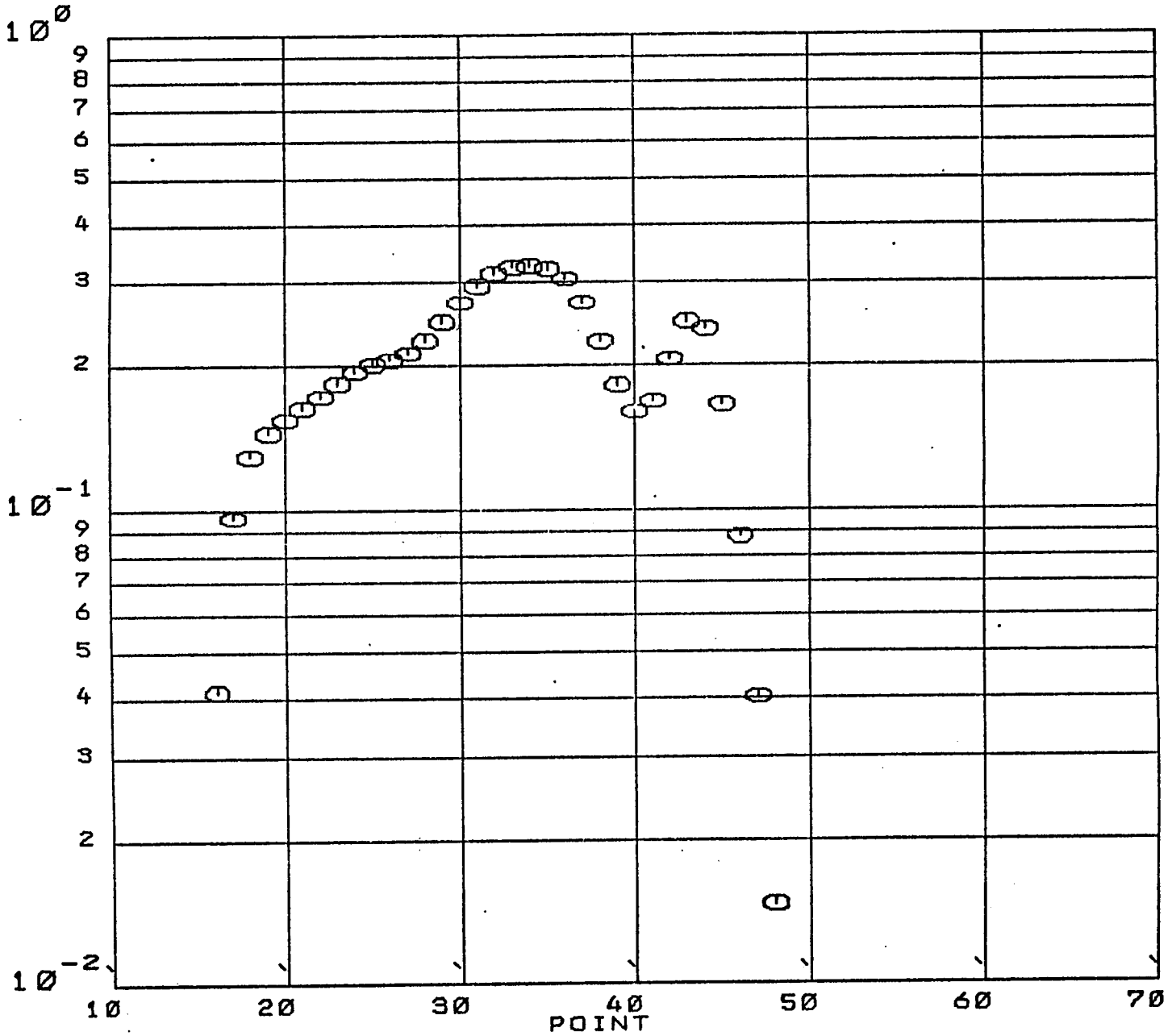
/HAFA

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

GROUP 112

NASA/RI OH90

RE/FT 1.49
ALPHA 29.98
LINE 56

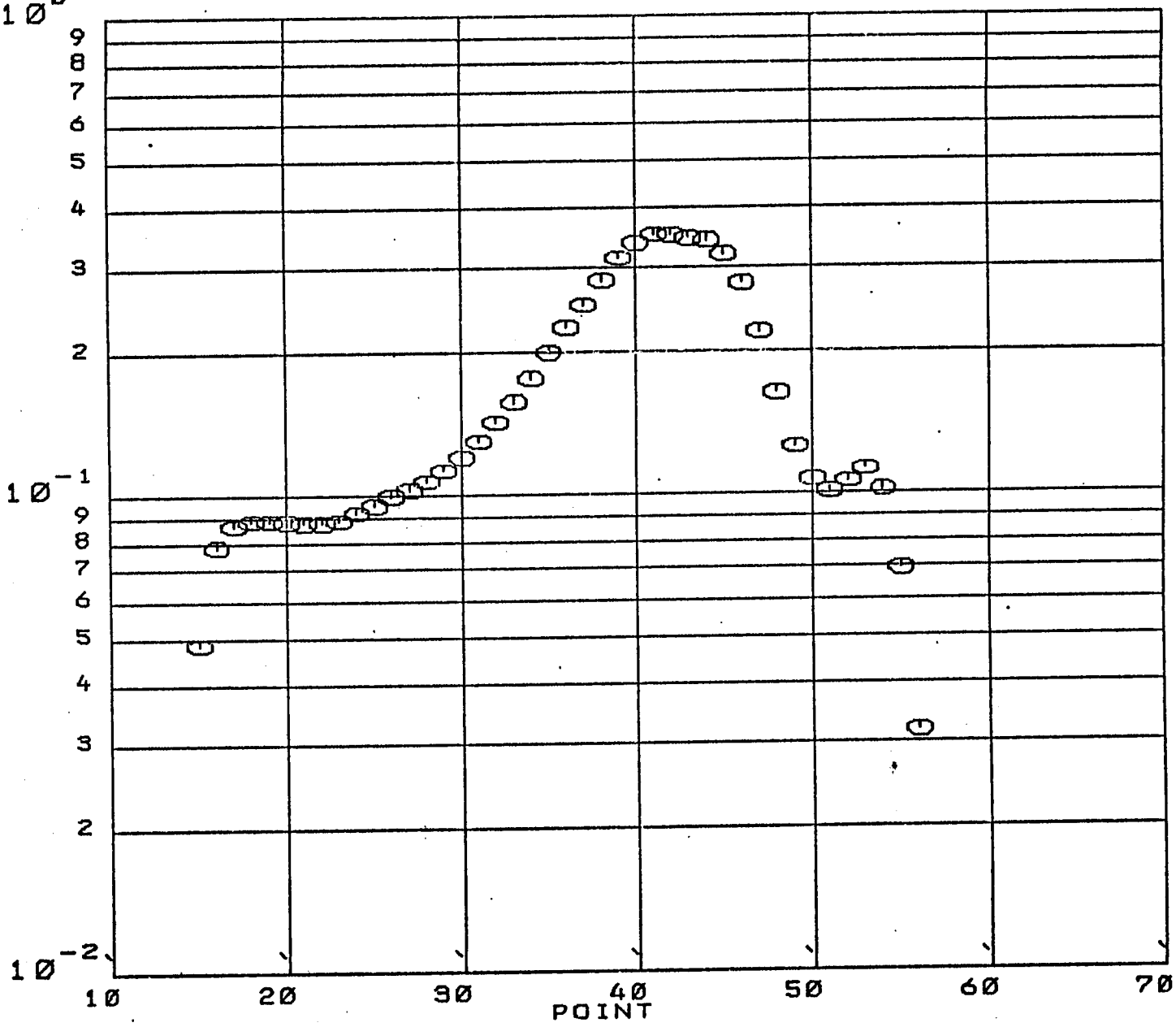


ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 1.49
ALPHA 29.98
LINE 63

GROUP 112 10^{0}



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C-135
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ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

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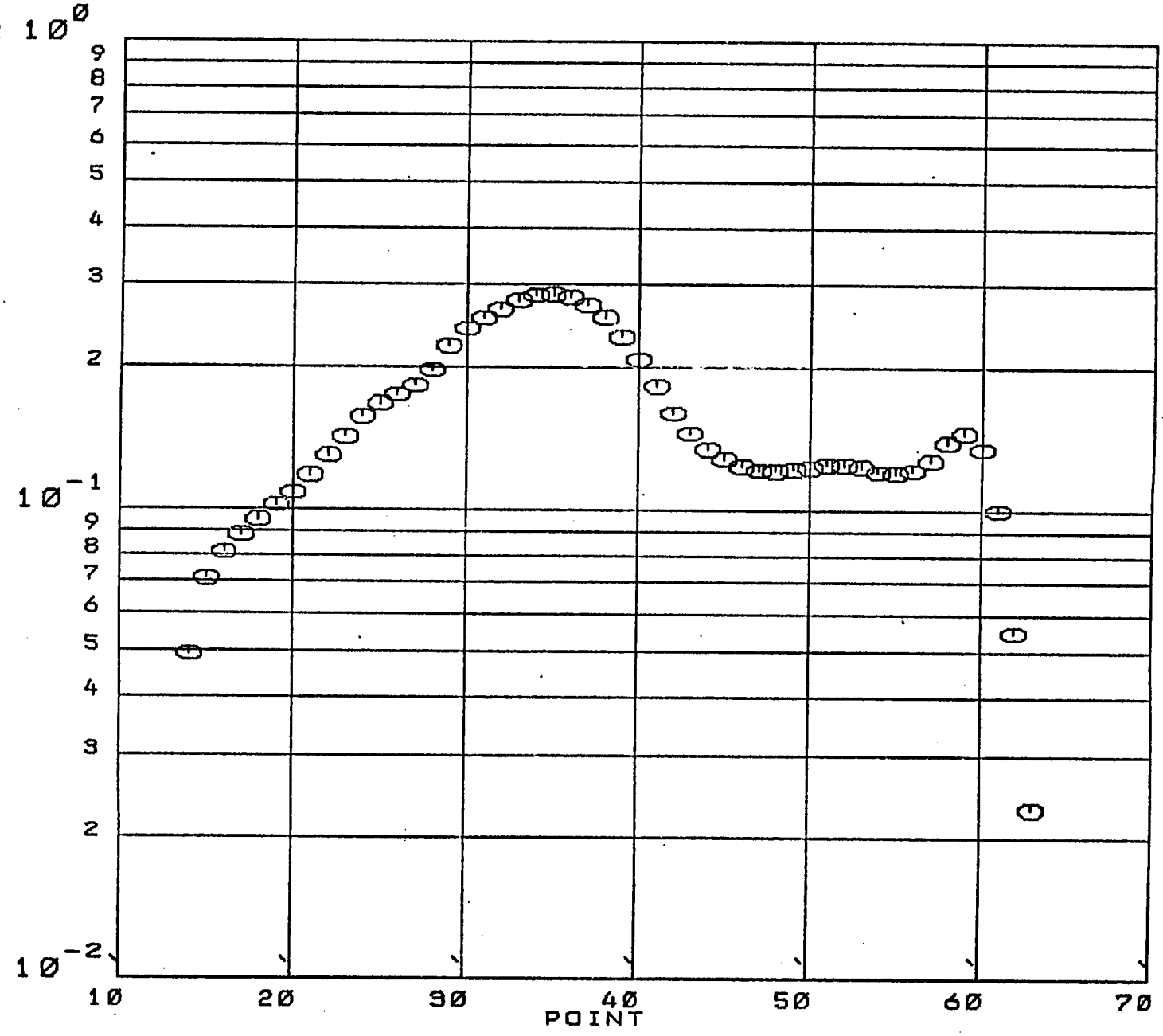
GROUP 112



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C-136
382

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

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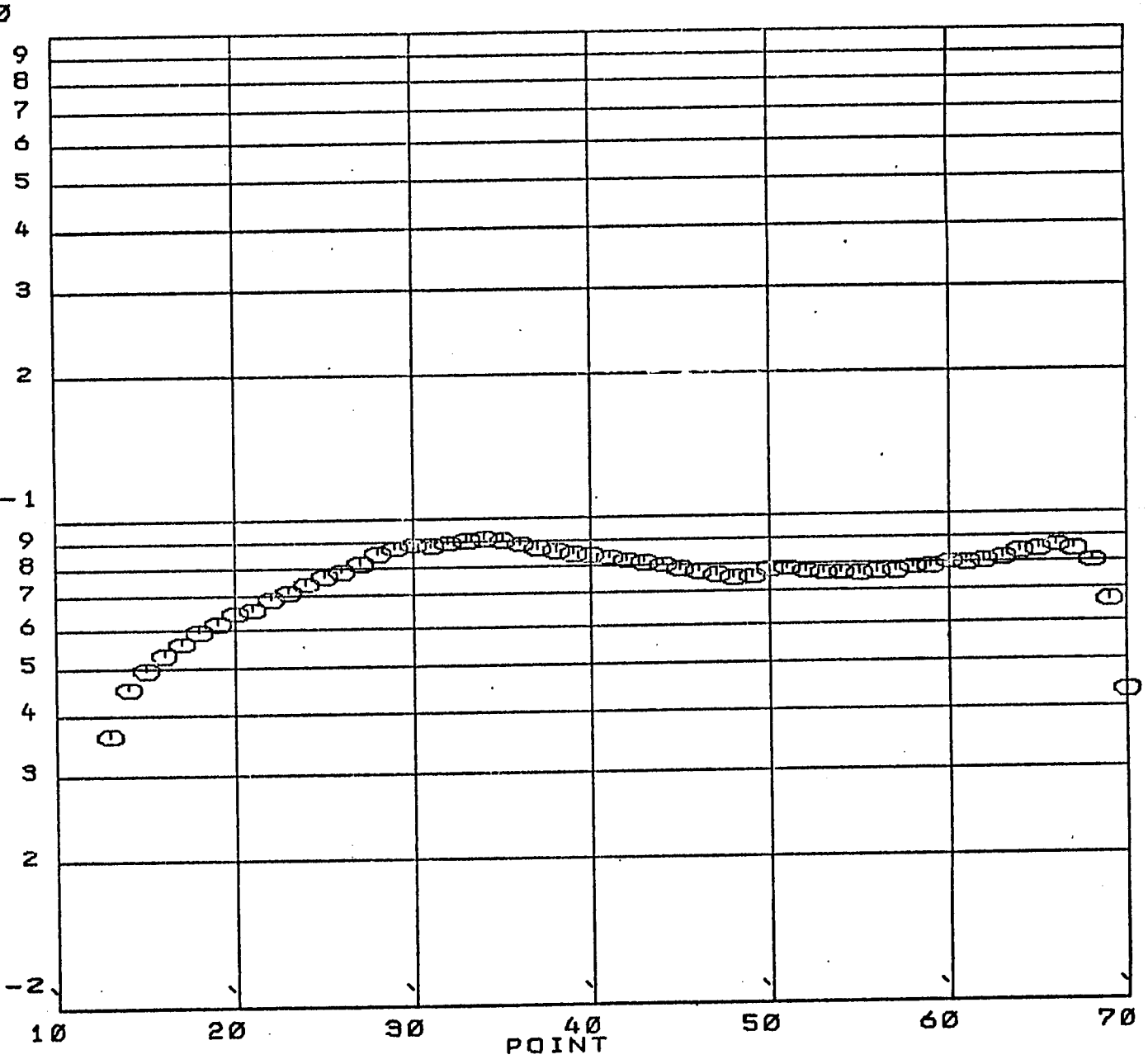

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

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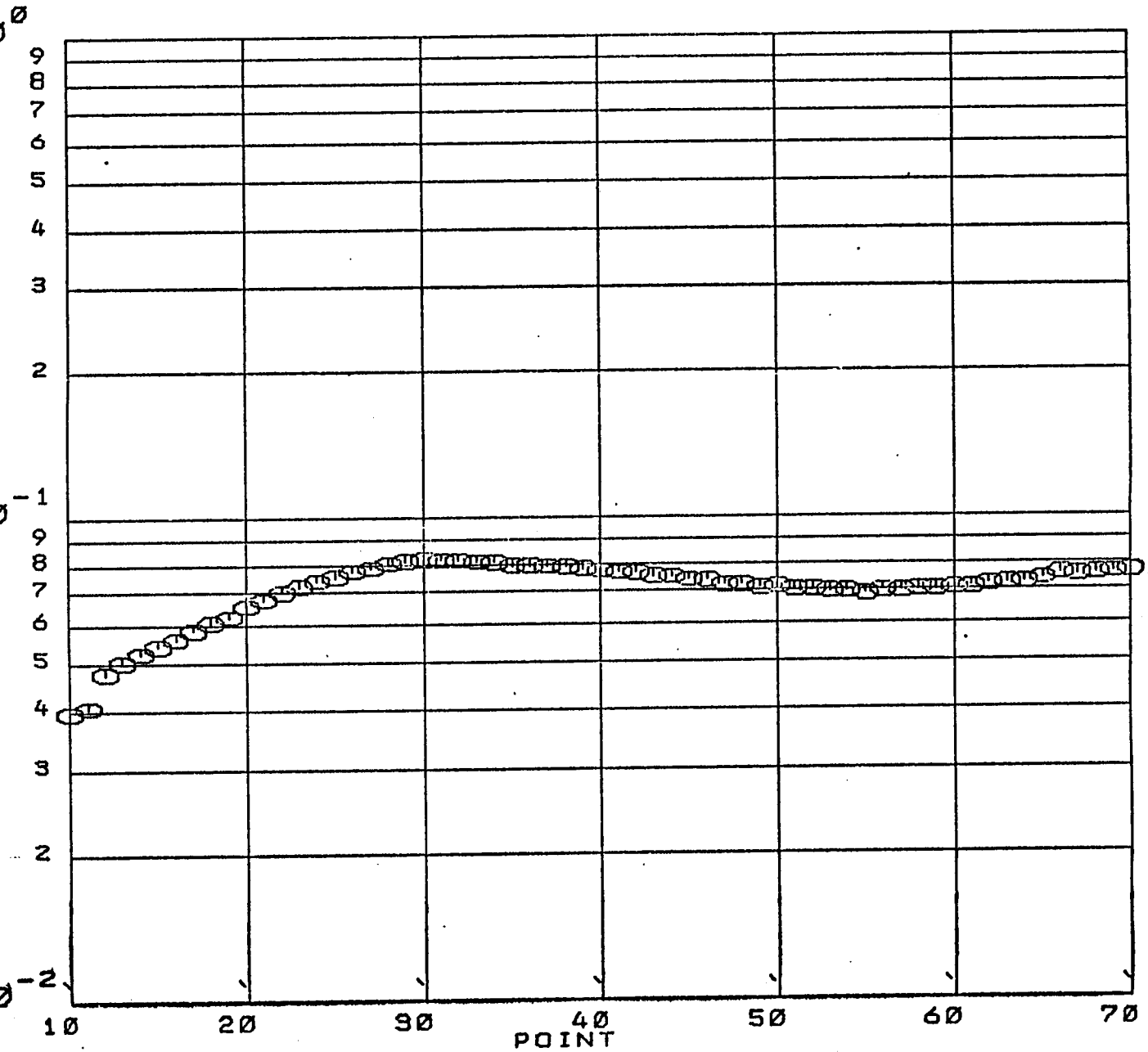

C-138

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

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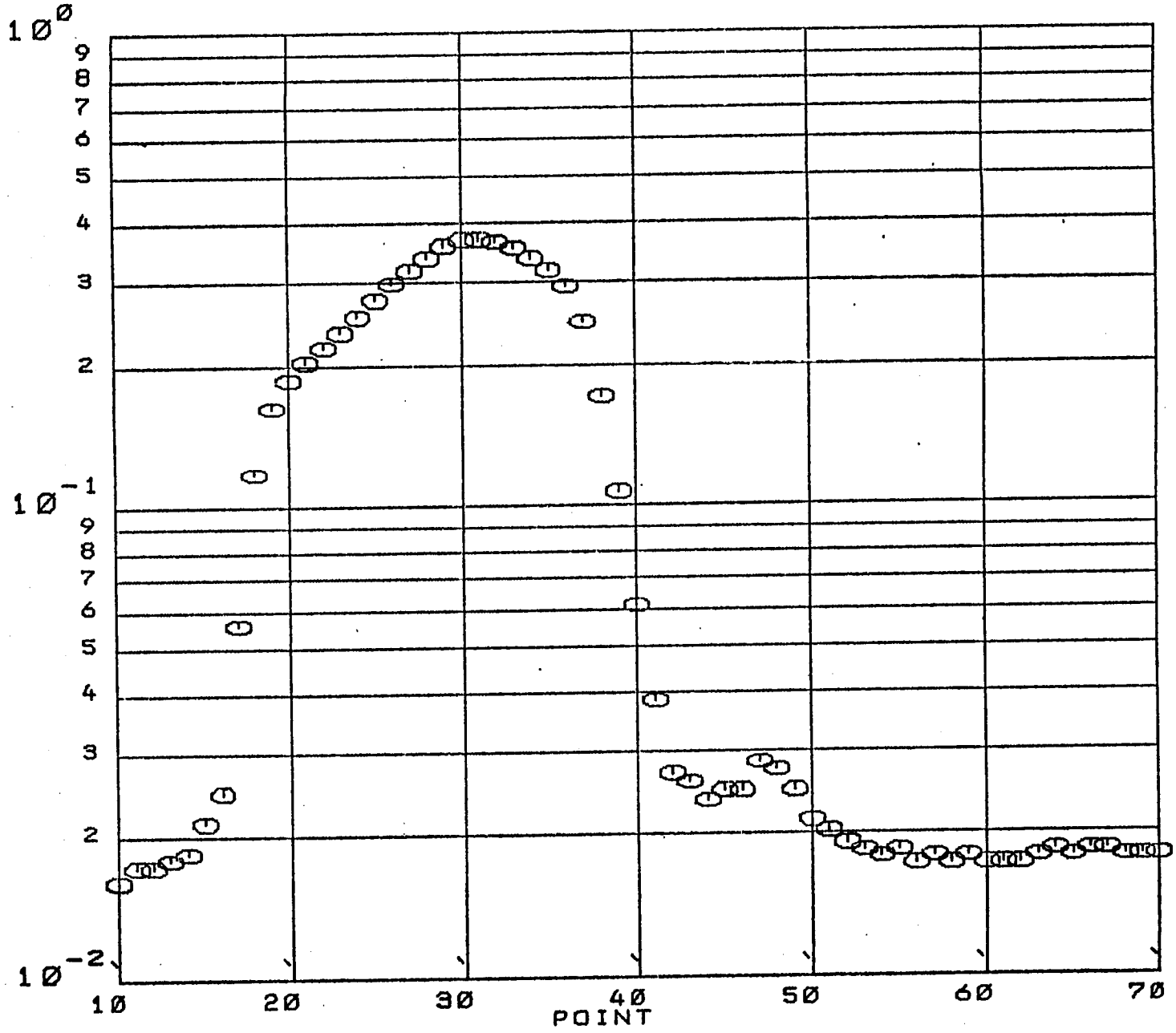

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

GROUP 114

NASA/AI OH90

RE/FT 1.98
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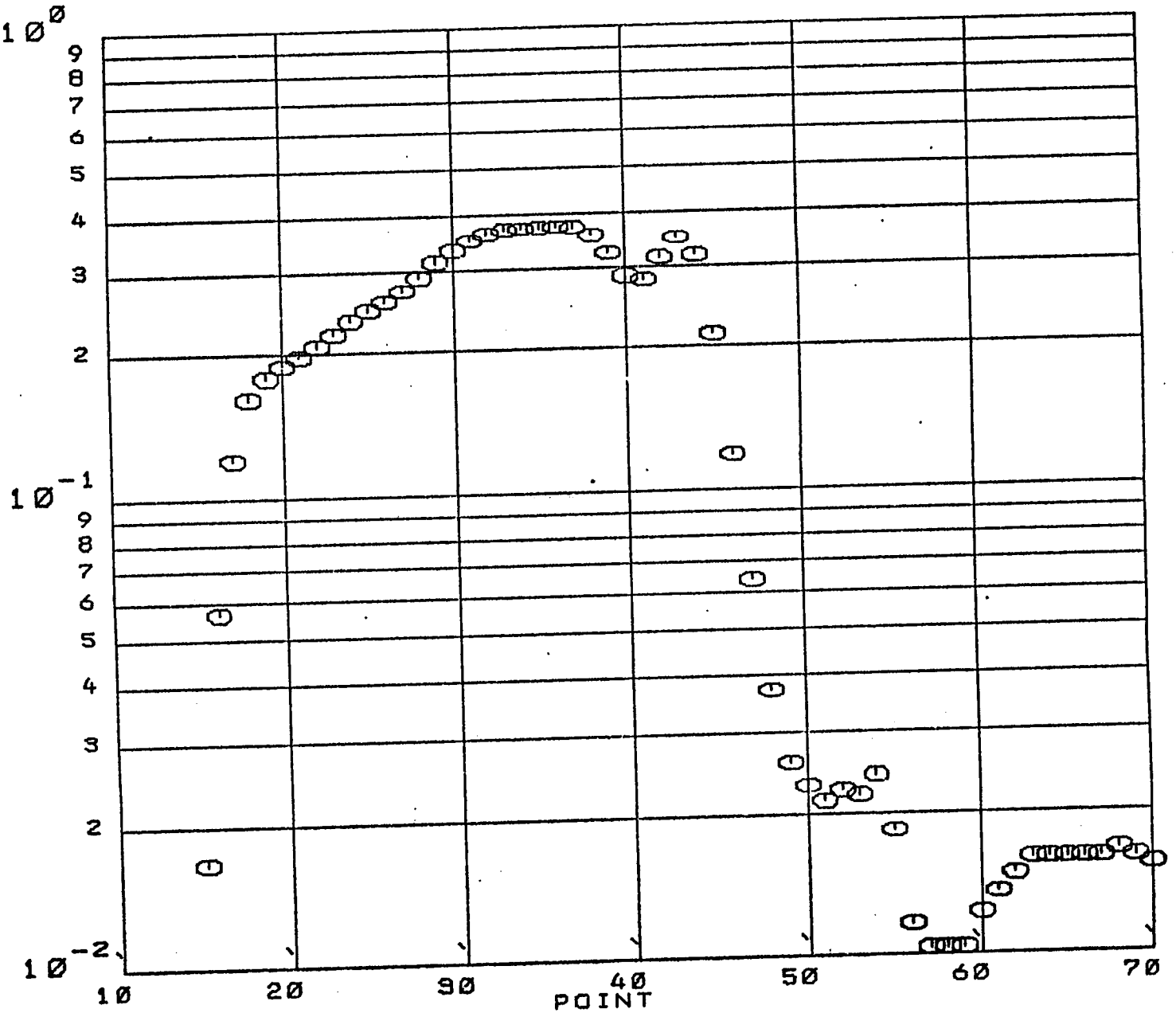

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AAO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

GROUP 114 10^{0}

NASA/AI OH90

RE/FT 1.98
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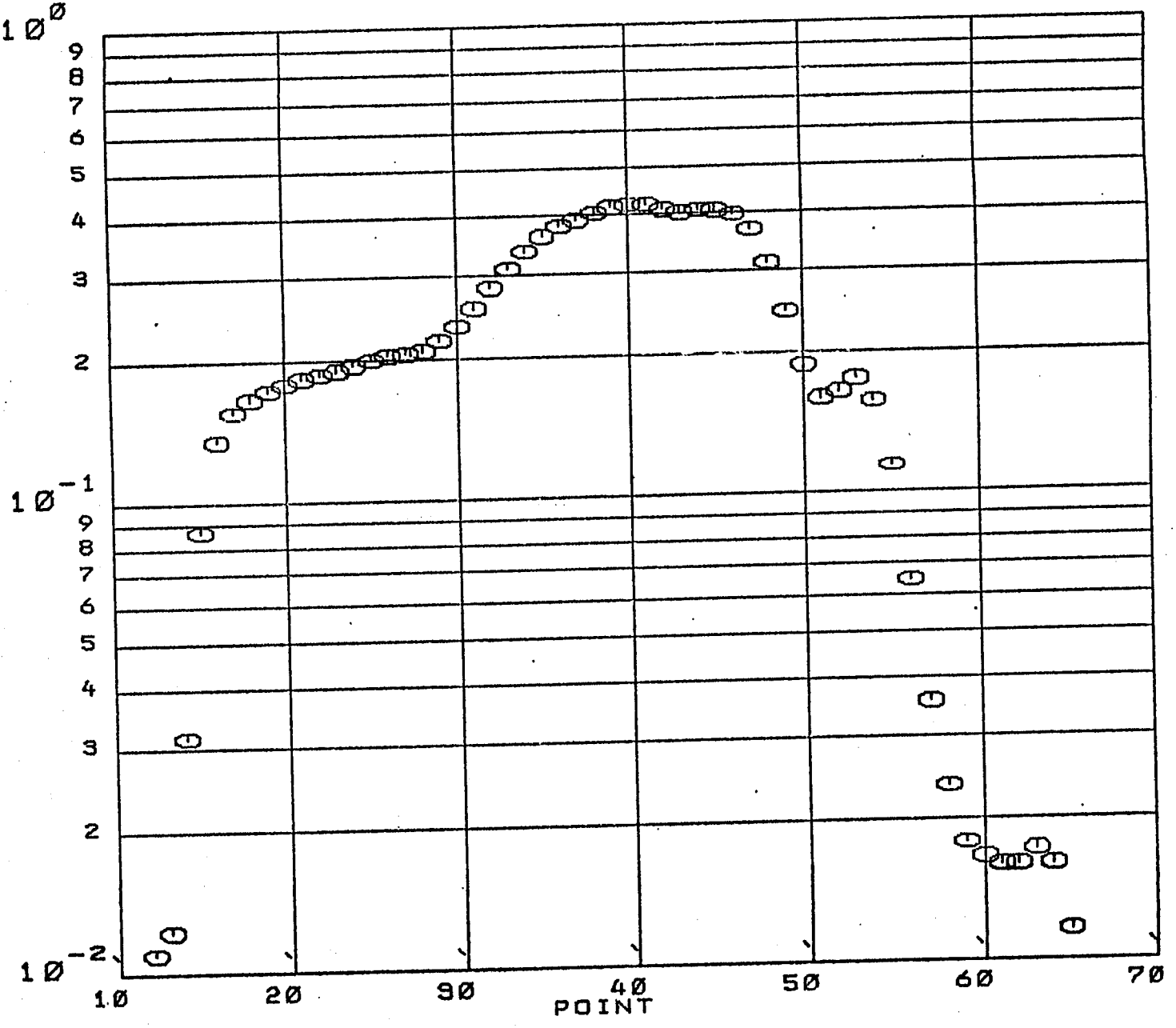

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ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A
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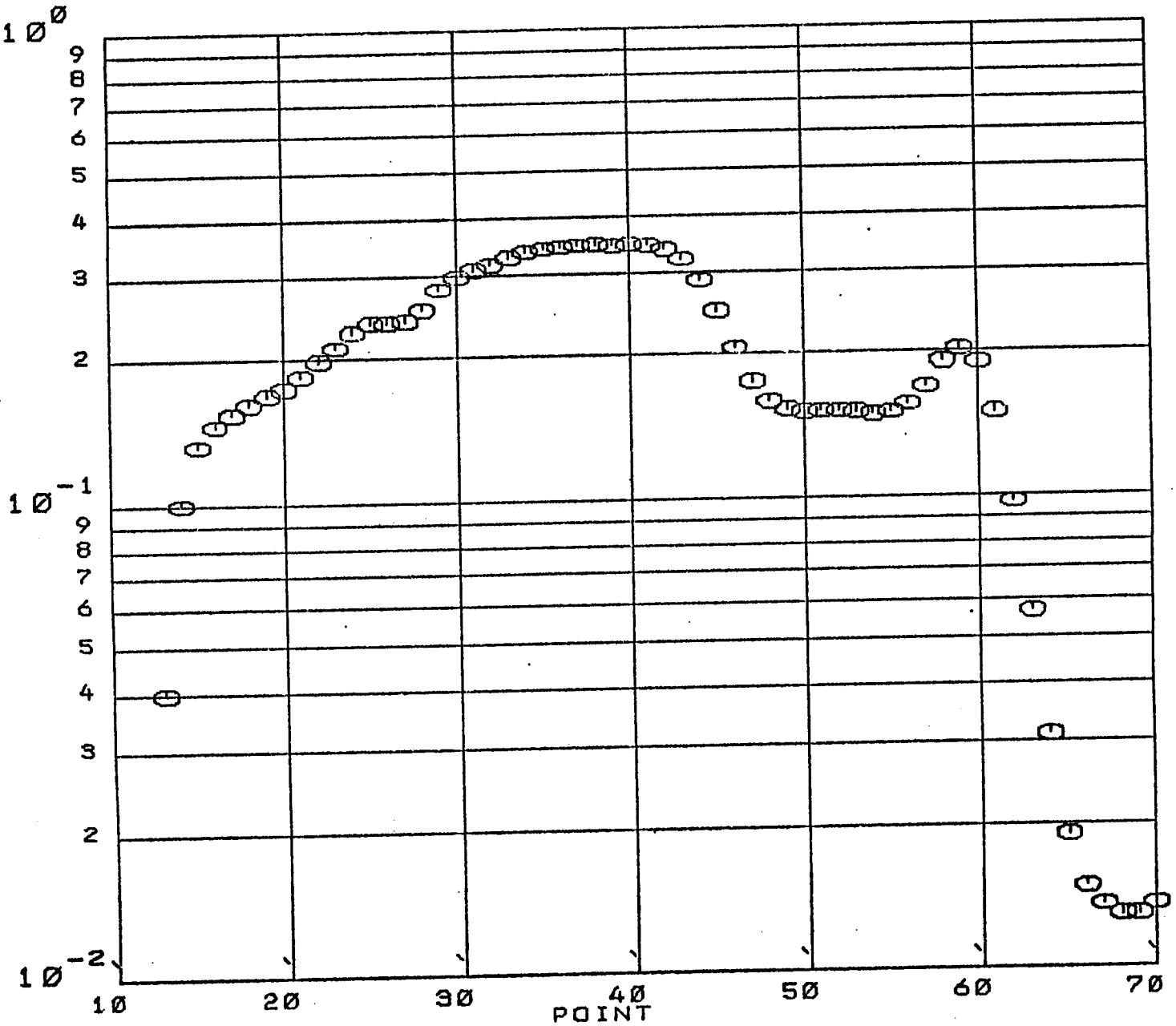

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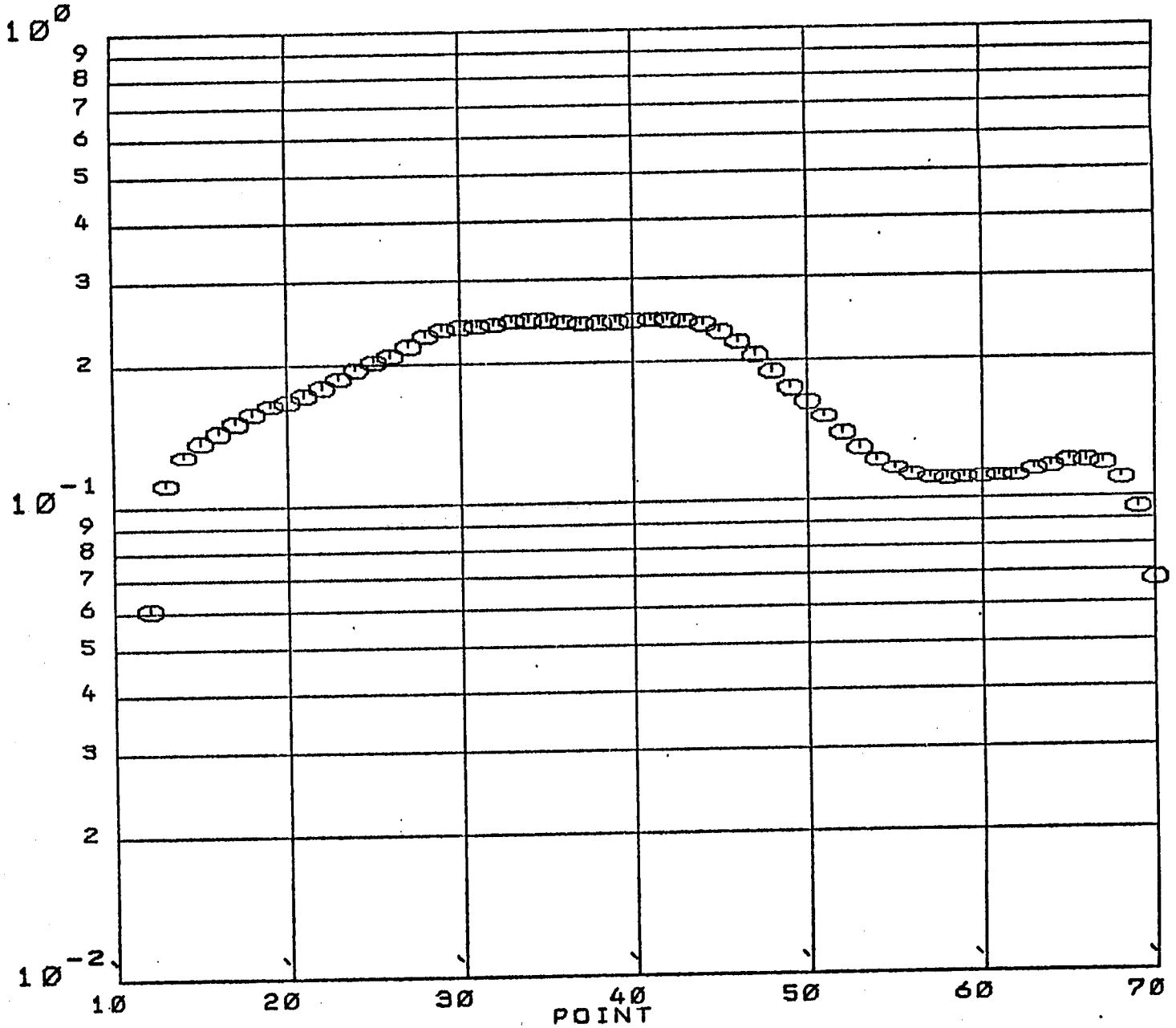
ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

AE/FT	1.98
ALPHA	29.98
LINE	74

GROUP 114



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ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

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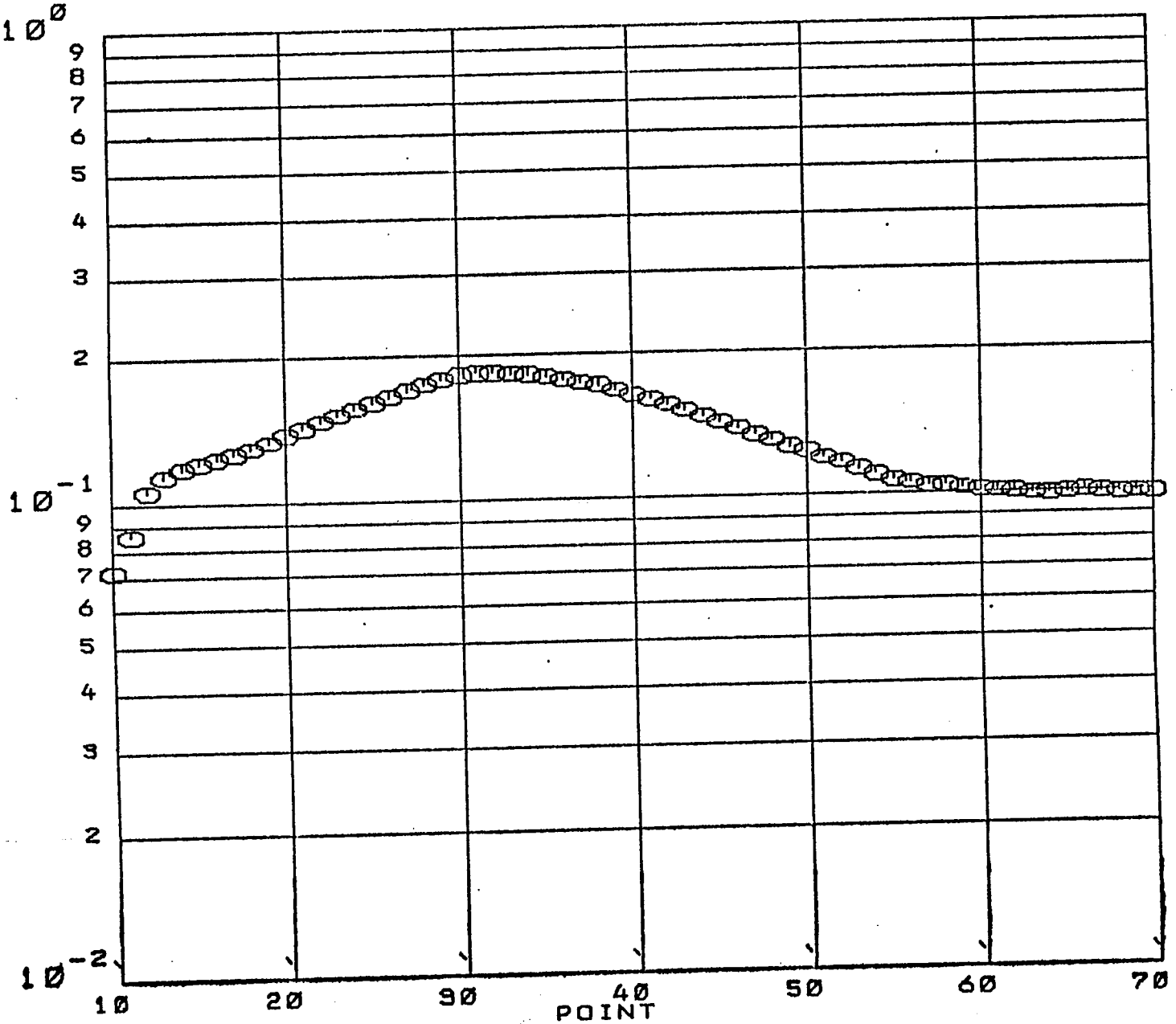

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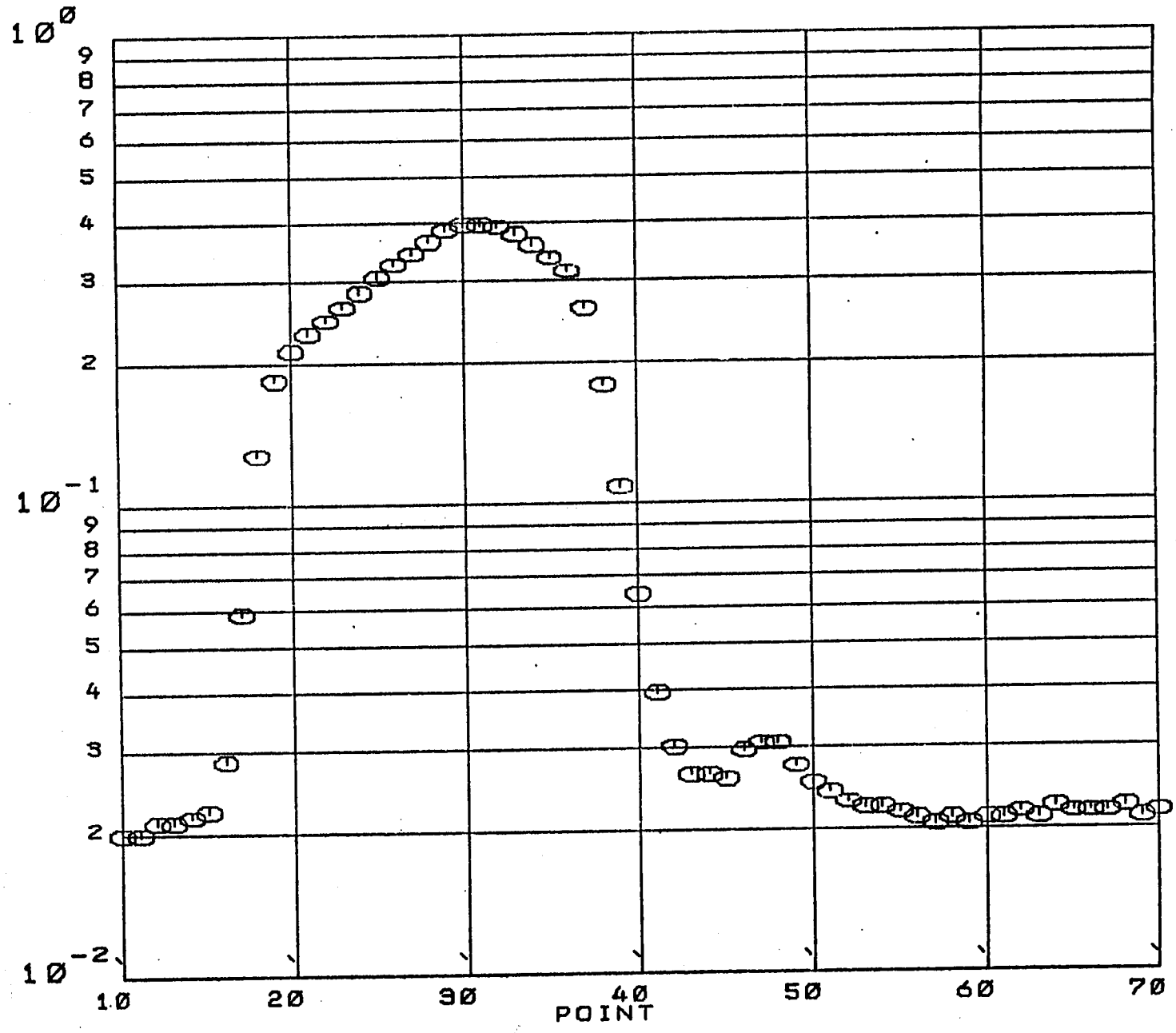
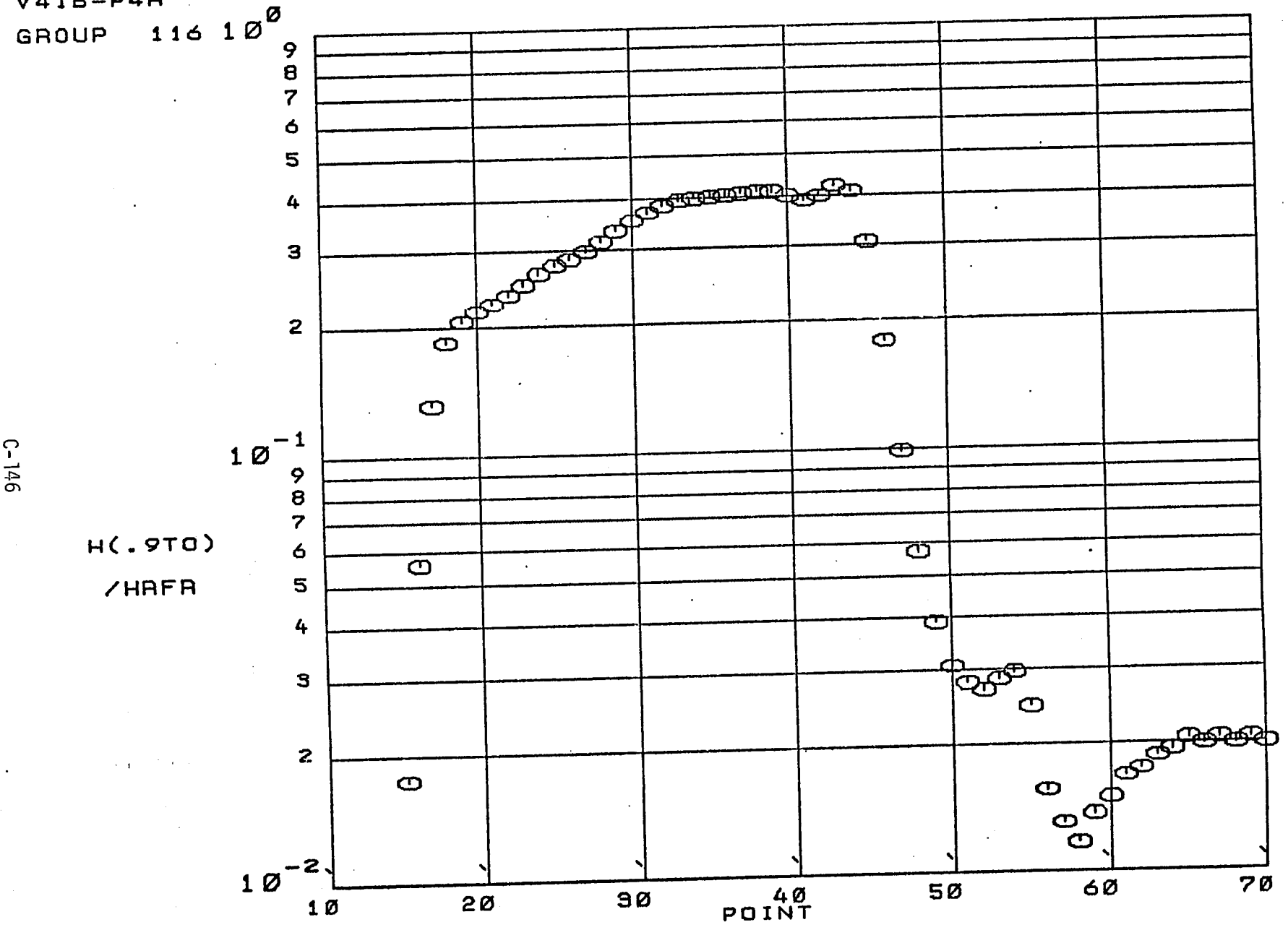
ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 2.46
ALPHA 9.98
LINE 51

GROUP 116




AAO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A
GROUP 116 10^0
NASA/AI OH90
RE/FT 2.46
ALPHA 29.98
LINE 56
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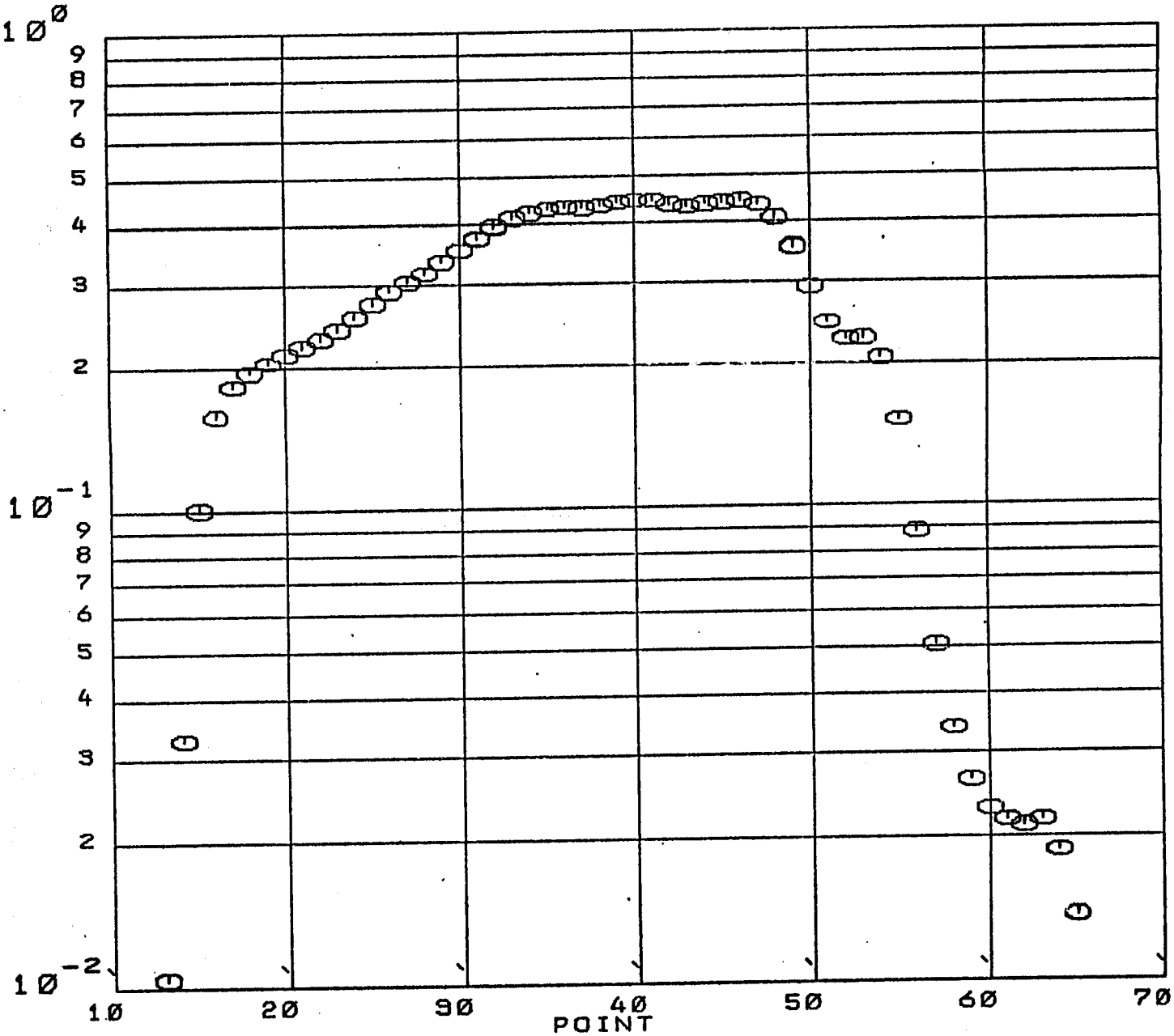
ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 2.46
ALPHA 29.98
LINE 63

GROUP 116

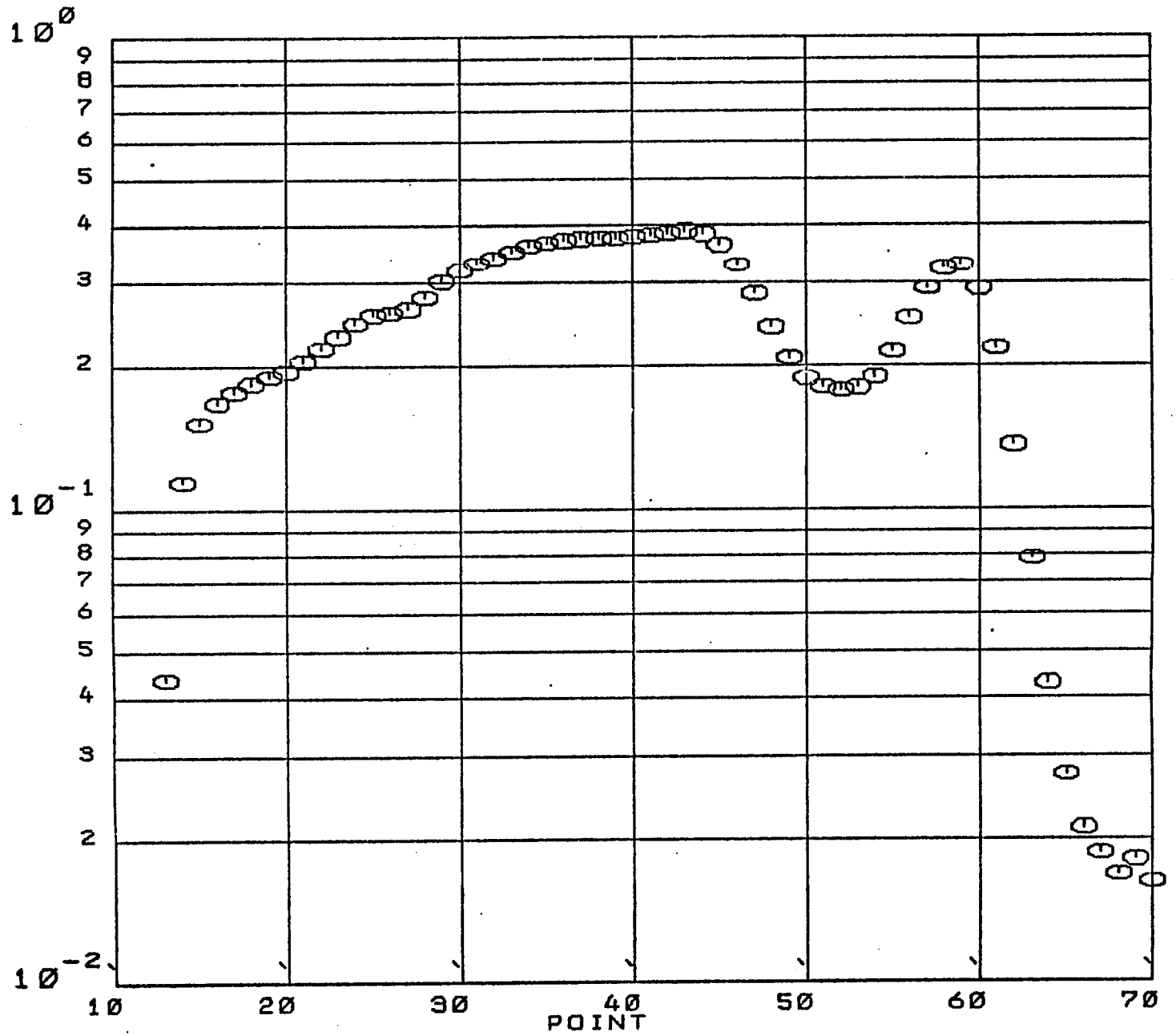


ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 2.46
ALPHA 29.98
LINE 68

GROUP 116



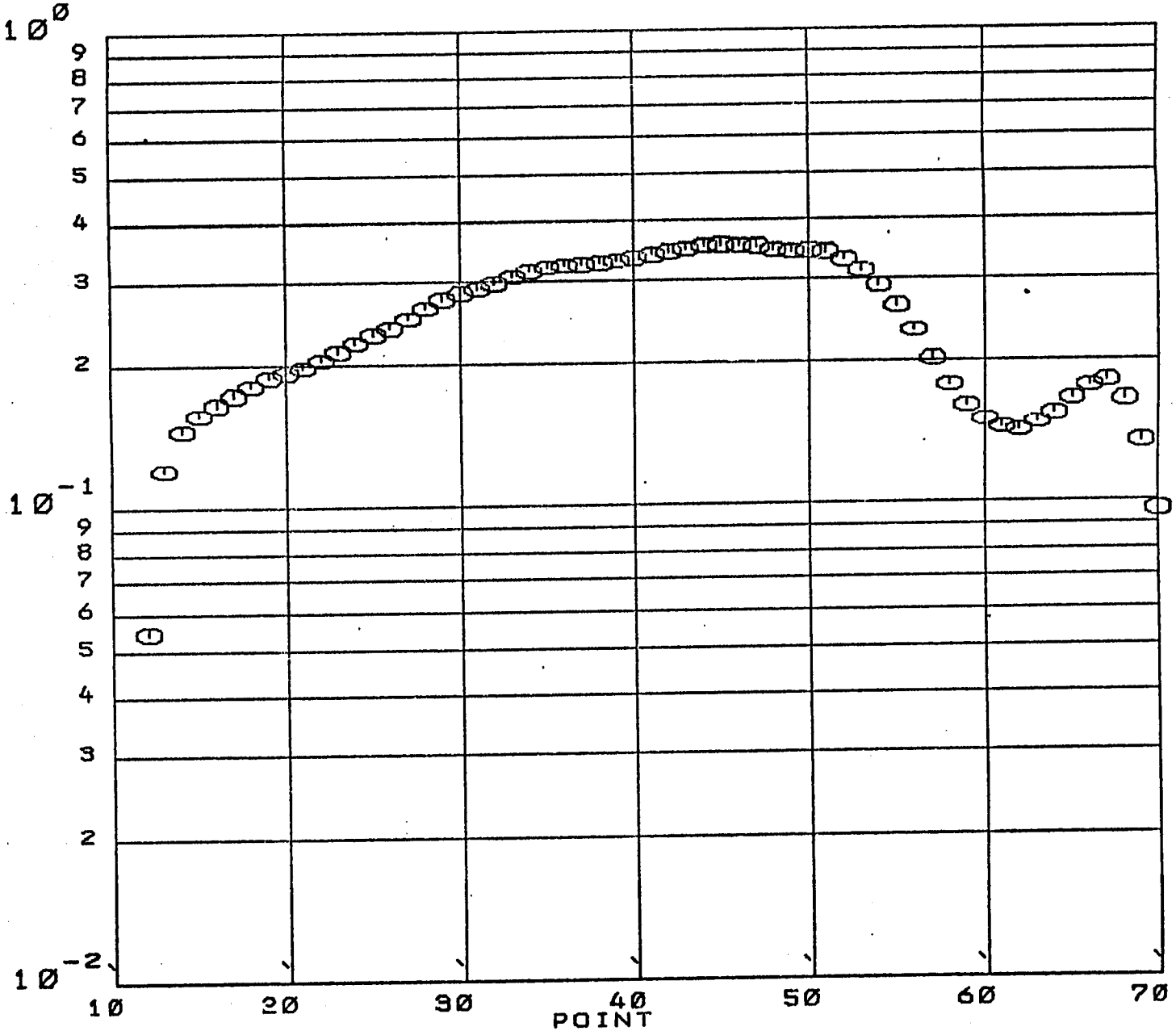
394

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI 0H90

RE/FT 2.46
ALPHA 9.98
LINE 74

GROUP 116 10^{0}



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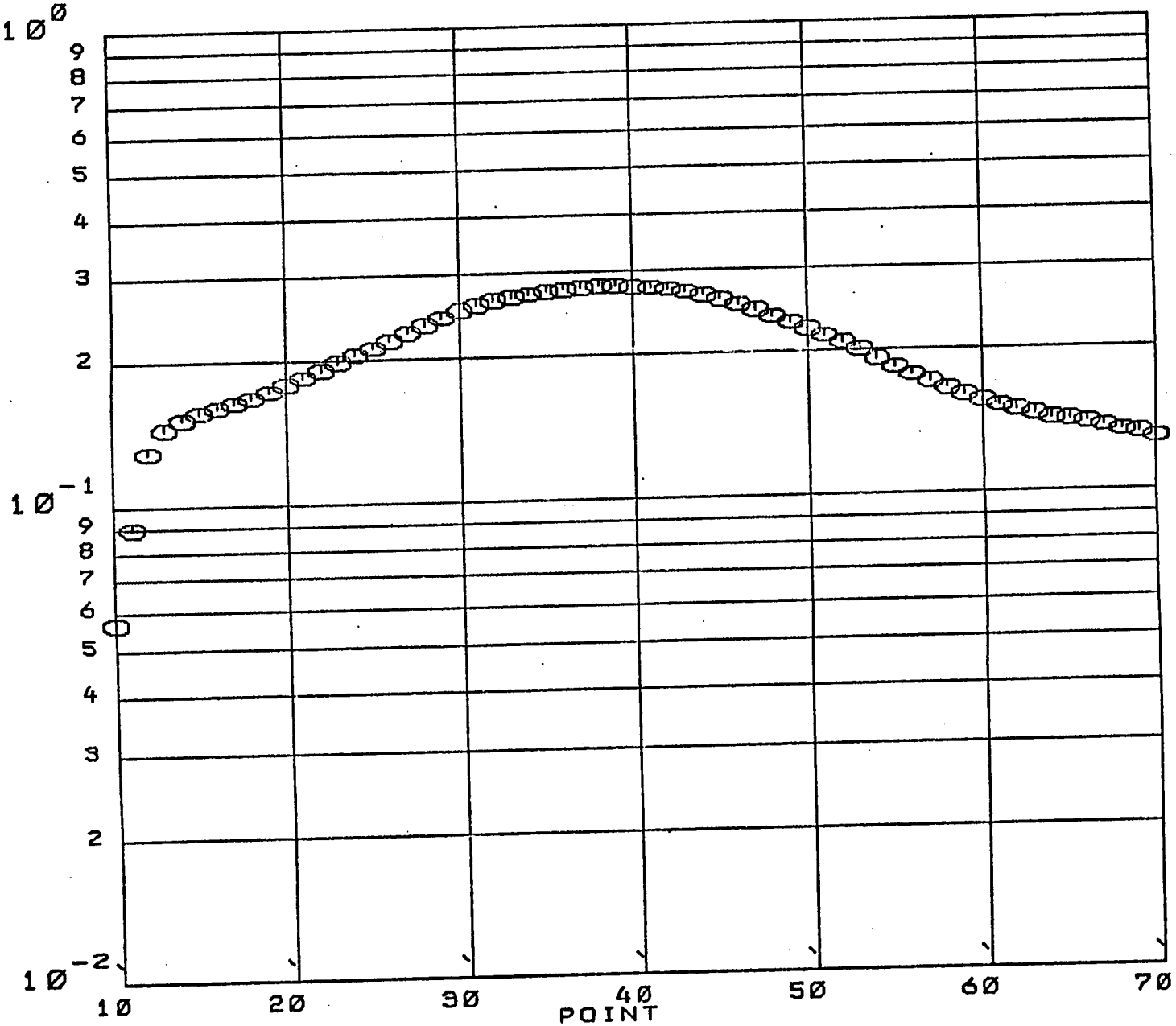
ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

GROUP 116

NASA/RI OH90

RE/FT 2.46
ALPHA 29.98
LINE 80



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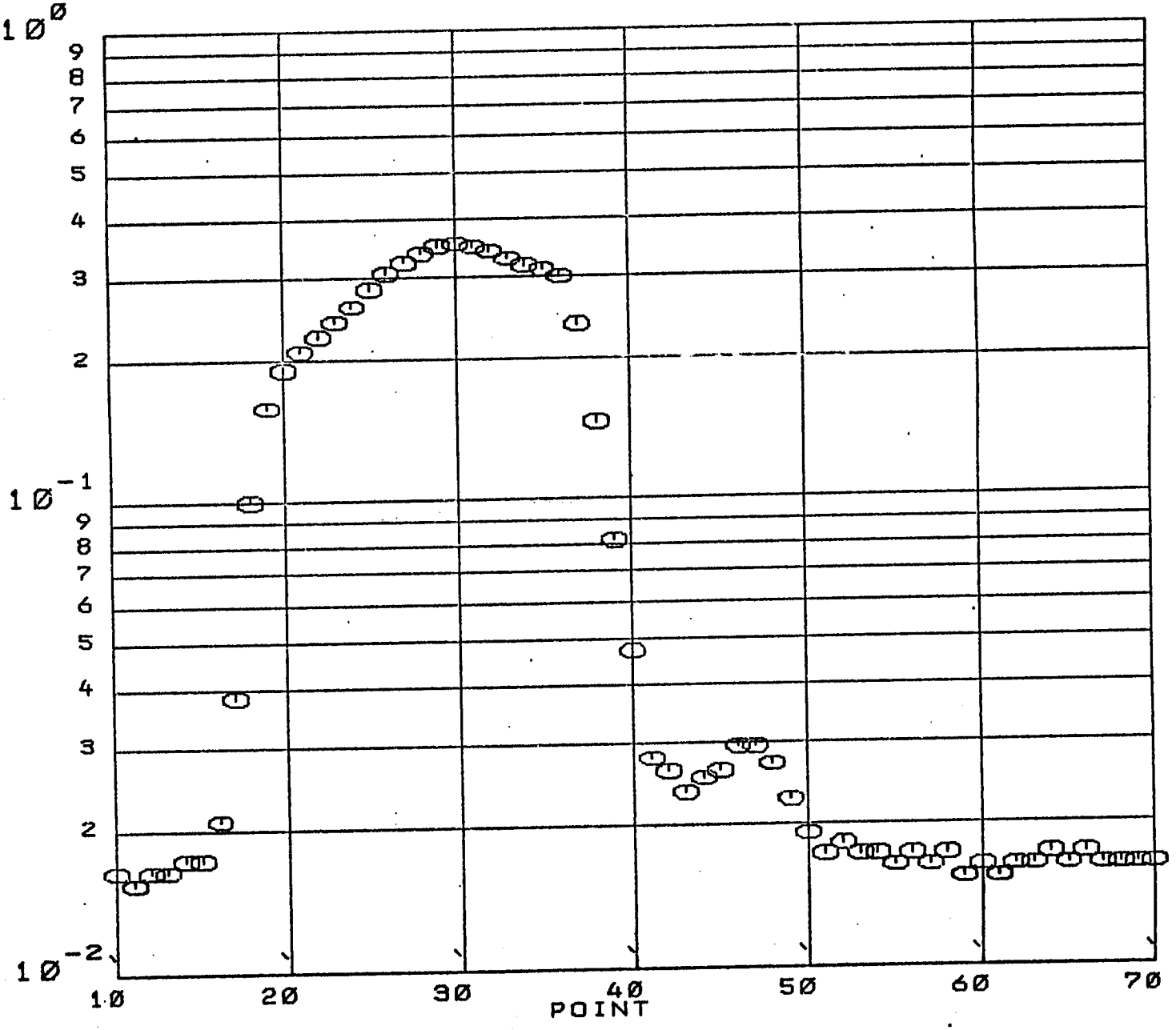
C-150
396

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

RE/FT 1.52
ALPHA 29.99
LINE 51

GROUP 119



ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

GROUP 119

NASA/AI 0H90

RE/FT 1.52
ALPHA 29.99
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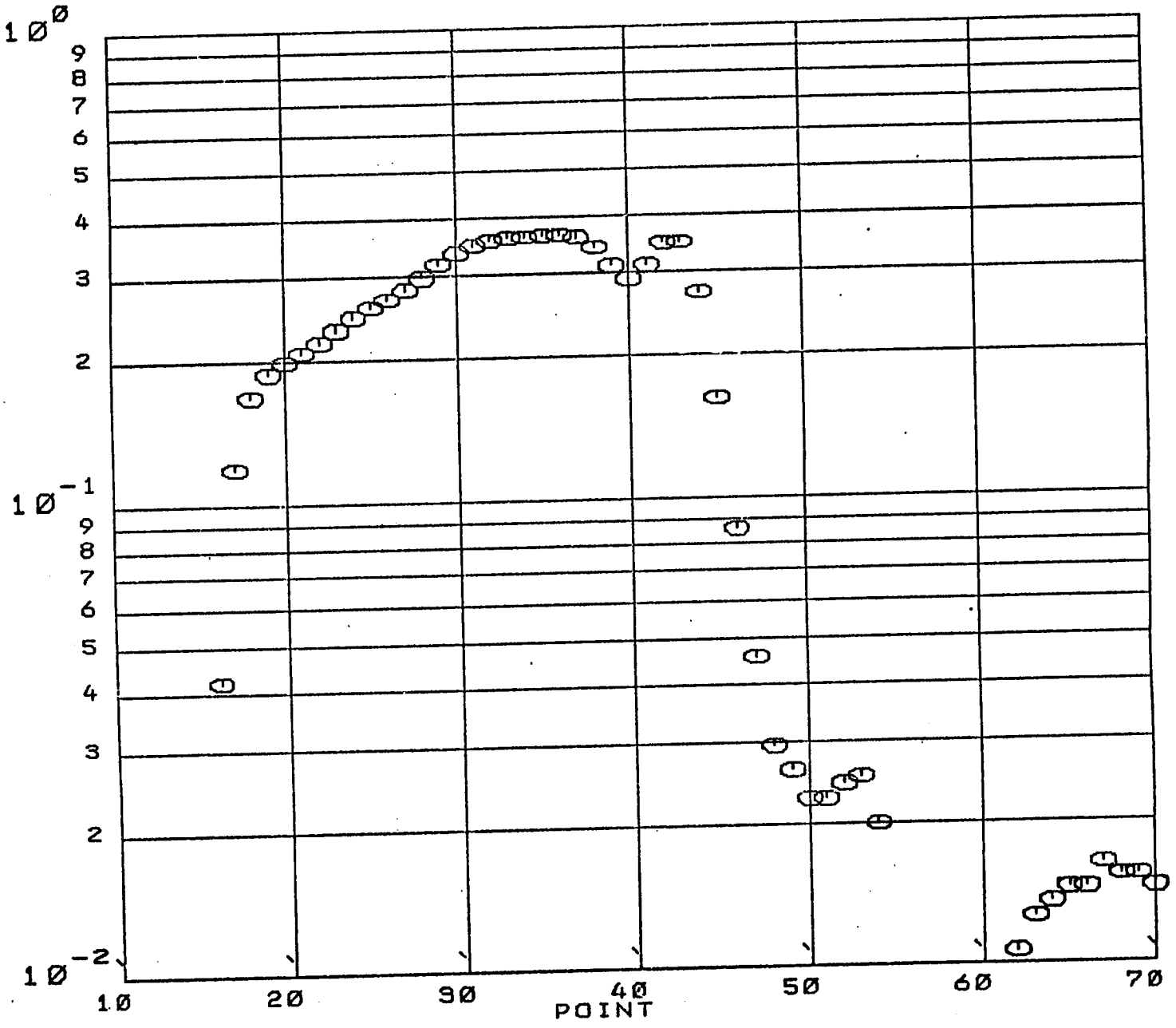

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C-152
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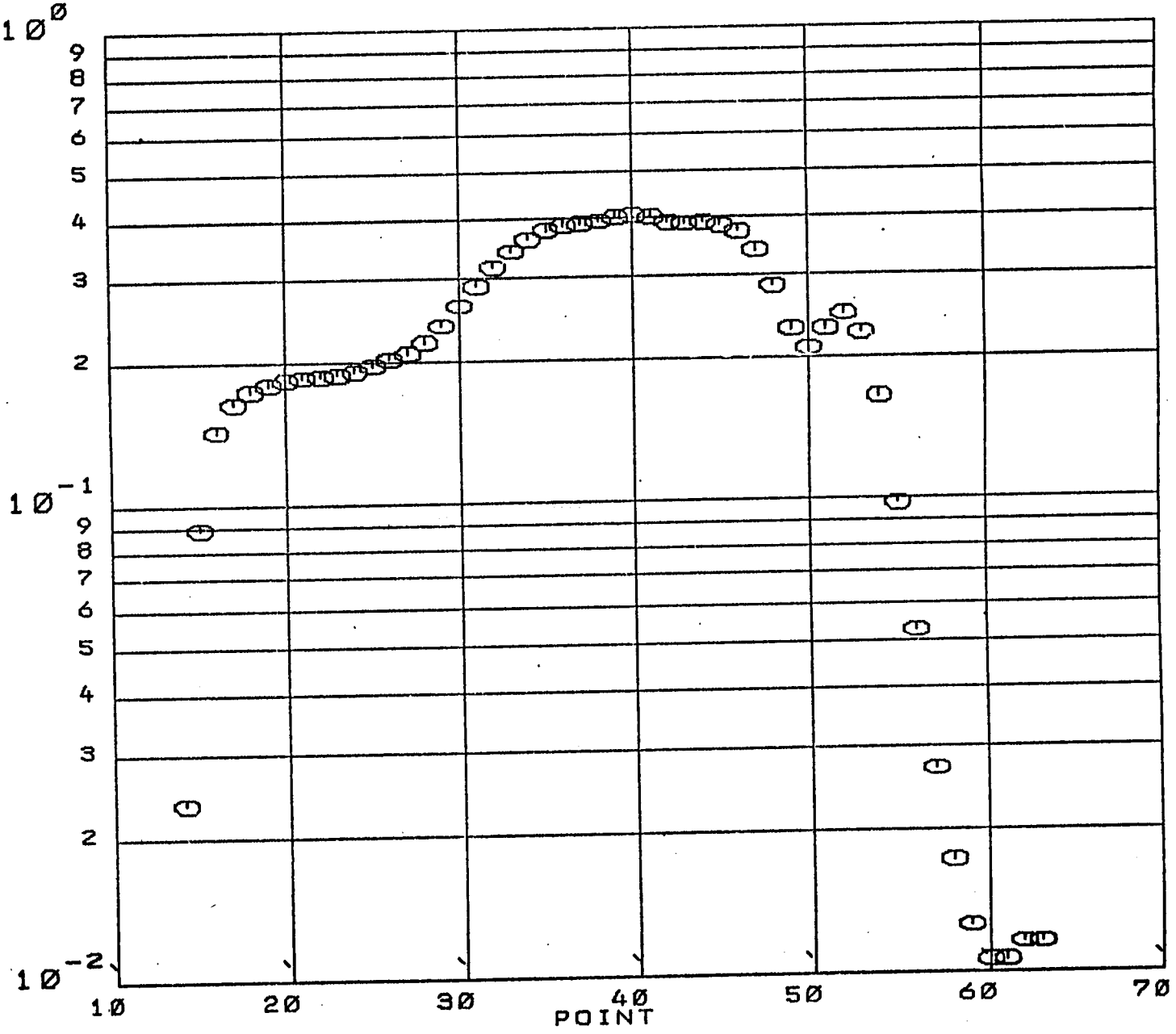
ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

GROUP 119

NASA/AI 0H90

RE/FT 1.52
ALPHA 29.99
LINE 63

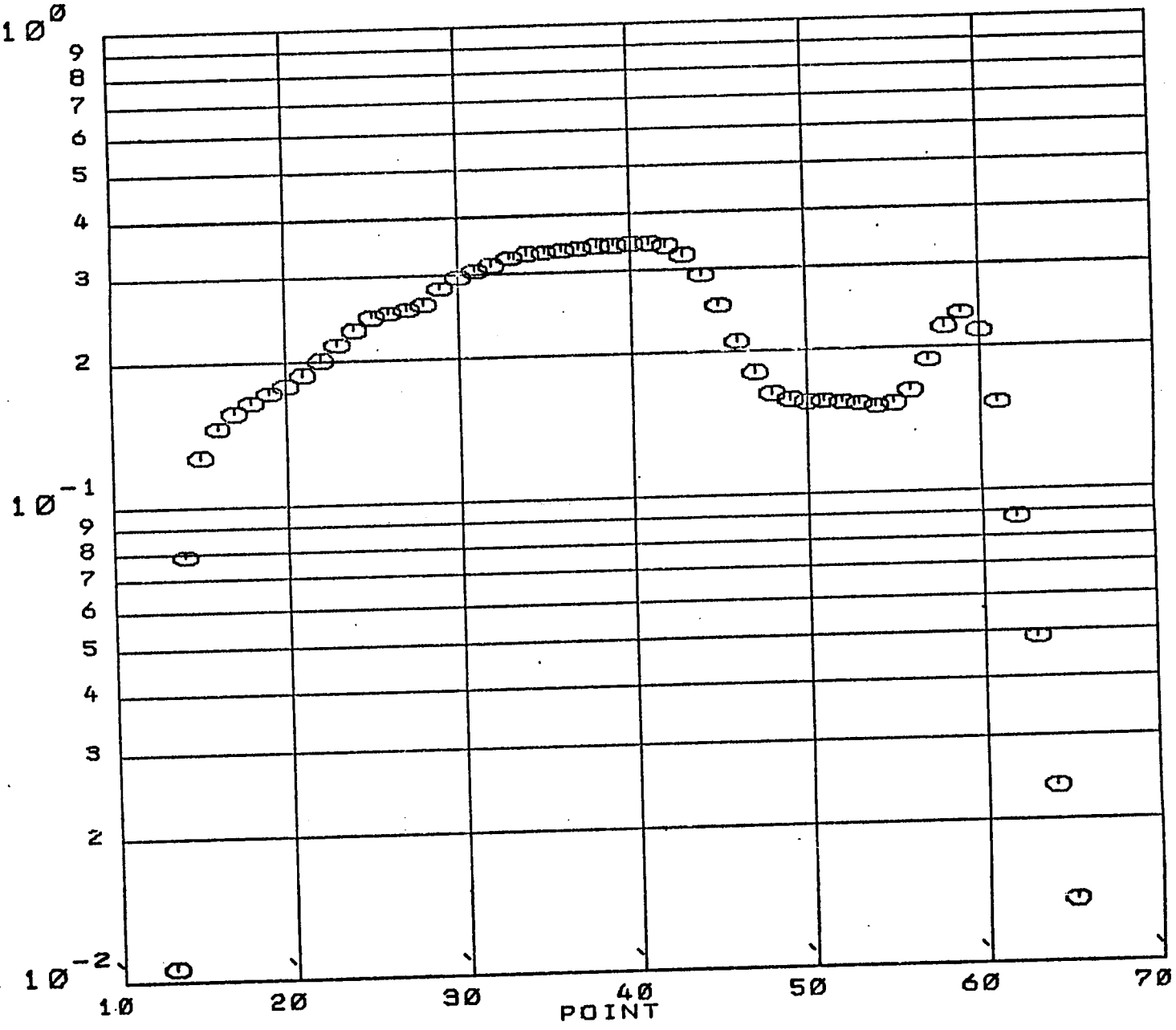


ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

GROUP 119

NASA/RI OH90

RE/FT 1.52
ALPHA 29.99
LINE 68



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ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI 0H90

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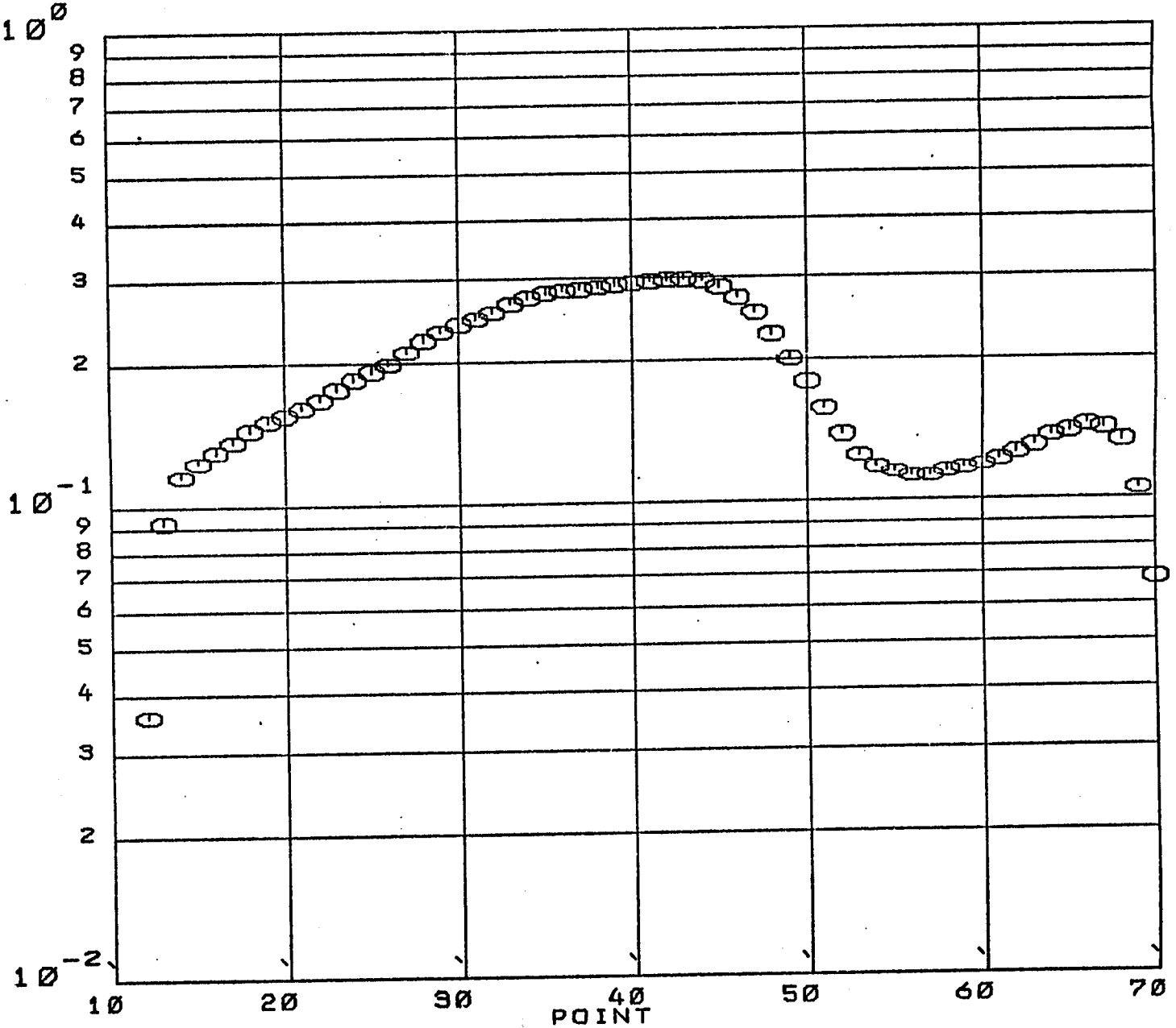
ALPHA 29.99
LINE 74

GROUP 119 10^{0}



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ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

GROUP 119

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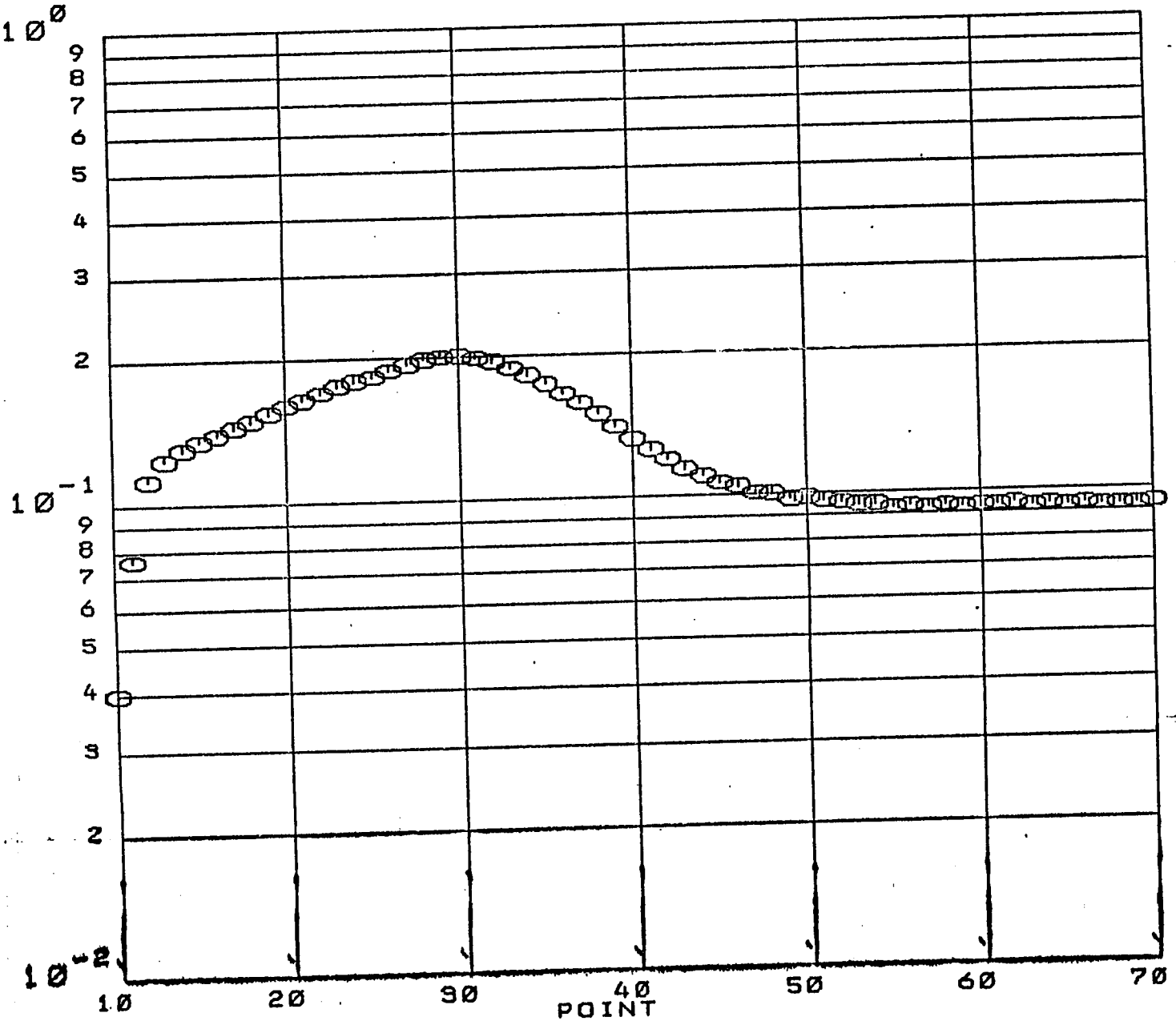
ALPHA 29.99
LINE 80



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ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

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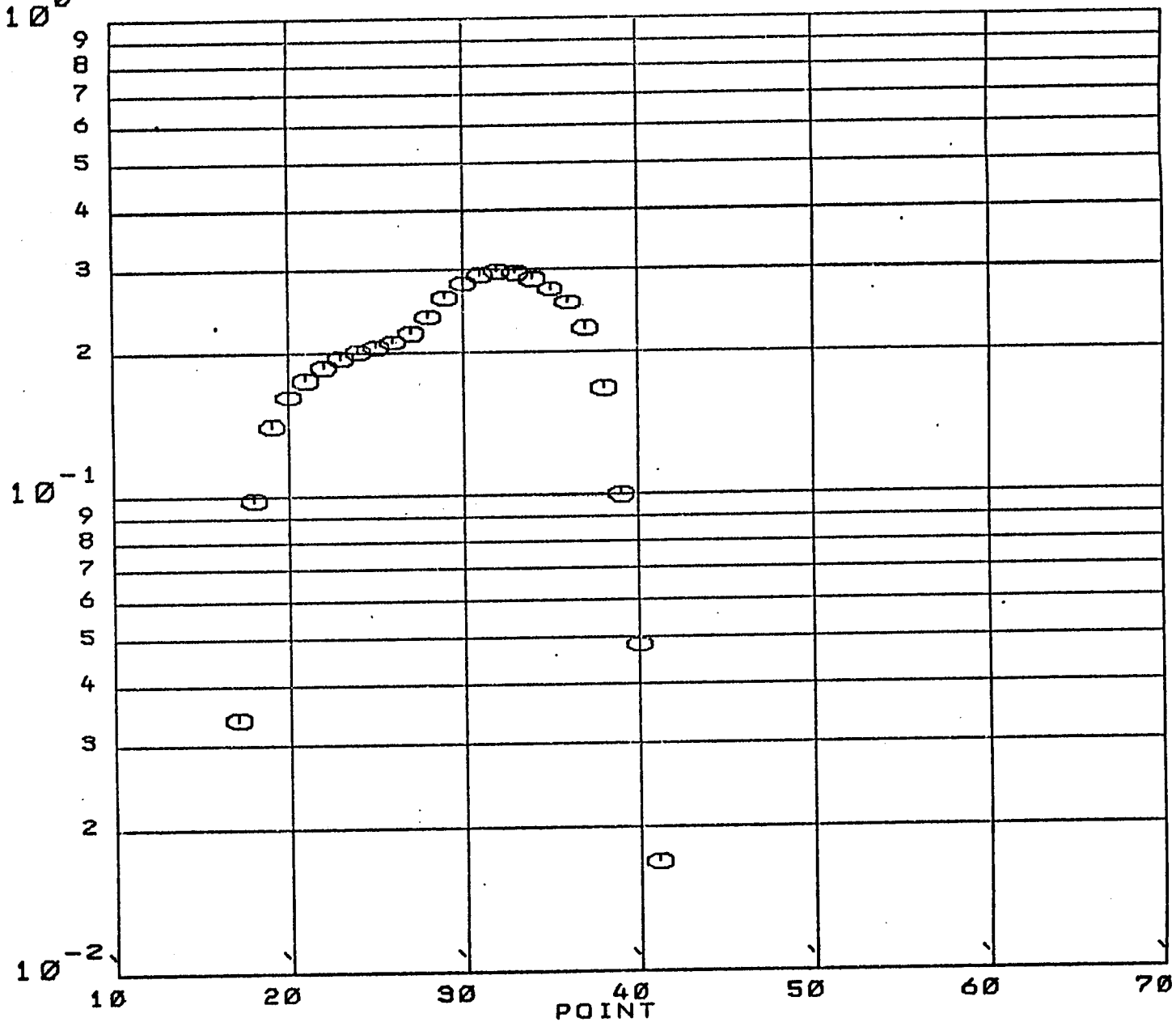

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ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

GROUP 122

NASA/RI OH90

RE/FT 1.01
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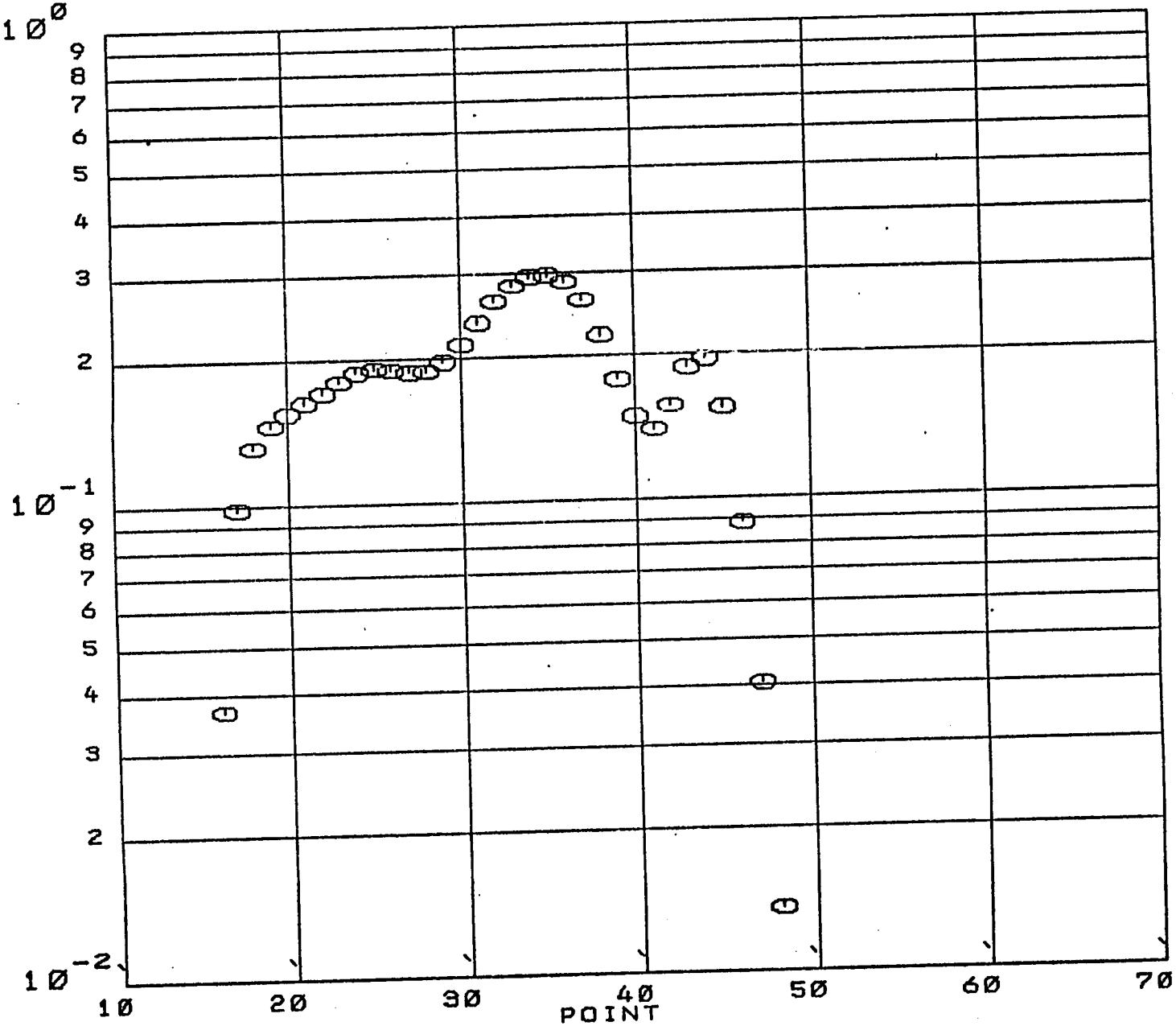
LINE 56



ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH9Ø

RE/FT 1.Ø1
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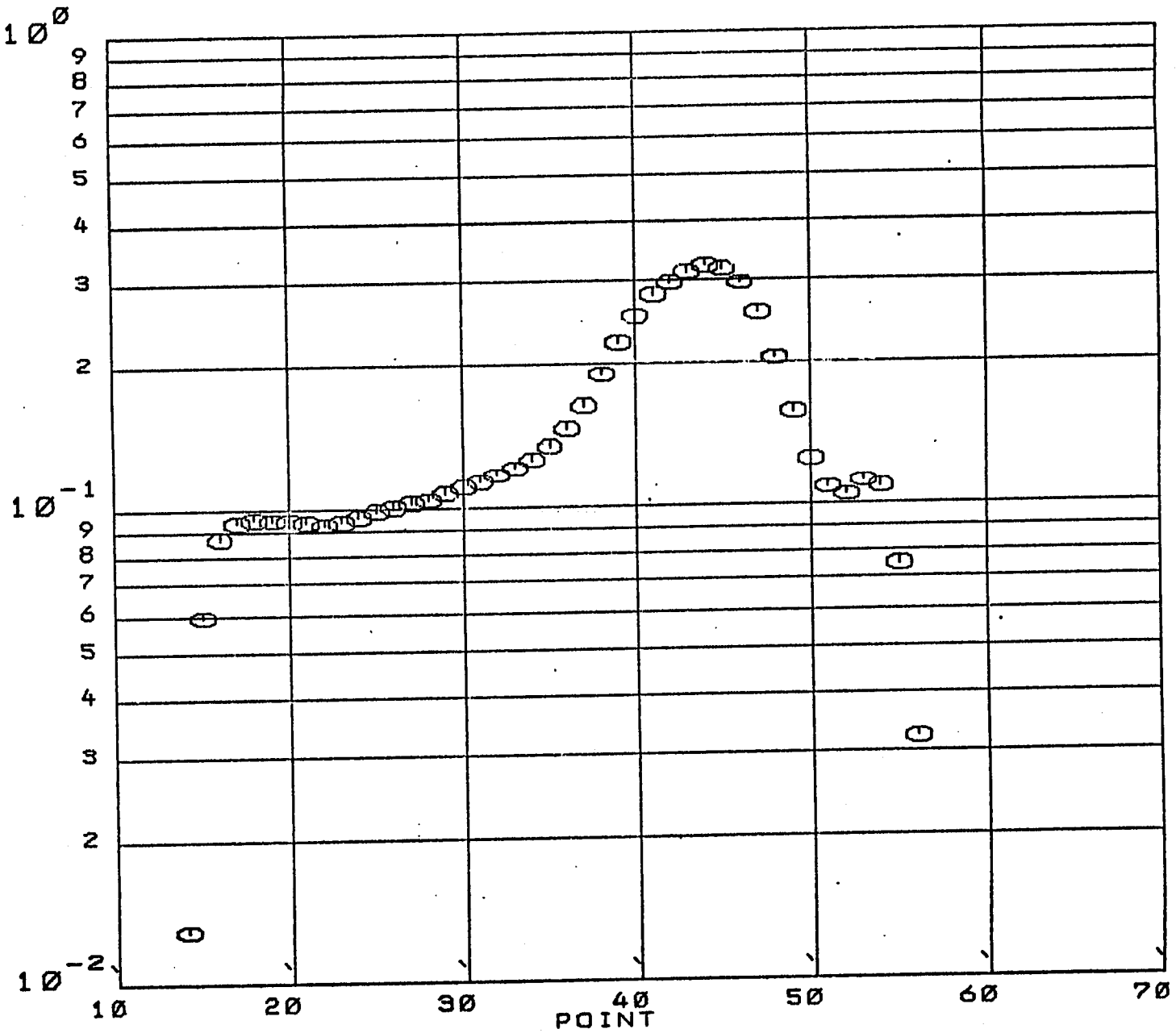

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

GROUP 122 1Ø

NASA/AI OH9Ø

RE/FT 1.Ø1
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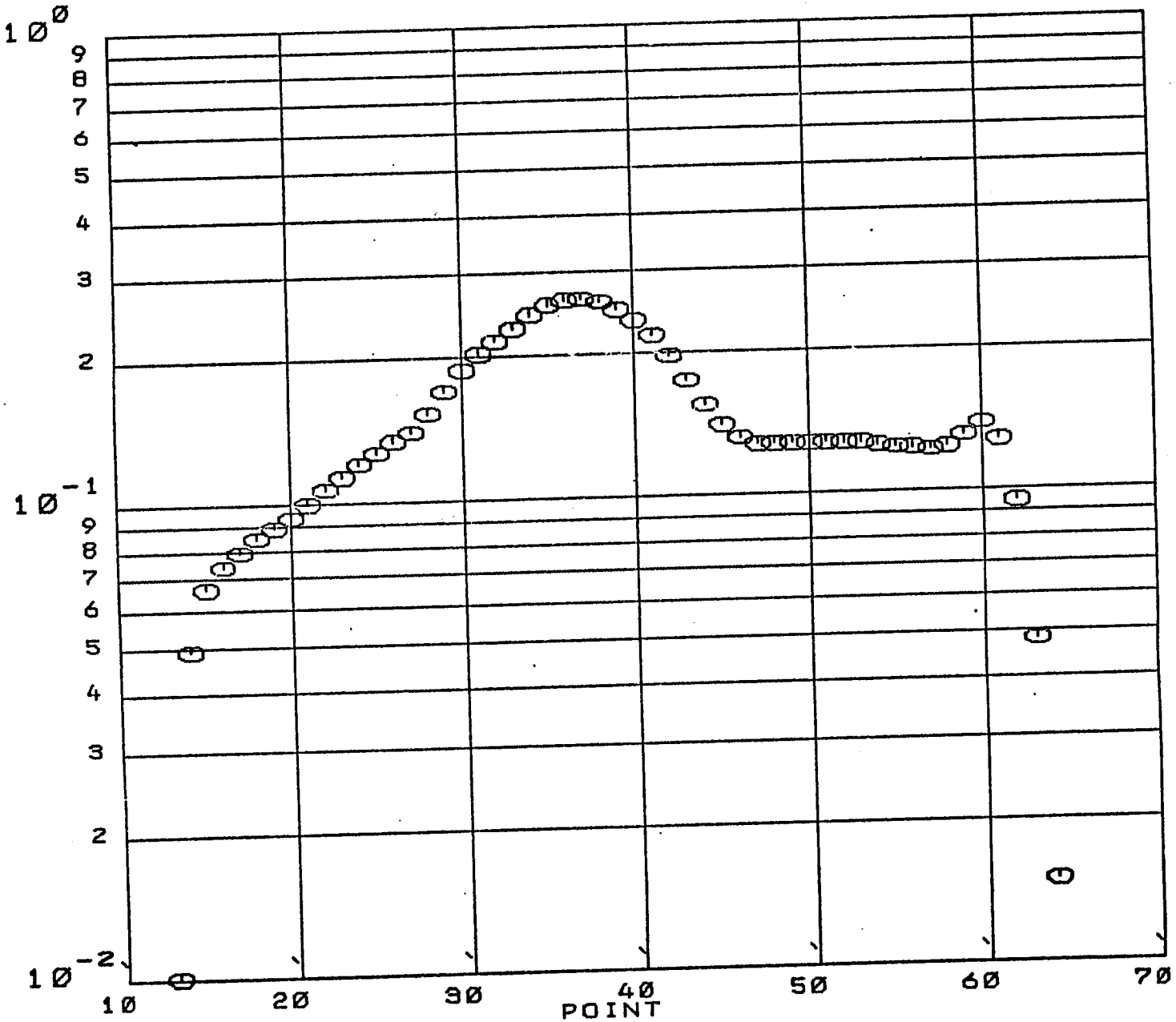
LINE 68



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ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI 0H90

RE/FT 1.01
ALPHA 29.98
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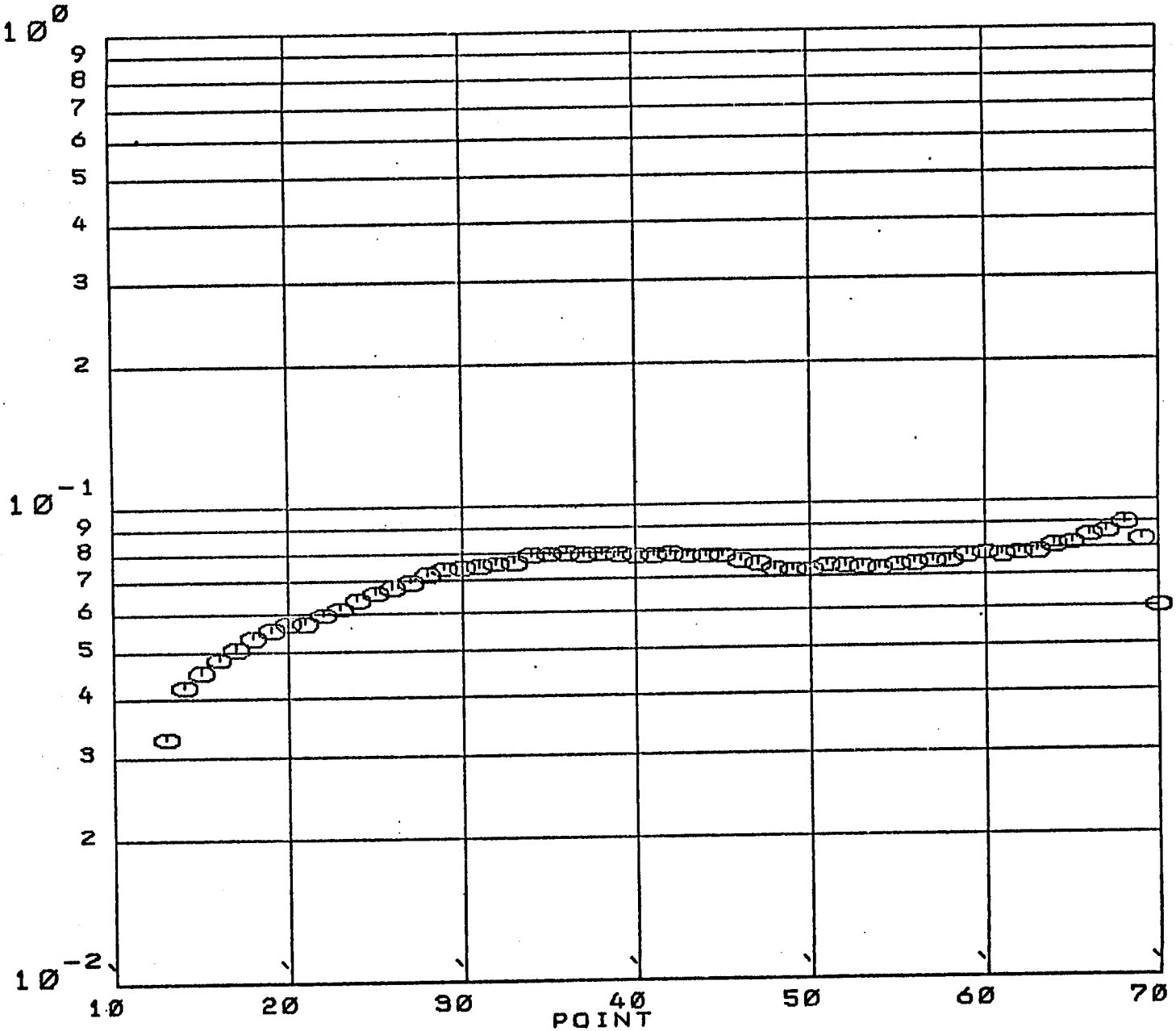
GROUP 122



ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

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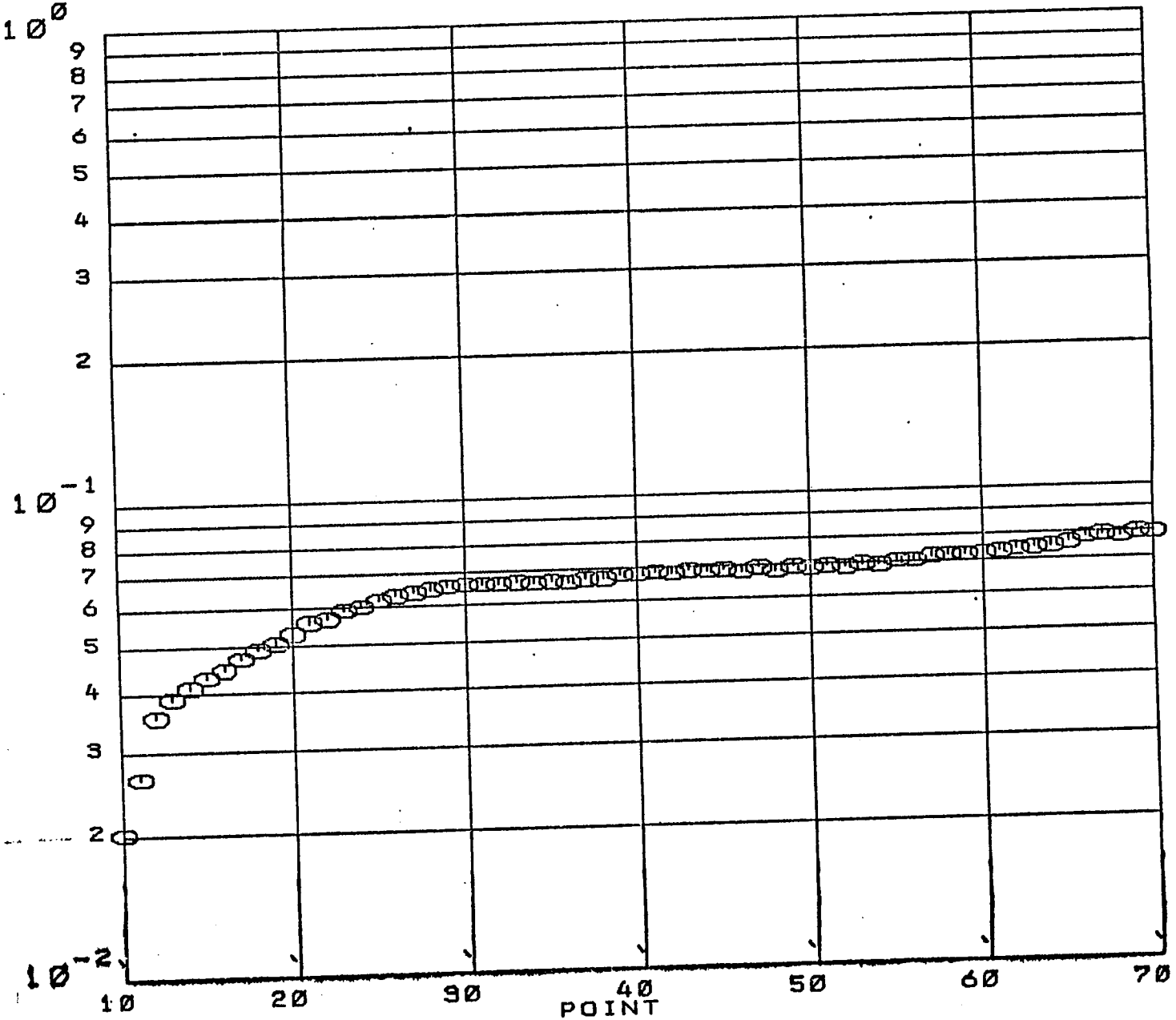

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ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

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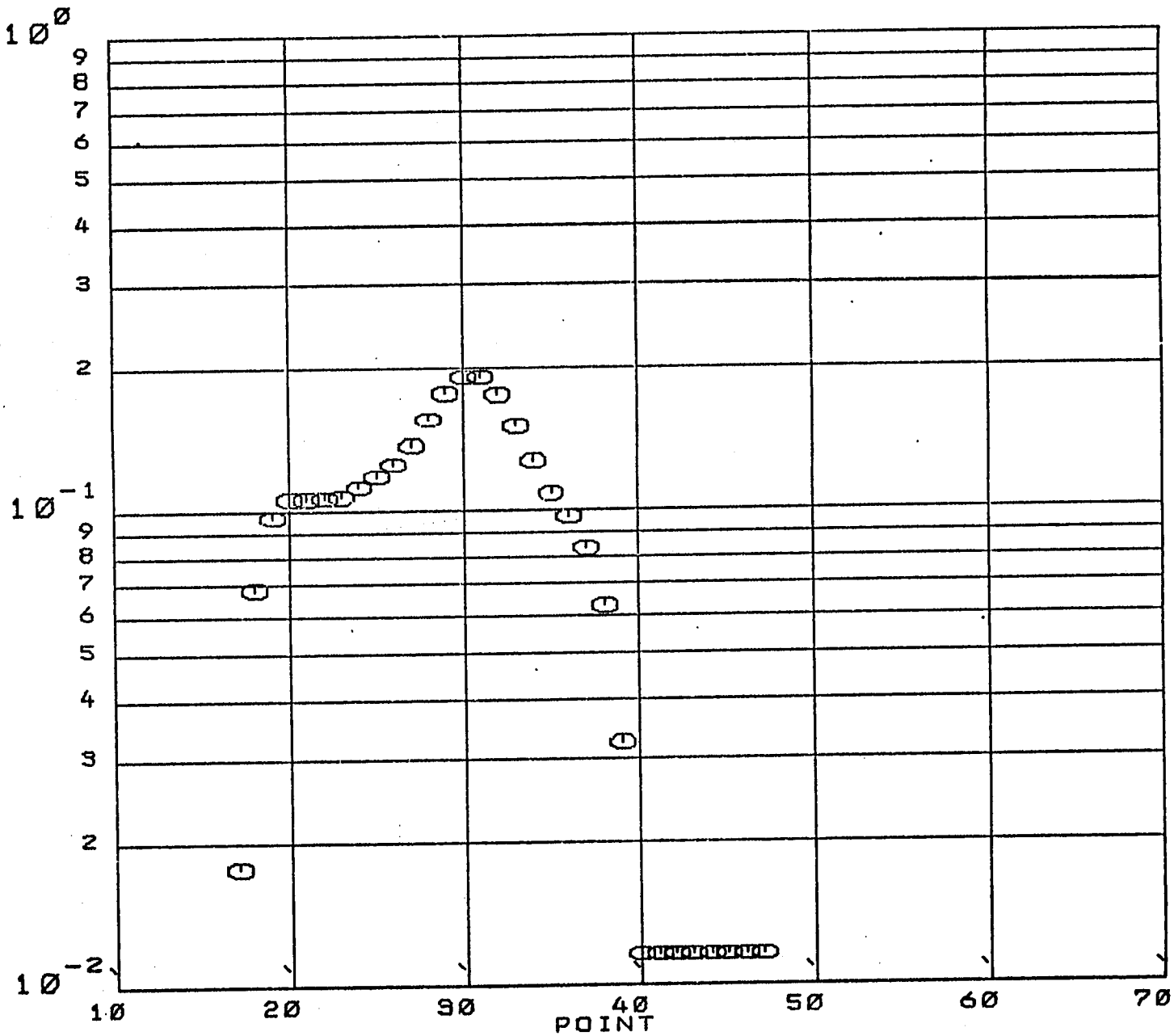

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4Q C-163

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

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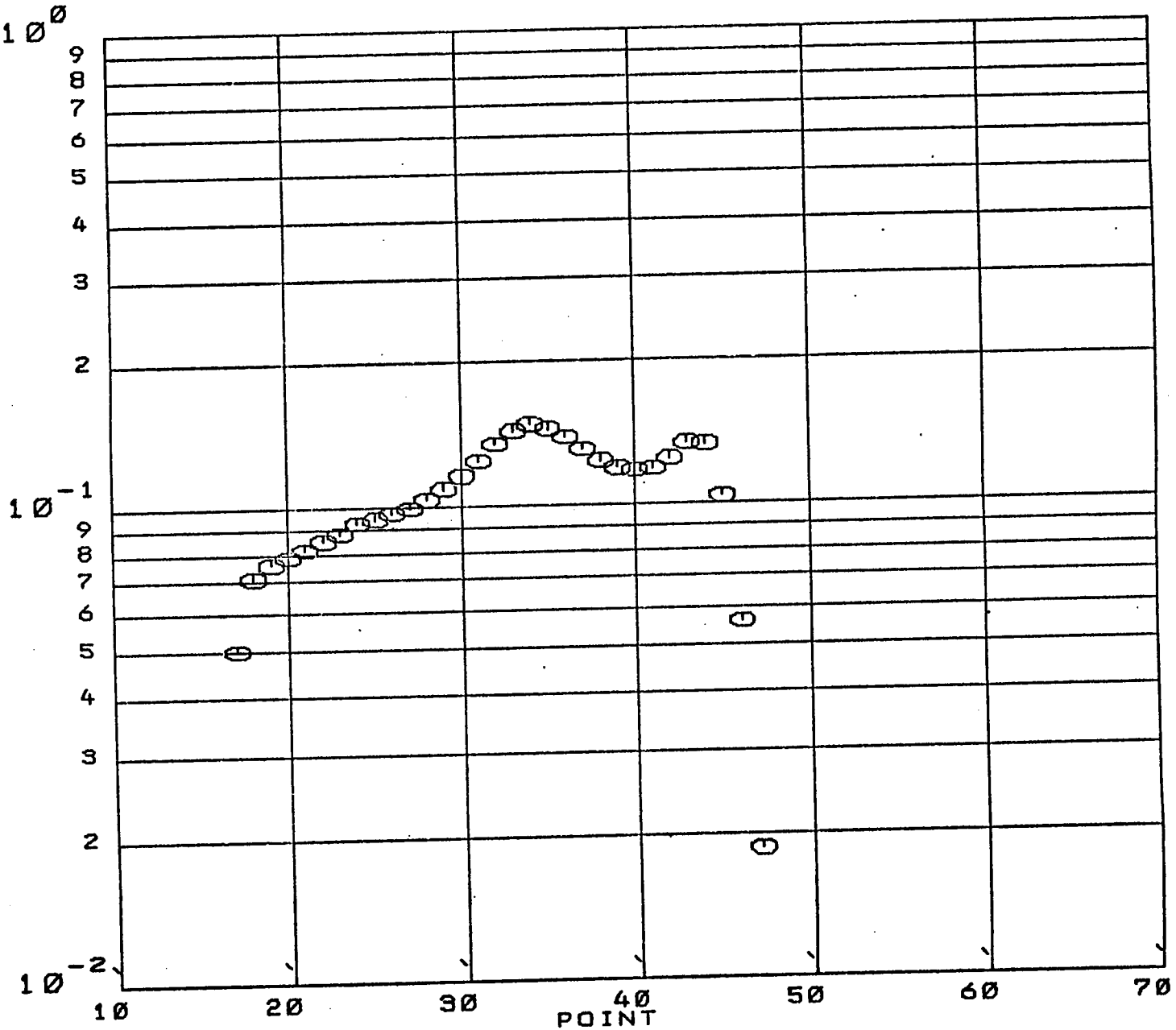

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ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

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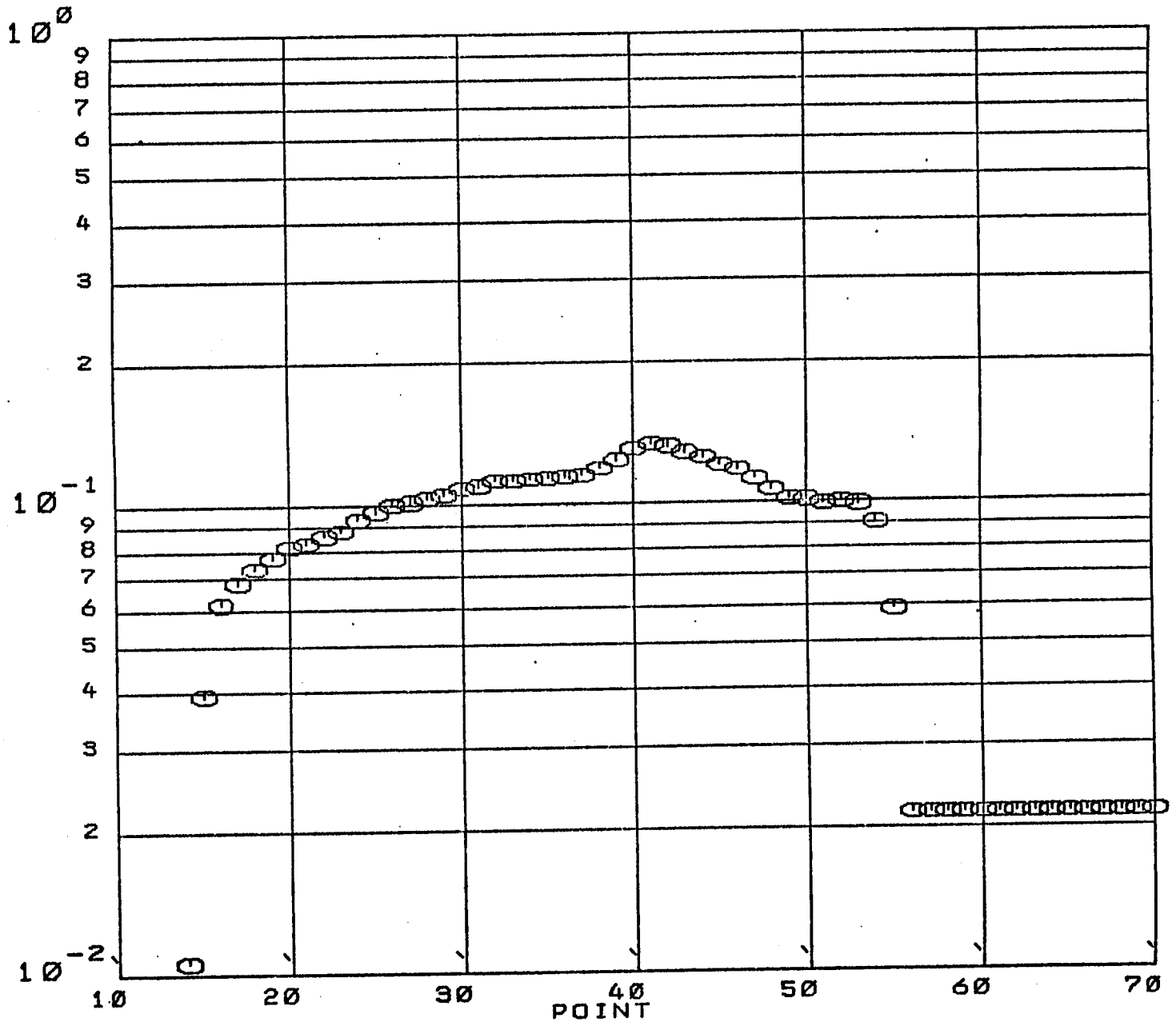

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

RE/FT 0.52
ALPHA 90.07
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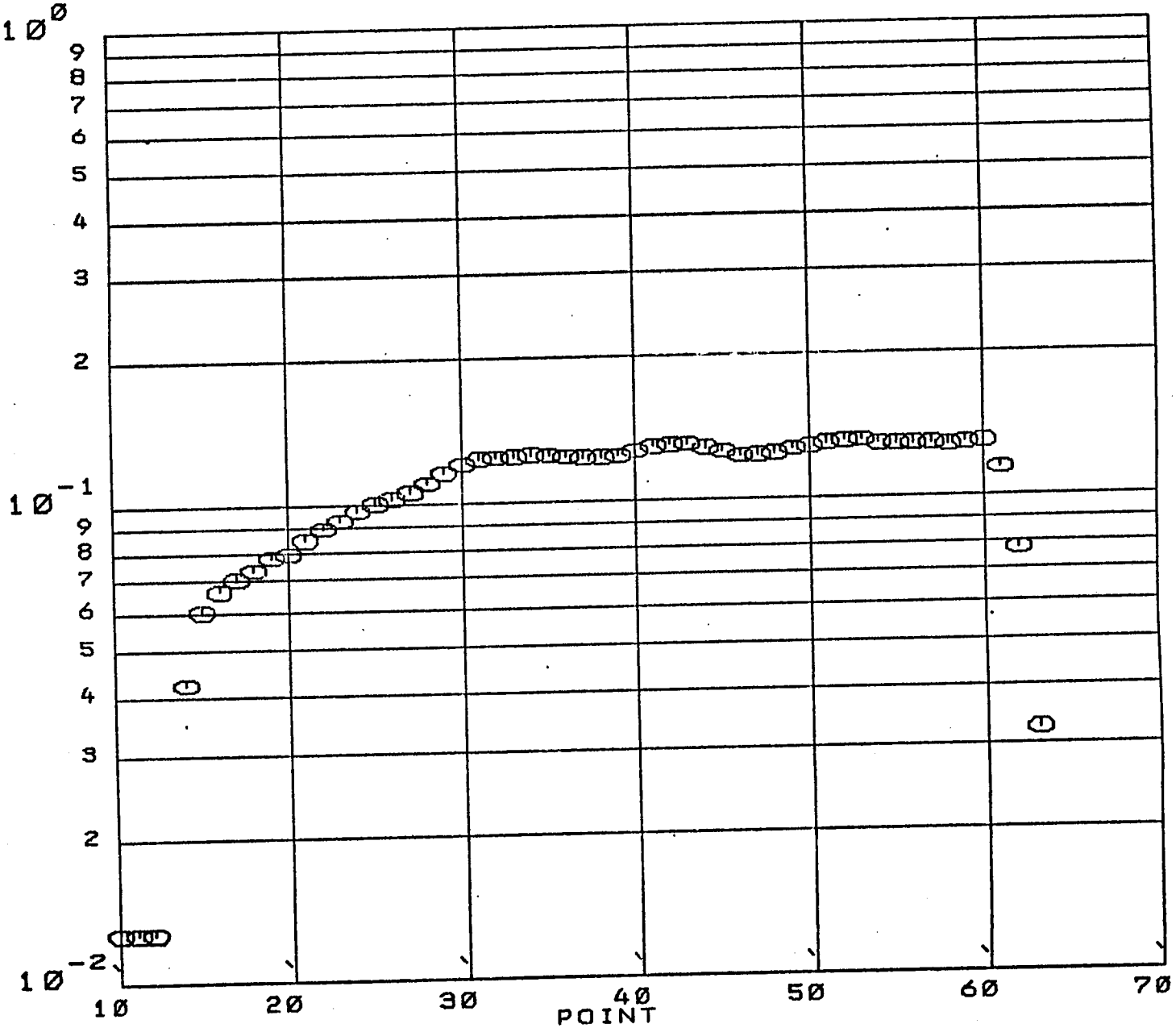
GROUP 128



ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/RI OH90

RE/FT 0.52
ALPHA 90.07
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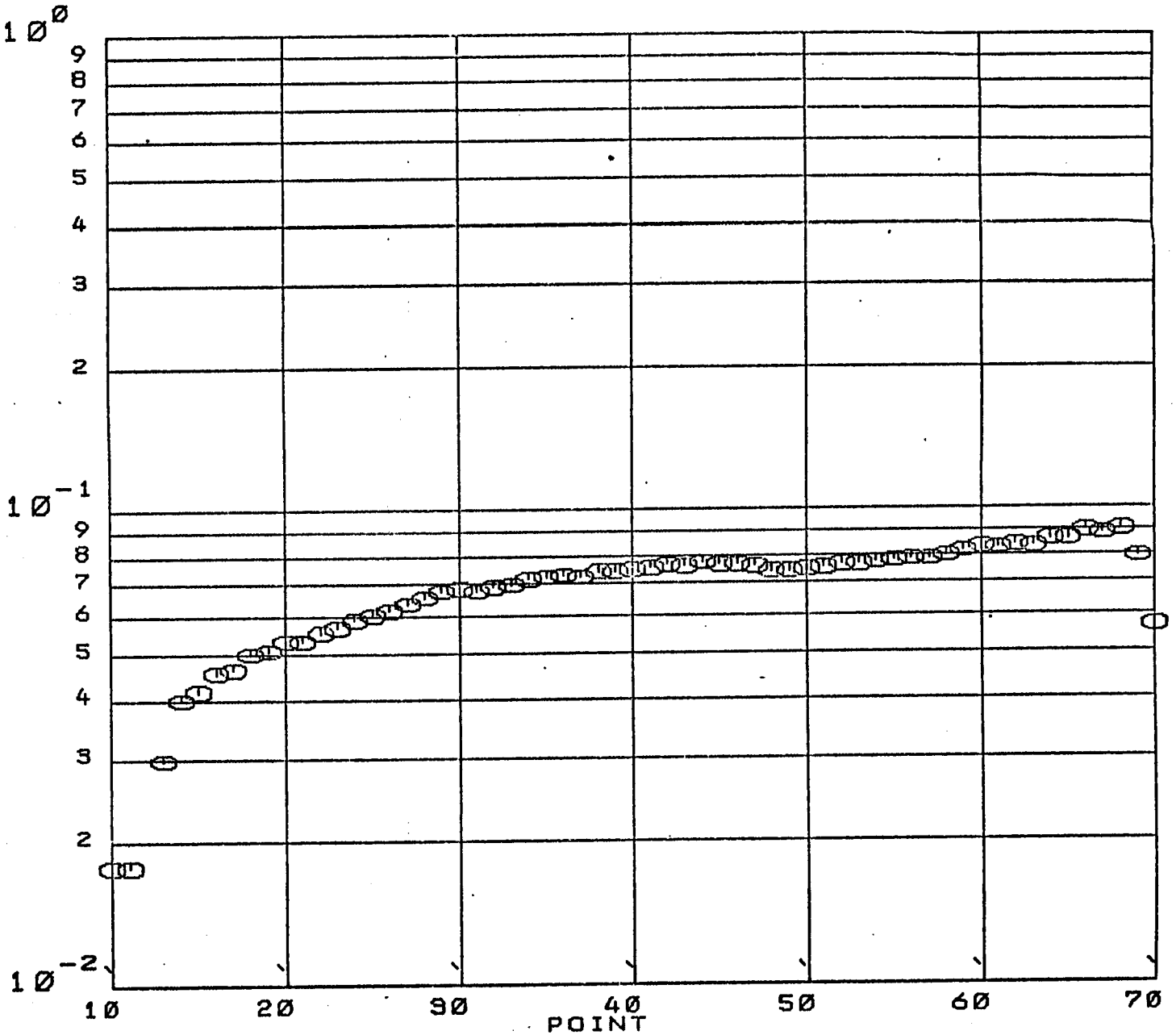

ARO, INC(AEDC)
ARNOLD AFS, TN
DATE 3 /3 /78
V41B-P4A

NASA/AI OH90

RE/FT 0.52
ALPHA 30.07
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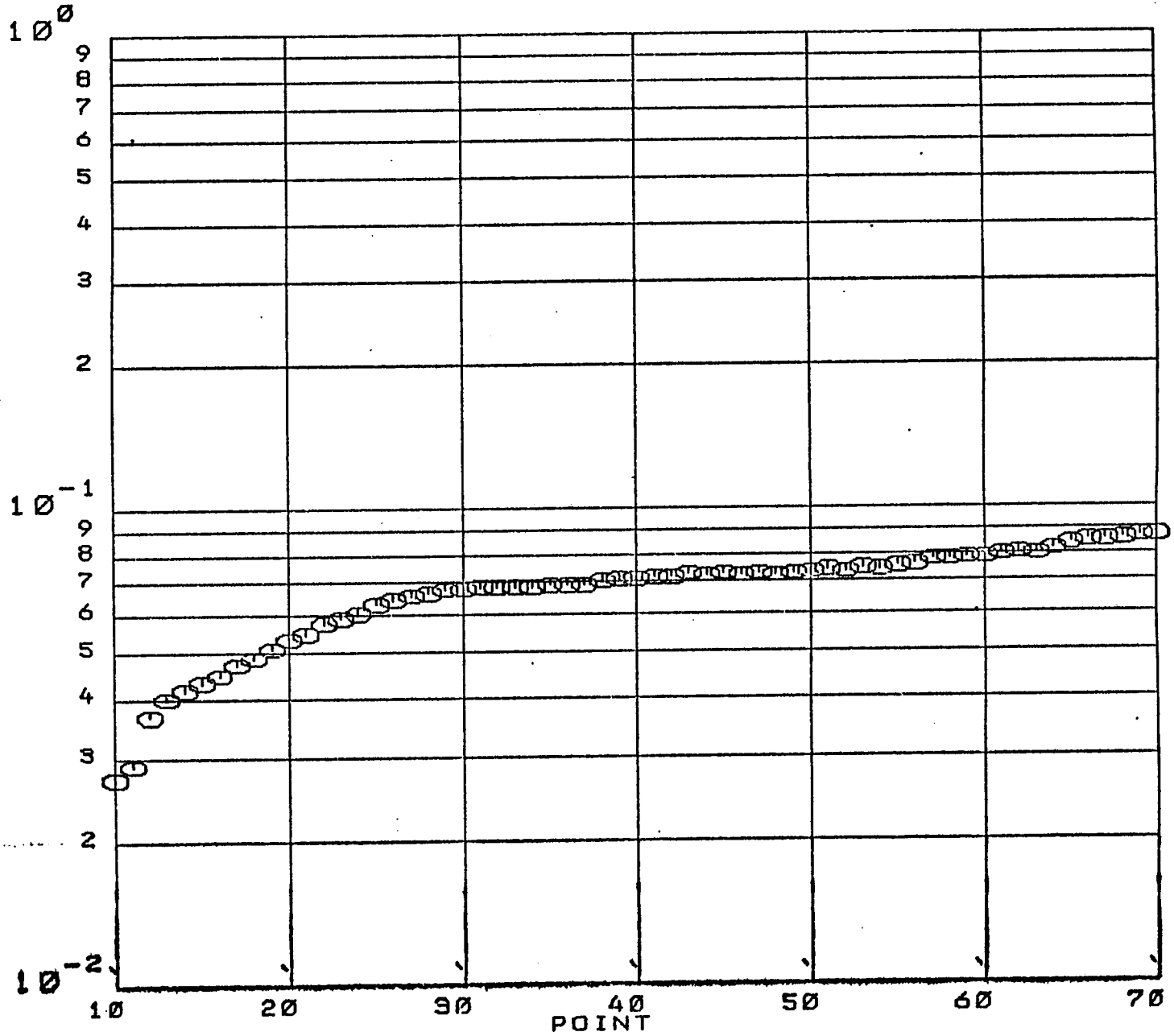
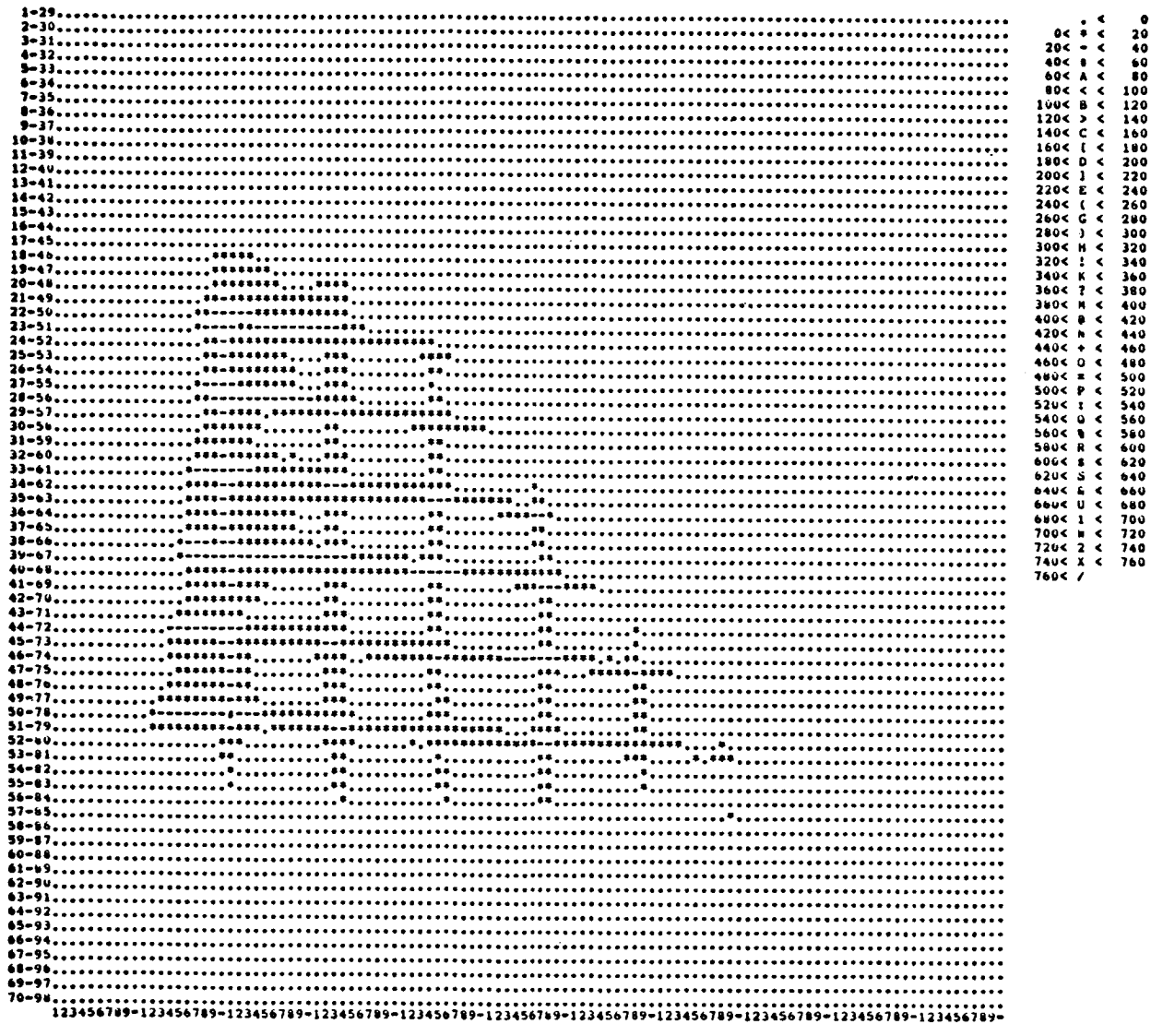


APPENDIX D

SOURCE DATA: IR CONTOUR PLOTS

DATE 3-MAR-78 PROJECT NO. V41B-P4A
AHO, INC.
AEDC DIVISION
A SVERDRUP CORPORATION COMPANY
NASA R1 ONYUA INFRA-RED
ARNOLD AIR FORCE STATION TENNESSEE

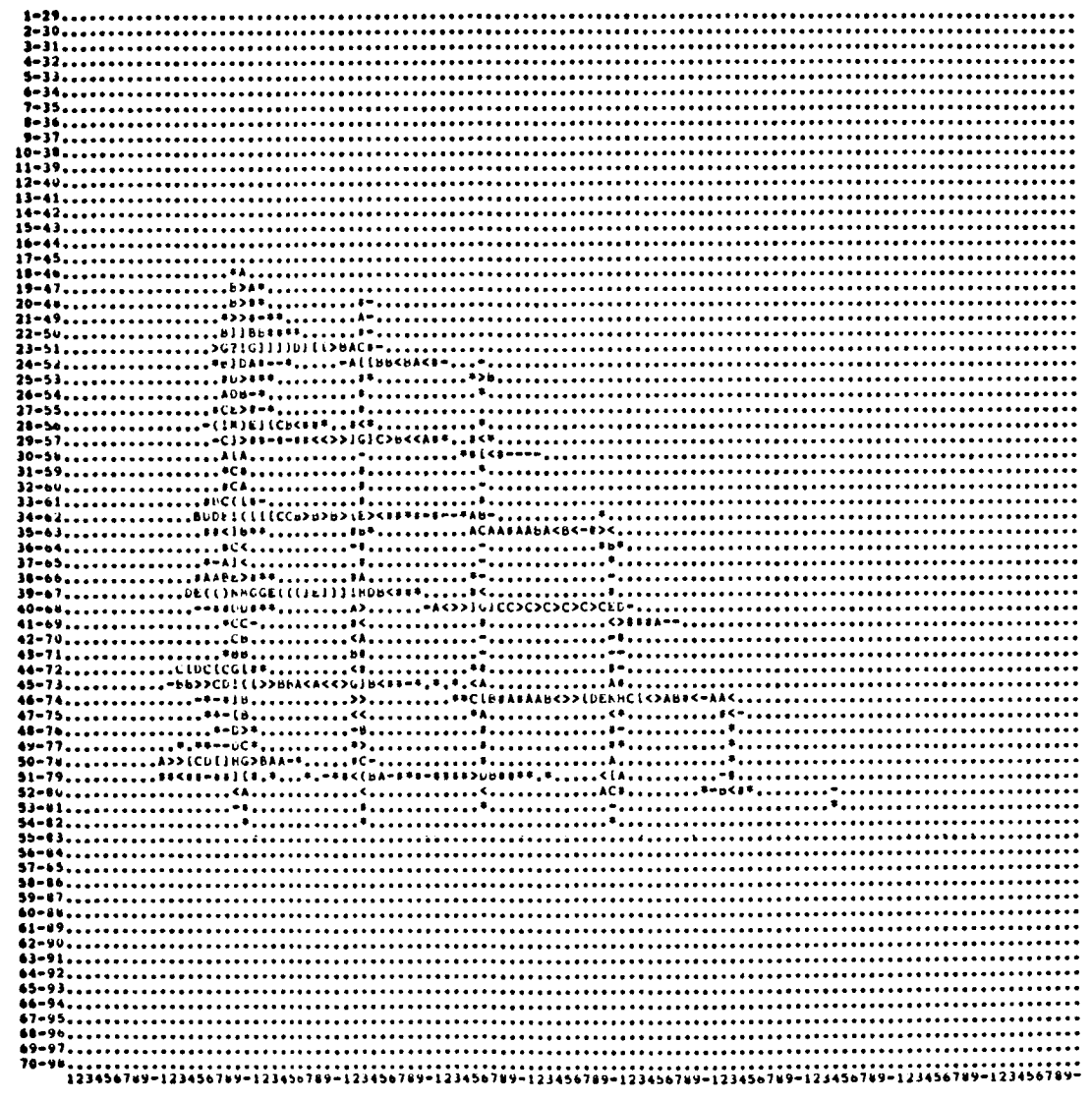
GROUP 0001 DATA RECORDED 3-MAR-78 17:36:22:517 $\alpha = 40^{\circ}$



416

DATE 3-MAR-78 PROJECT NO. V418-P4A
ARO, INC.
AEDC DIVISION
A SVERDRUP CORPORATION COMPANY
NASA RI OH90A INFHA-RED
ARNOLD AIR FORCE STATION TENNESSEE

GROUP 0002 DATA RECORDED 3-MAR-78 181 51271141 $\alpha = 30°$



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34<	(<	36
36<	G <	38
38<	) <	40
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62<	I <	64
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66<	R <	68
68<	K <	70
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72<	S <	74
74<	T <	76
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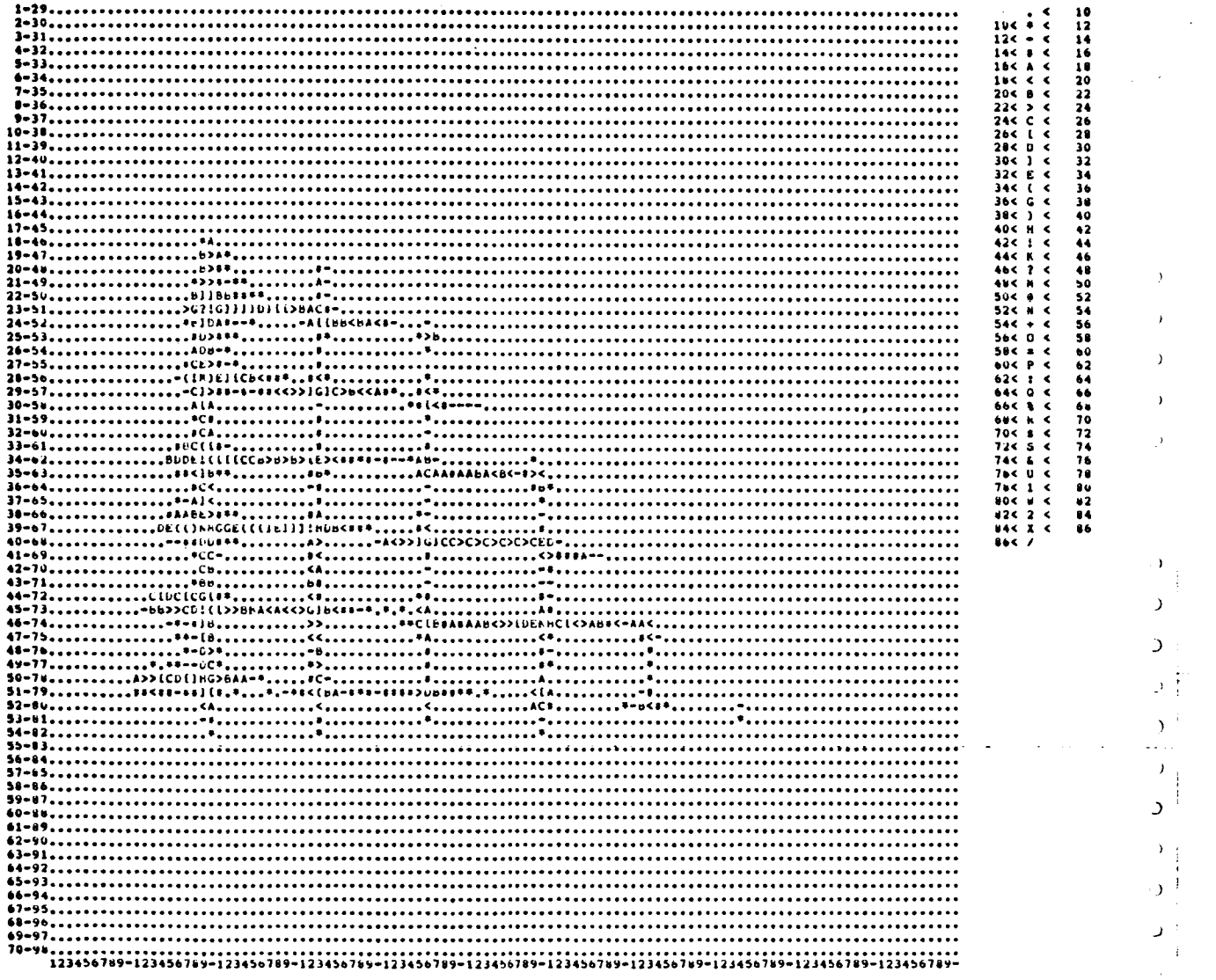
86<	/	

417

DATE 3-MAR-78 PROJECT NO. V418-P4A
ARO, INC.
AEDC DIVISION
A SVERDRUP CORPORATION COMPANY
NASA RI OH90A INFRA-RED
ARNOLD AIR FORCE STATION TENNESSEE

GROUP 0002 DATA RECORDED 3-MAR-78 18: 5:27:141 $\alpha = 30^{\circ}$



417

DATE 8-MAR-78 PROJECT NO. V41B-P4A
ARO, INC.
AEDC DIVISION
A SVERDRUP CORPORATION COMPANY
NASA RI OH90A INFNA-REV
ARNOLD AIR FORCE STATION TENNESSEE

Tape for Gp 69

GROUP 0004 DATA RECORDED 8-MAR-78 91241271483

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12-40.....-@.....
13-41.....A-@.....@@.....
14-42.....B@.....@<b<-.....
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16-44.....@.....
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18-46.....@.....
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25-53.....C.....@.....
26-54.....C.....-.....
27-55.....@[@.....@.....
28-56.....@]
29-57.....>[
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33-61.....[C
34-62.....D>
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36-64.....EA
37-65.....BE-
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39-67.....CC@
40-68.....D<
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42-70.....AD-
43-71.....BC@
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47-75.....-<@.....>C@.....
48-76.....A@.....CJ@.....
49-77.....A@.....>E<.....
50-78.....A@.....@DB.....
51-79.....>UCDE(&](G)1A???RIHEDB8@.....-(>@.....
52-80....G+H(D&]D>A@.....@@AbC))!AMP@NNNNNRGDB-.....@-BA<b>CC[[Cb<E@@AD[A@....@-@.....
53-81C]]JGD@.....@AC(E))!!]G(&]ODD([C(CC(CBA@.....A@.....@-.....
54-82G[P.....-B1](]HIAA?MAAGDb-.....
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35<	C <	40
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50<	] <	55
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60<	(<	65
65<	G <	70
70<	) <	75
75<	H <	80
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85<	K <	90
90<	? <	95
95<	M <	100
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160<	& <	165
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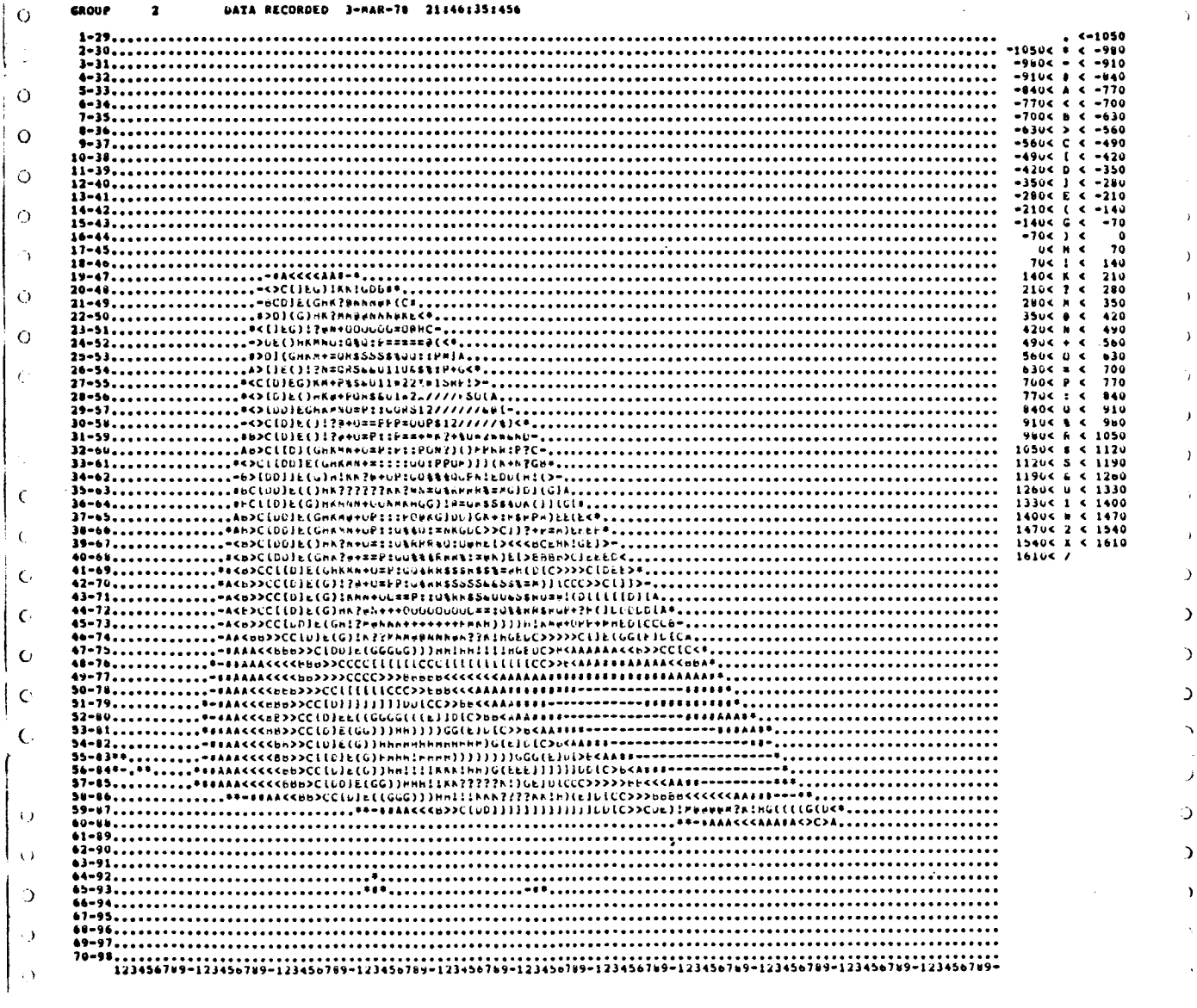
190<	/	

418

DATE 6-MAR-78 PROJECT NO. V41B-P4A
AHQ, INC.
AEDC DIVISION
A SVERDRUP CORPORATION COMPANY
NASA RI OM90A INFHA-HED
ARNOLD AIR FORCE STATION TENNESSEE

ADP Copy

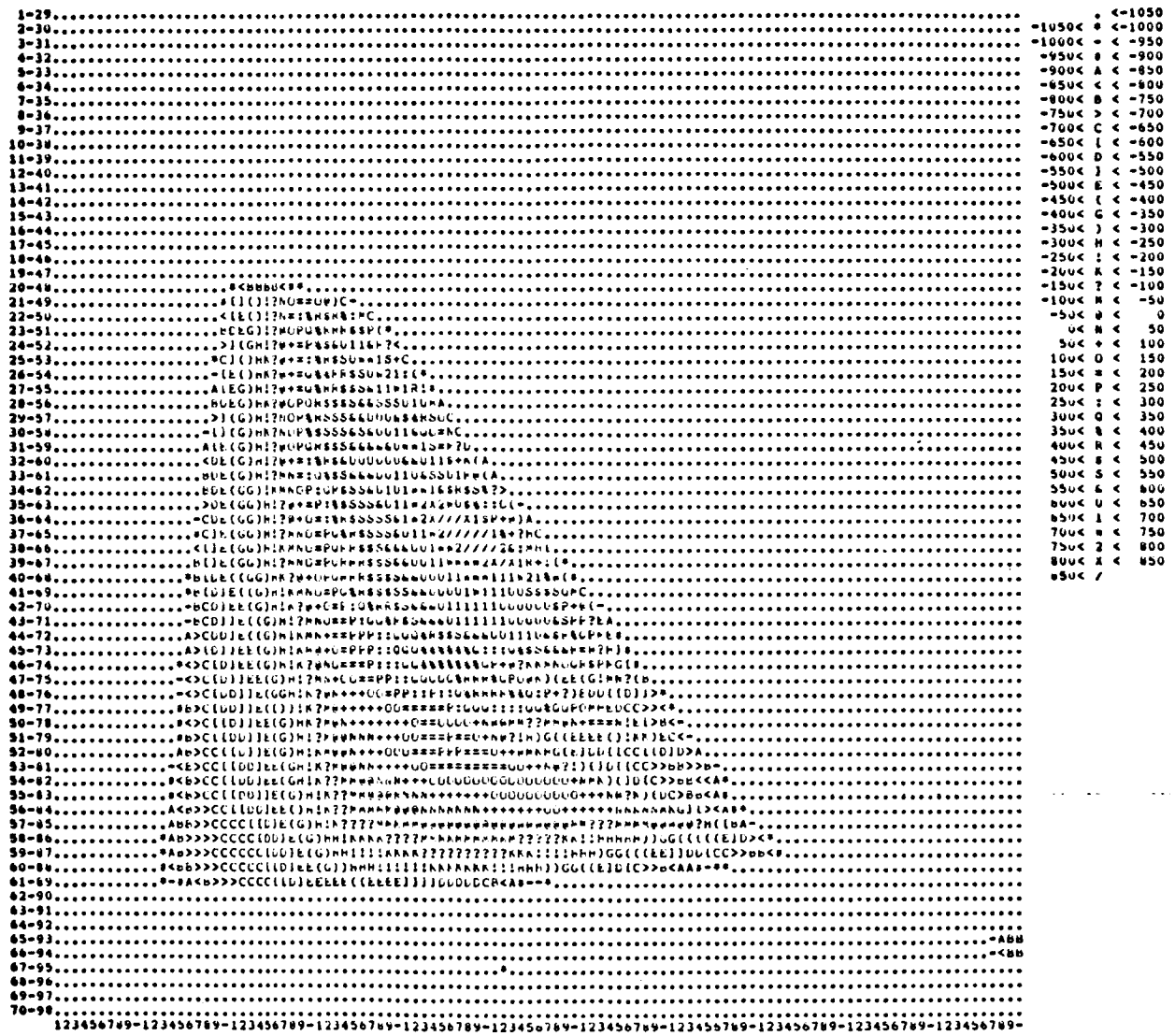
GROUP 2 DATA RECORDED 3-MAR-78 21:46:35:456



DATE 6-MAR-78 PROJECT NO. V41B-P4A
ARO, INC.
AEDC DIVISION
A SVERDRUP CORPORATION COMPANY
NASA NI UM90A INFHA-HED
ARNOLD AIR FORCE STATION TENNESSEE

ADP Copy

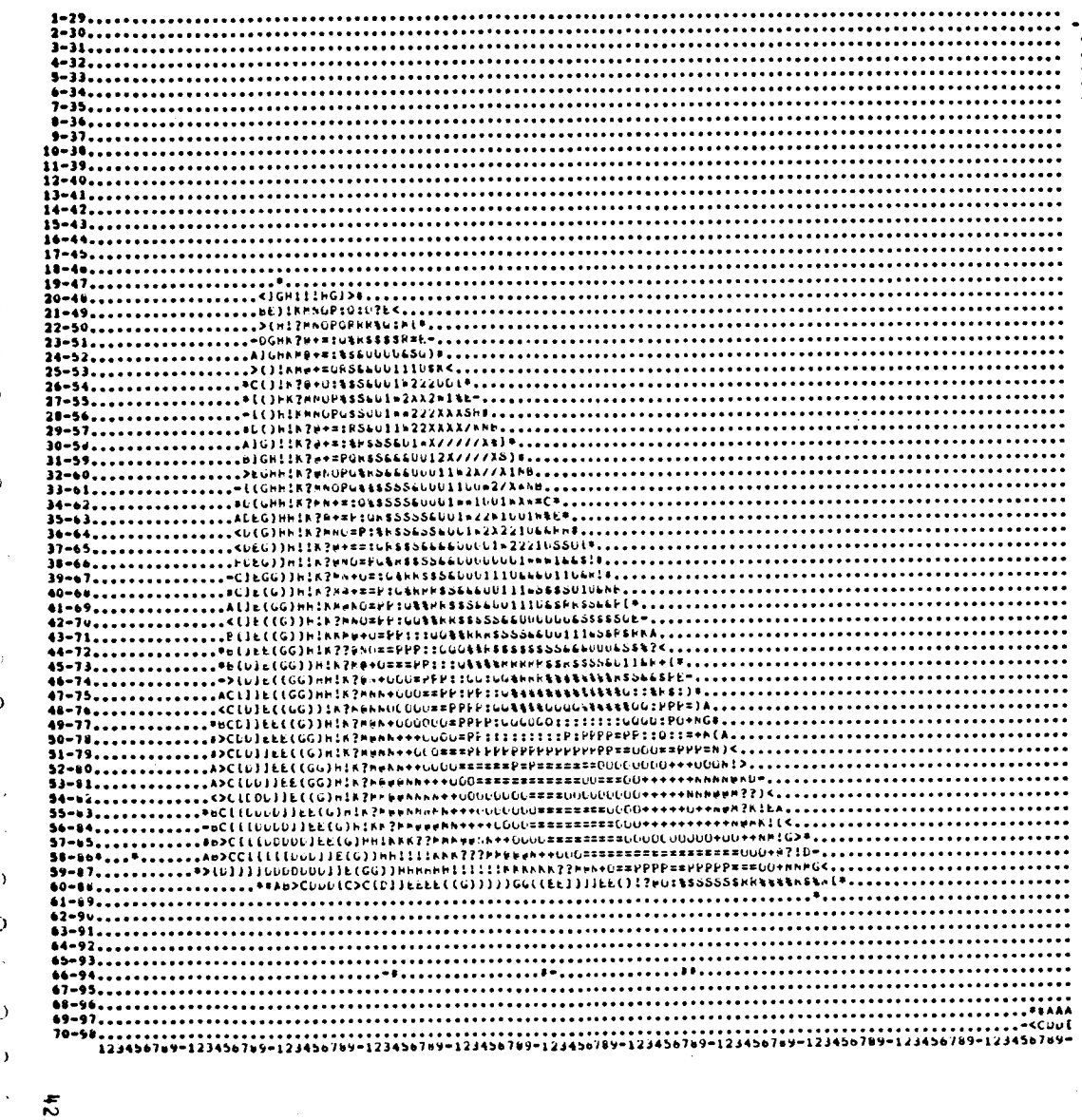
GROUP 4 DATA RECORDED 3-MAR-78 23: 11:11:313



420

DATE 6-MAR-78 PROJECT NO. V41B-P4A
ARO, INC.
AEDC DIVISION
A SVERDRUP CORPORATION COMPANY
NASA RI OH9UA INFHA-KLD
ARNOLD AIR FORCE STATION TENNESSEE

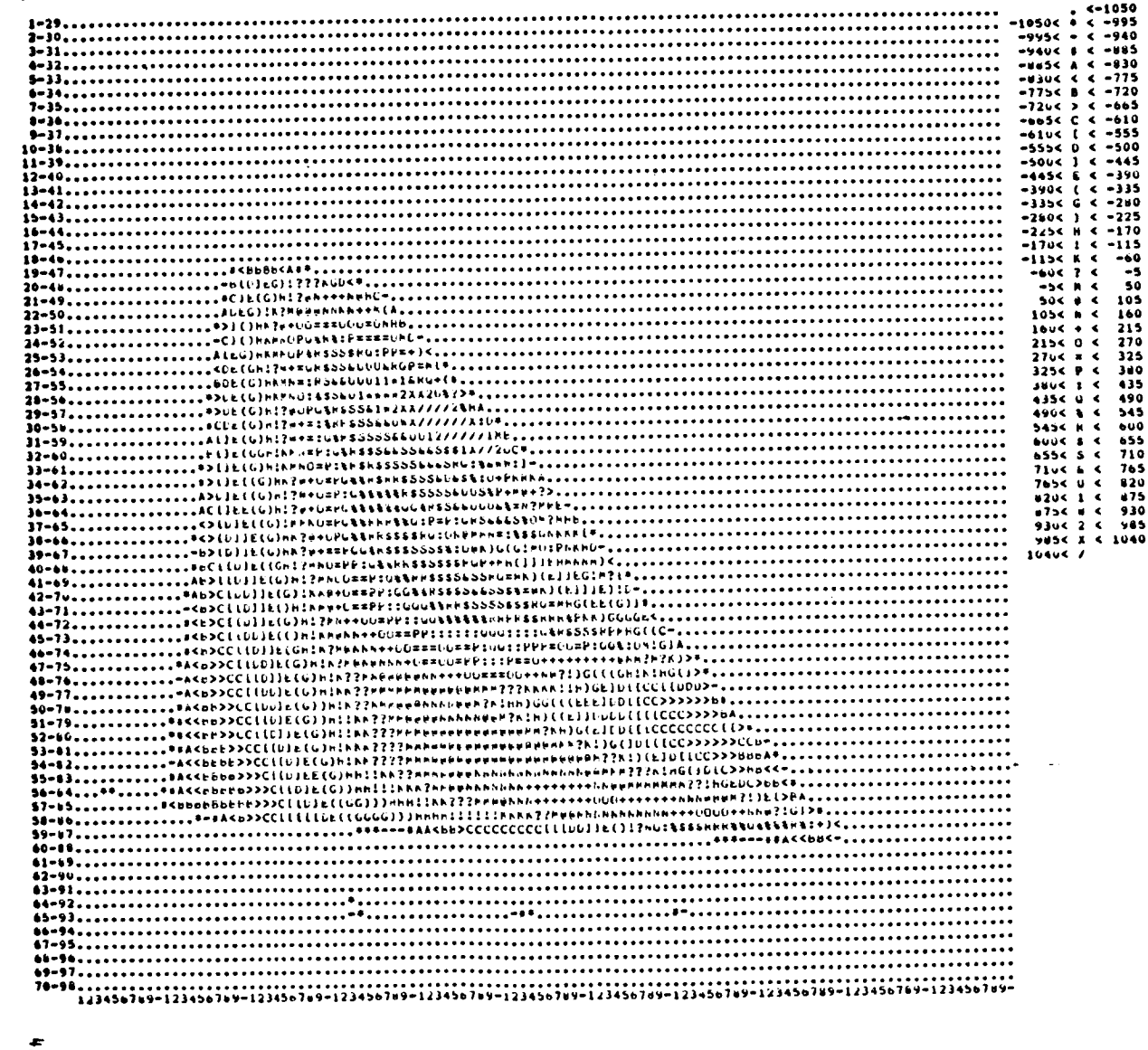
GROUP 7 DATA RECORDED 6-MAR-78 01:33:20:338



DATE 6-MAR-78 PROJECT NO. V41B-P4A
ARO, INC.
AEDC DIVISION
A SVERDRUP CORPORATION COMPANY
MAIN AI UN90A INFRA-RED
ARNOLD AIR FORCE STATION TENNESSEE

ADP Copy

GROUP 9 DATA RECORDED 6-MAR-78 1:22: 3:192

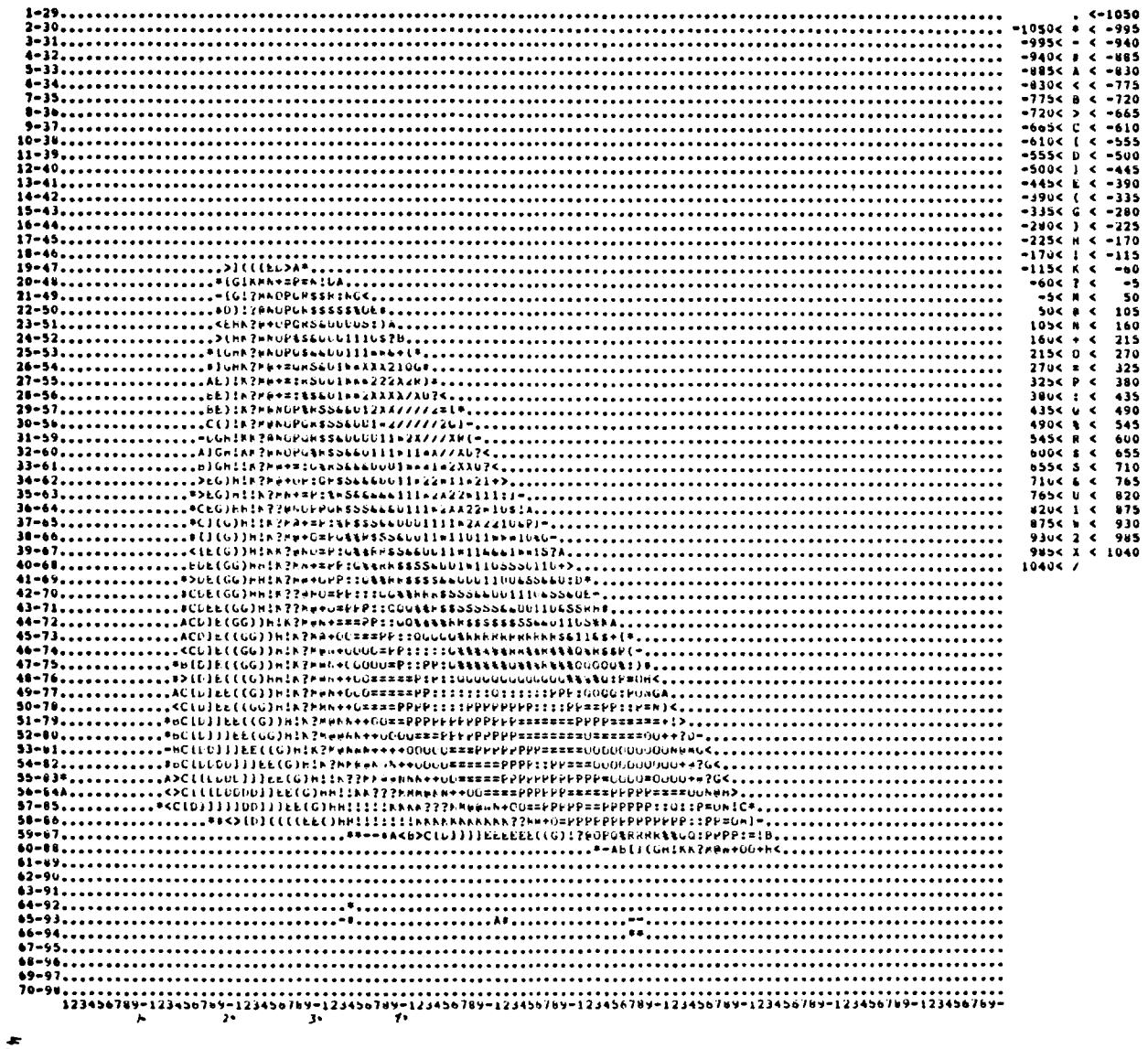


422

DATE 6-MAR-78 PROJECT NO. V41B-P4A
ARO, INC.
AEDC DIVISION
A SVERDRUP CORPORATION COMPANY
NASA RI UP90A IAPRA-REO
ARNOLD AIR FORCE STATION TENNESSEE

ADP Copy

GROUP 10 DATA RECORDED 4-MAR-78 11:40:33:392

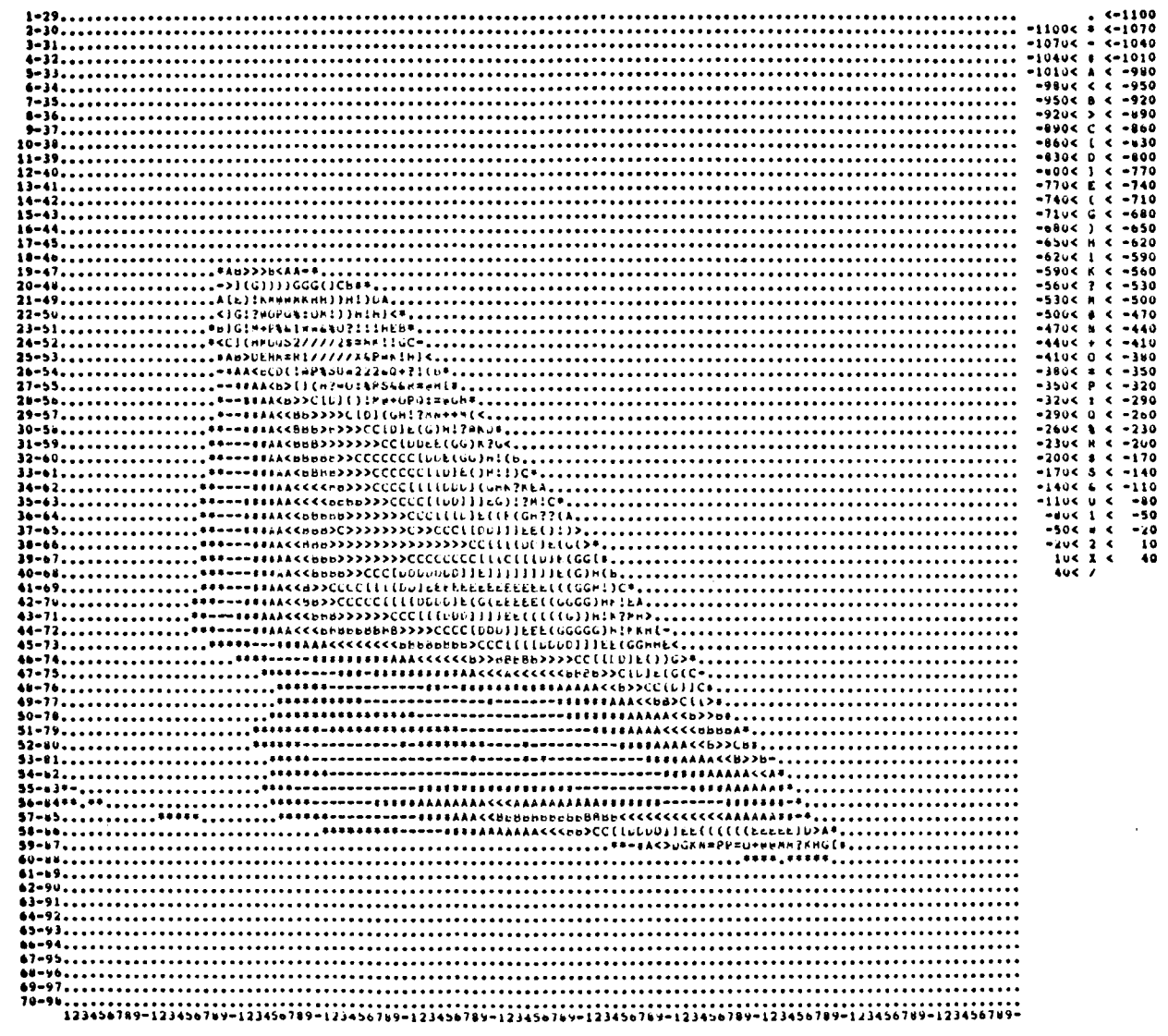


423

DATE 6-MAR-78 PROJECT NO. V41A-P4A
ARO, INC.
AEDC DIVISION
A SVERDRUP CORPORATION COMPANY
NASA RI UH90A INFRA-RED
ARNOLD AIR FORCE STATION TENNESSEE

ADP Copy

GROUP 13 DATA RECORDED 4-MAR-78 21:35:25:312

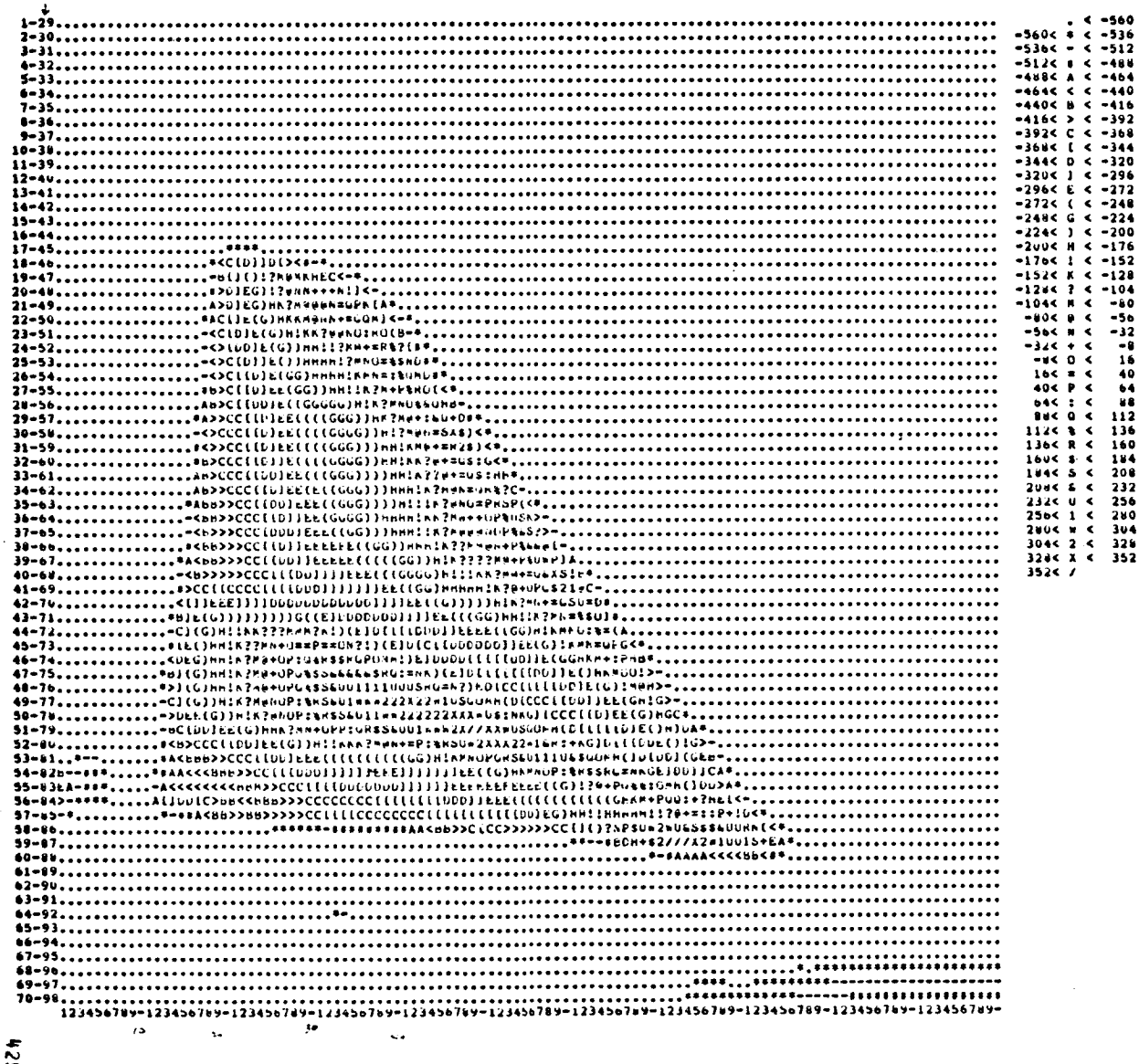


D-10

DATE 6-MAR-78 PROJECT NO. V41B-P4A
ARO, INC.
AEDC DIVISION
A SVERDRUP CORPORATION COMPANY
NASA RI UH90A INFNA-NED
ARNOLD AIR FORCE STATION TENNESSEE

ADP Copy

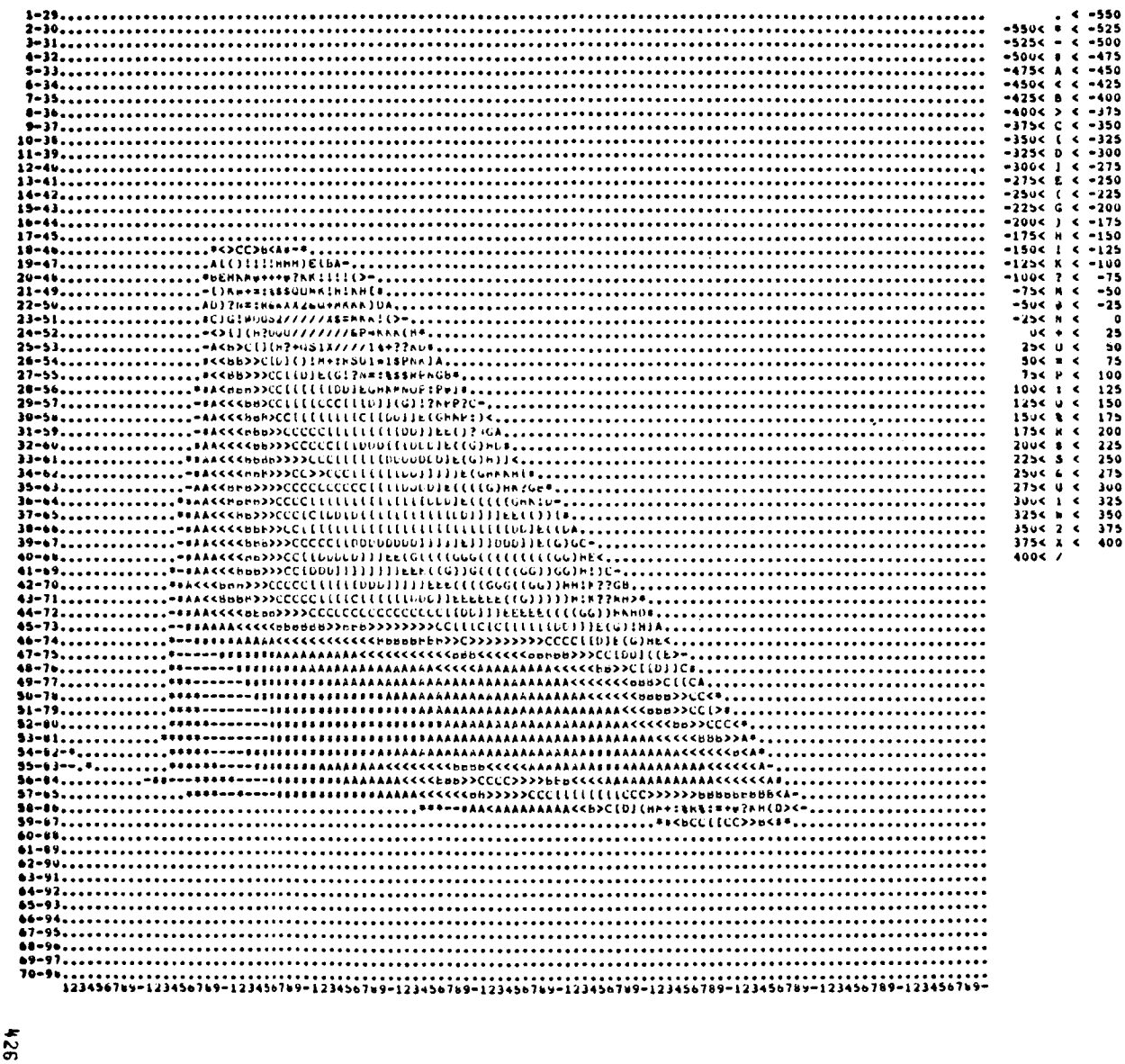
GROUP 15 DATA RECORDED 6-MAR-78 2:56:201864



DATE 6-MAR-78 PROJECT NO. V418-P4A
ARO, INC.
AEDC DIVISION
A SVERDRUP CORPORATION COMPANY
NASA MI OH90A INFRA-RED
ARNOLD AIR FORCE STATION TENNESSEE

ADP Copy

GROUP 18 DATA RECORDED 4-MAR-78 4:26:26: 01



426

DATE 6-MAR-78 PROJECT NO. V41B-P4A
ARO, INC.
AEDC DIVISION
A SVERDRUP CORPORATION COMPANY
ARSA RI ON9UA INFRA-RED
ARNOLD AIR FORCE STATION TENNESSEE

ADP Copy

GROUP 19 DATA RECORDED 6-MAR-78 4:40: 91515

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 1-29.....                                                
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ADP Copy

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DATE  6-MAR-78   PROJECT NO.  V418-P4A
AEDC, INC.
AEDC DIVISION
A SVERDRUP CORPORATION COMPANY
NASA KI  UH9UA IAFRA-KED
ARNOLD AIR FORCE STATION TENNESSEE

GROUP    24        DATA RECORDED  6-MAR-78  20133135I 48
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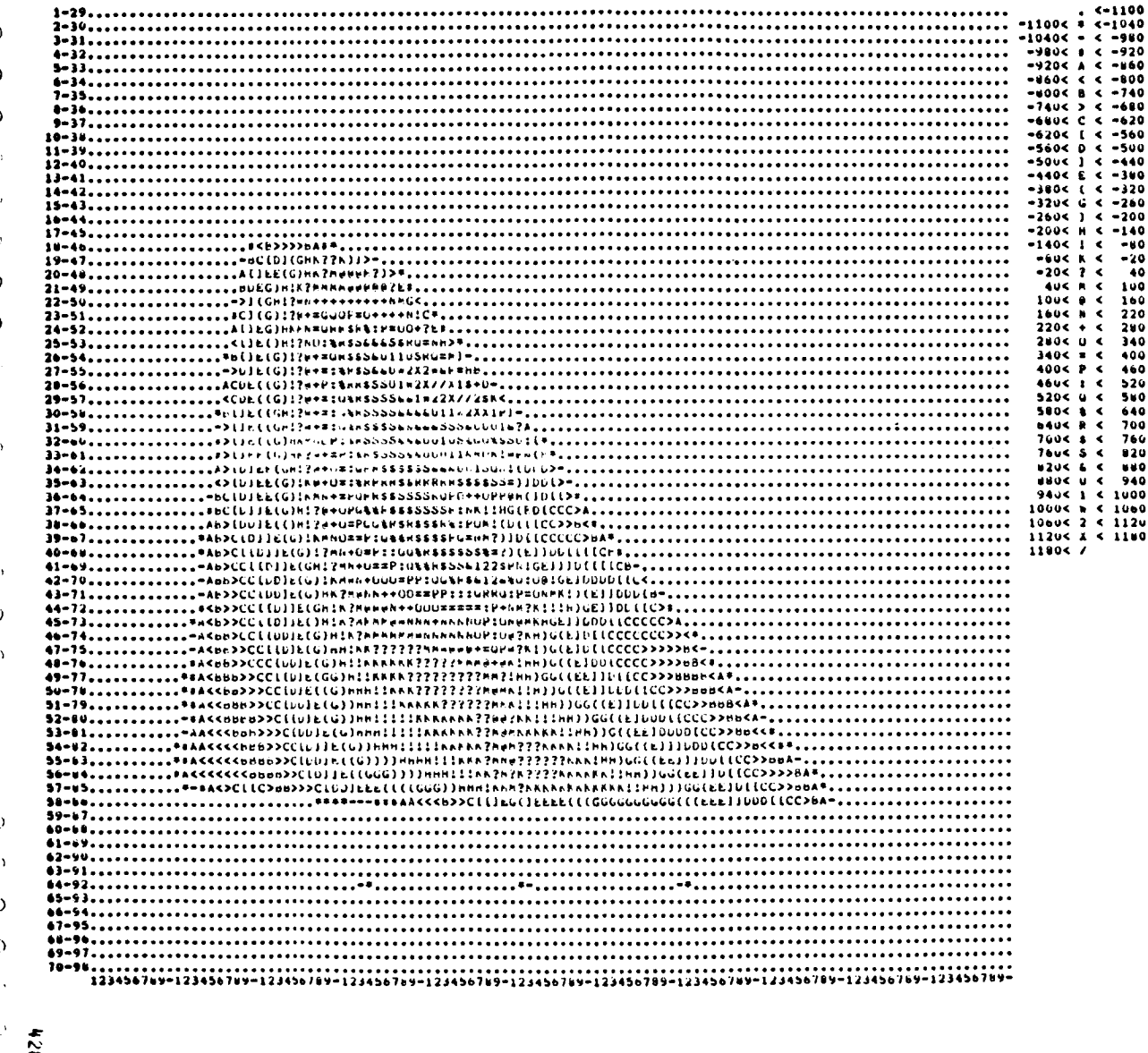

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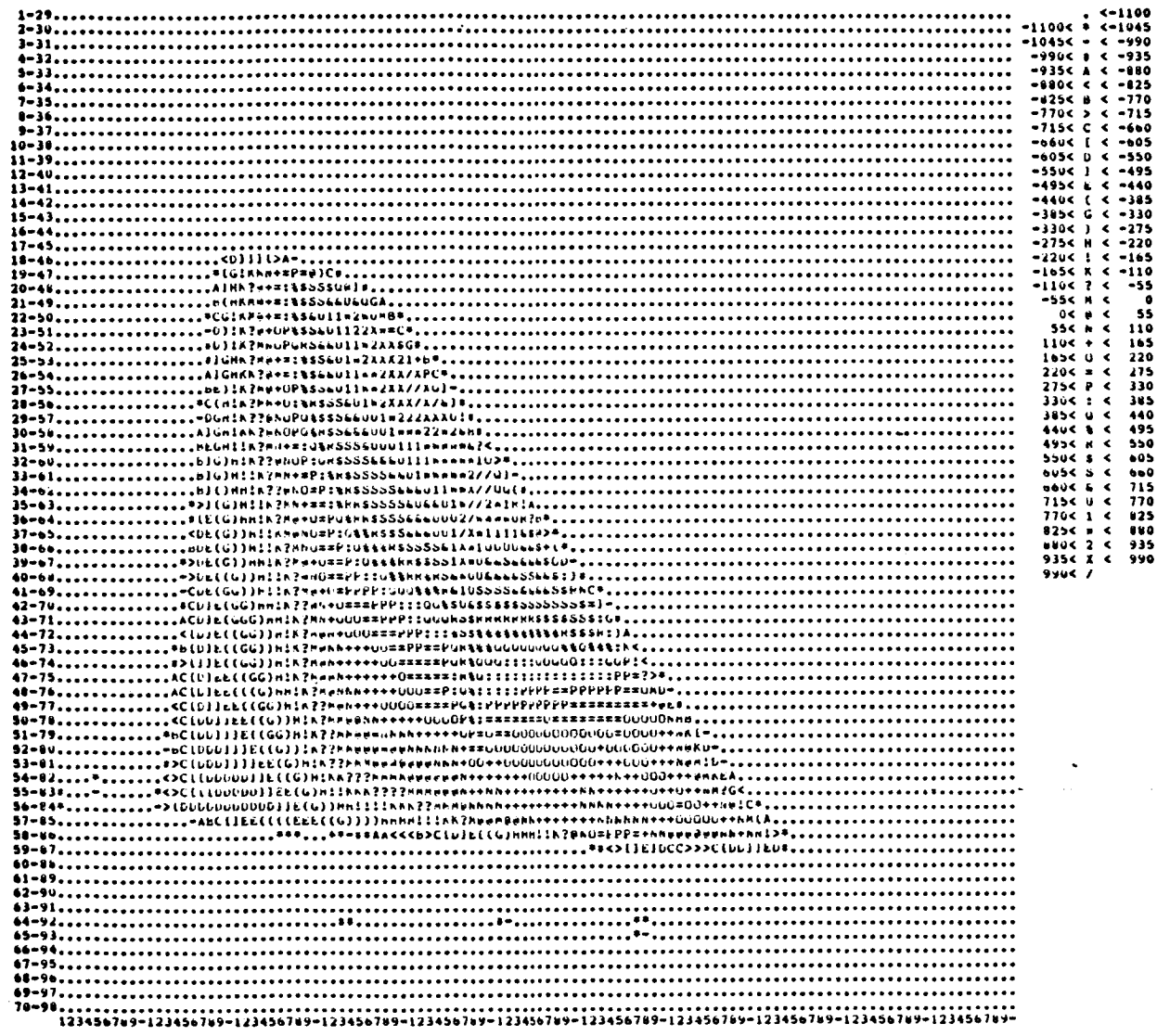
DATE 6-MAR-78 PROJECT NO. V41B-P4A
ARO, INC.
AEDC DIVISION
A SVERDRUP CORPORATION COMPANY
NASA KI UNYUA INFRA-RED
ARNOLD AIR FORCE STATION TENNESSEE

ADP Copy

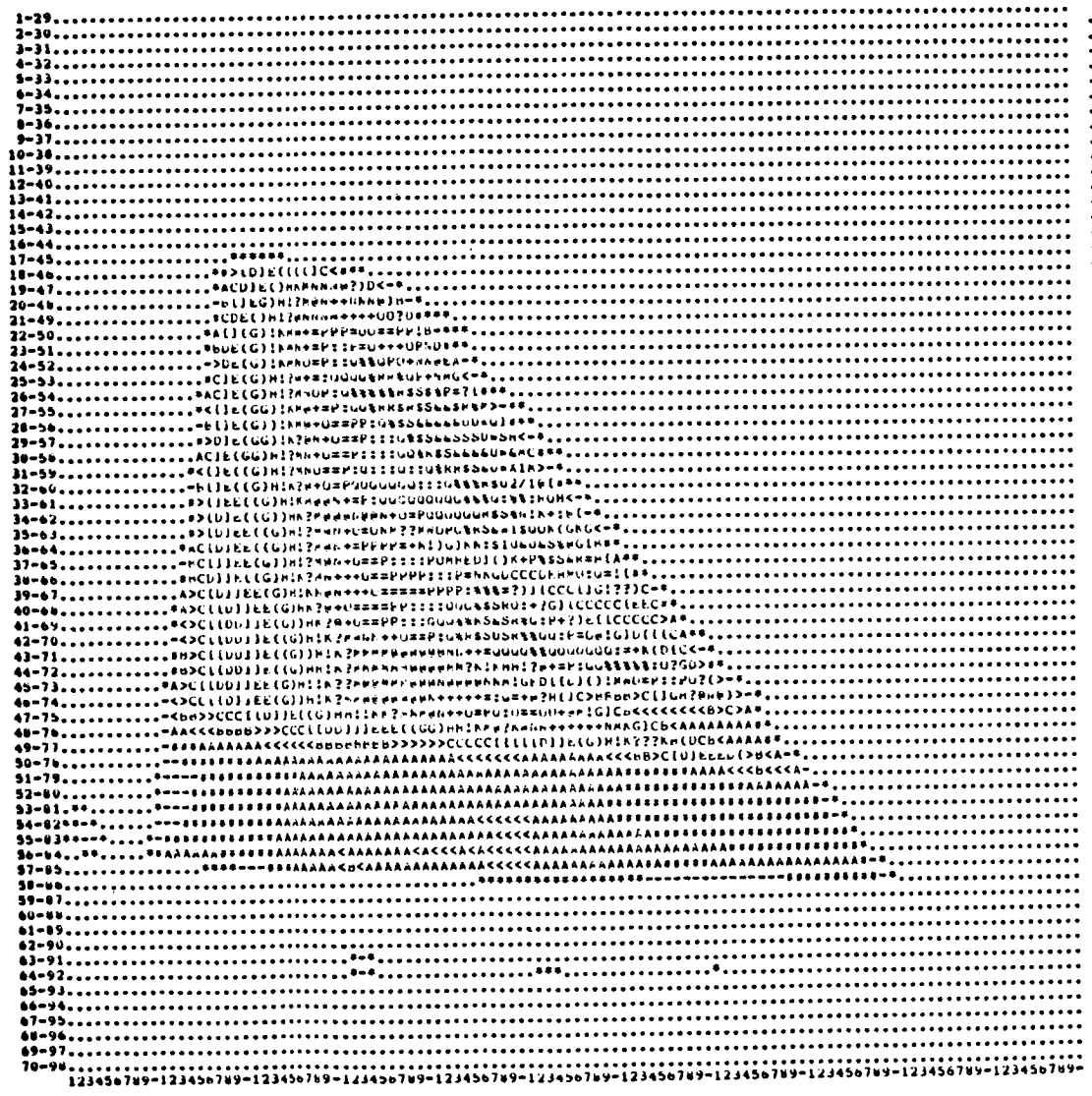
GROUP 25 DATA RECORDED 6-MAR-78 21: 0:10:451



DATE 7-MAR-78 PROJECT NO. V41B-P4A
ARO, INC.
AEDC DIVISION
A SVERDRUP CORPORATION COMPANY
NASA RI UM90A INPHA-HLD
ARNOLD AIR FORCE STATION TENNESSEE

ADP Copy

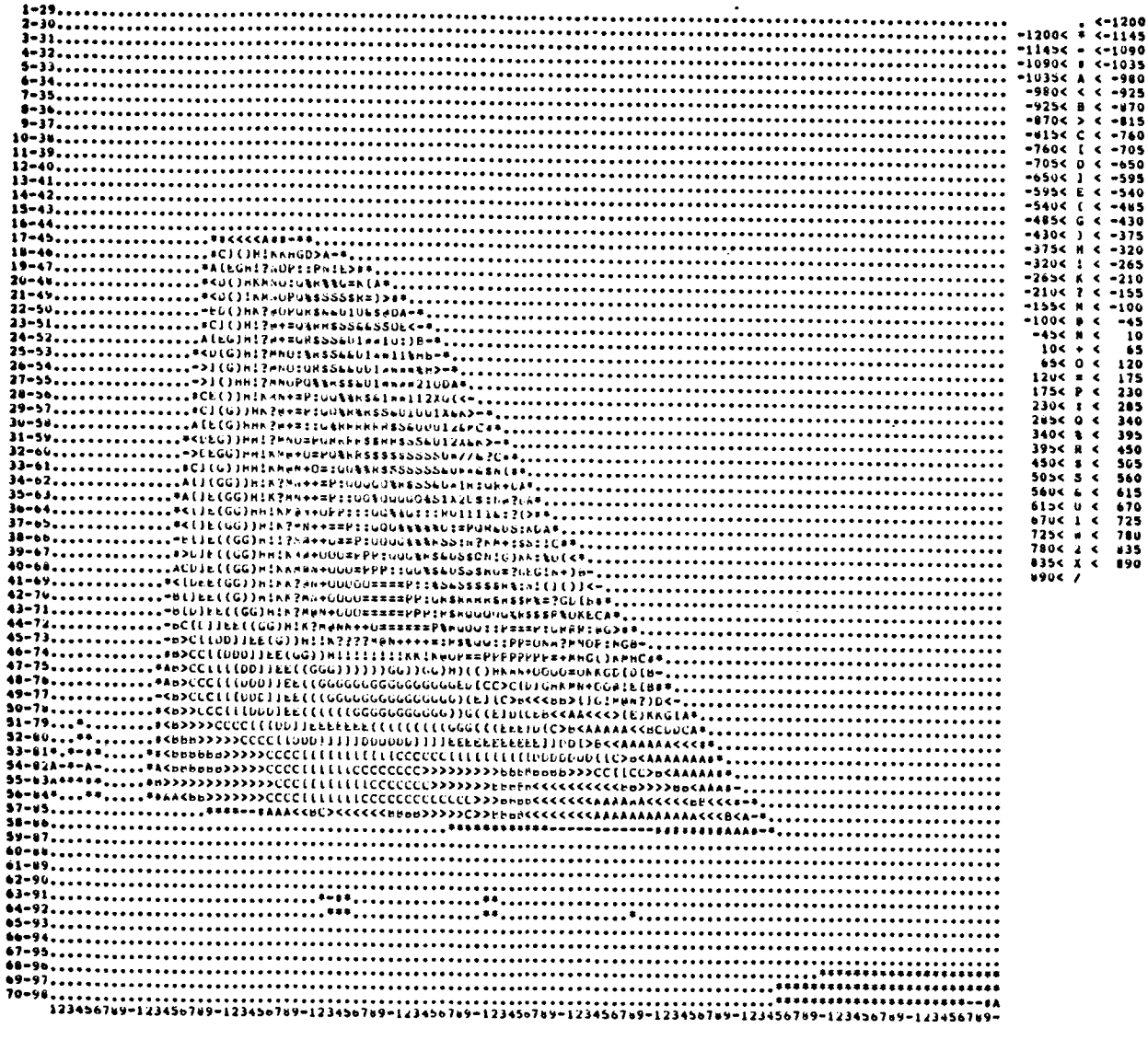
GROUP 44 DATA RECORDED 7-MAR-78 41351581181



DATE 7-MAR-78 PROJECT NO. V41B-P4A
ARO, INC.
AEDC DIVISION
A SVERDRUP CORPORATION COMPANY
NASA MI OH90A INFRA-RED
ARNOLD AIR FORCE STATION TENNESSEE

ADP Copy

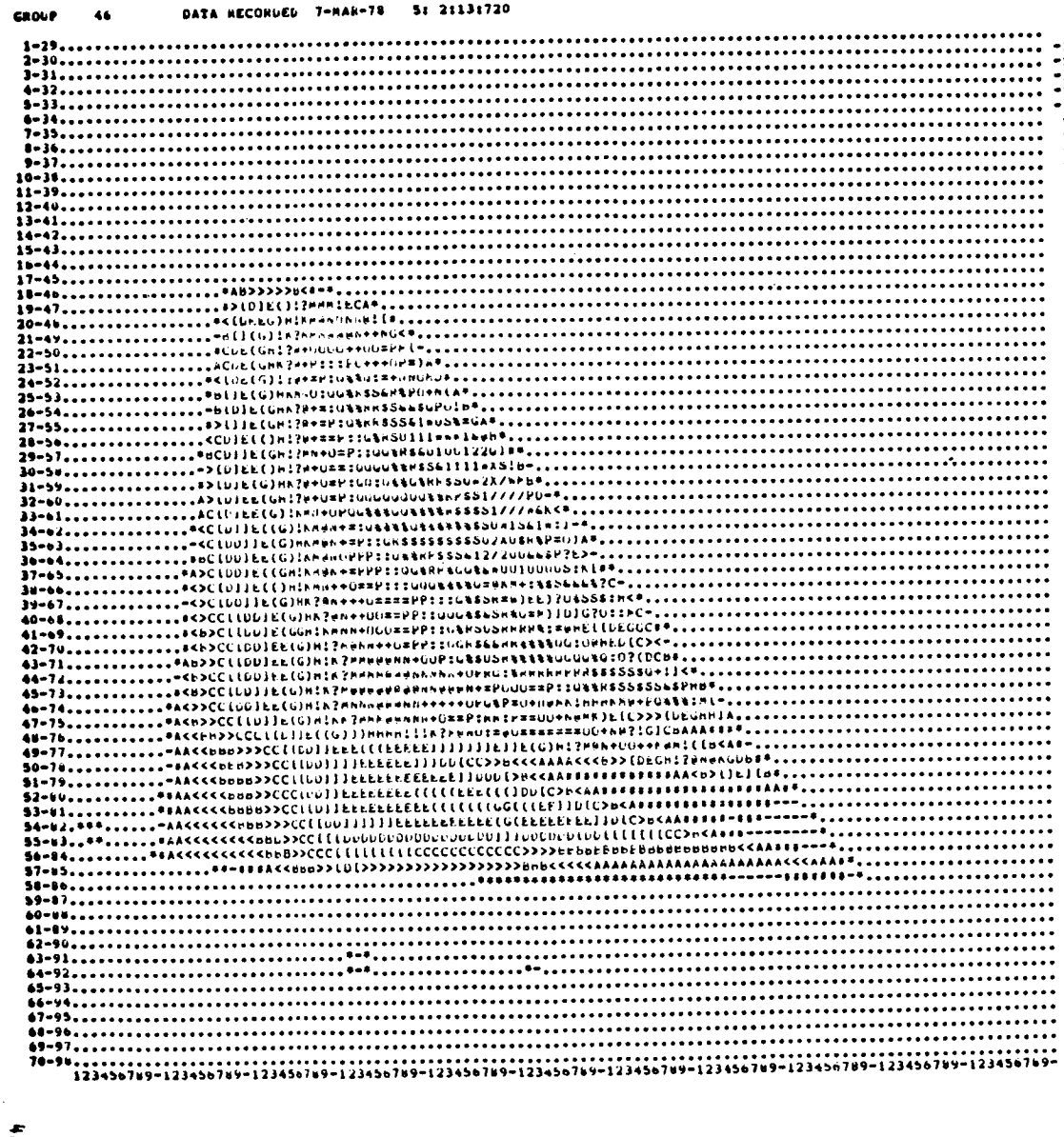
GROUP 45 DATA RECORDED 7-MAR-78 4:49:43:508



DATE 7-MAR-78 PROJECT NO. V41B-P4A
ARO, INC.
AEDC DIVISION
A SVERDRUP CORPORATION COMPANY
NASA NI UH90A INFRA-RED
ARNOLD AIR FORCE STATION TENNESSEE

ADP Copy

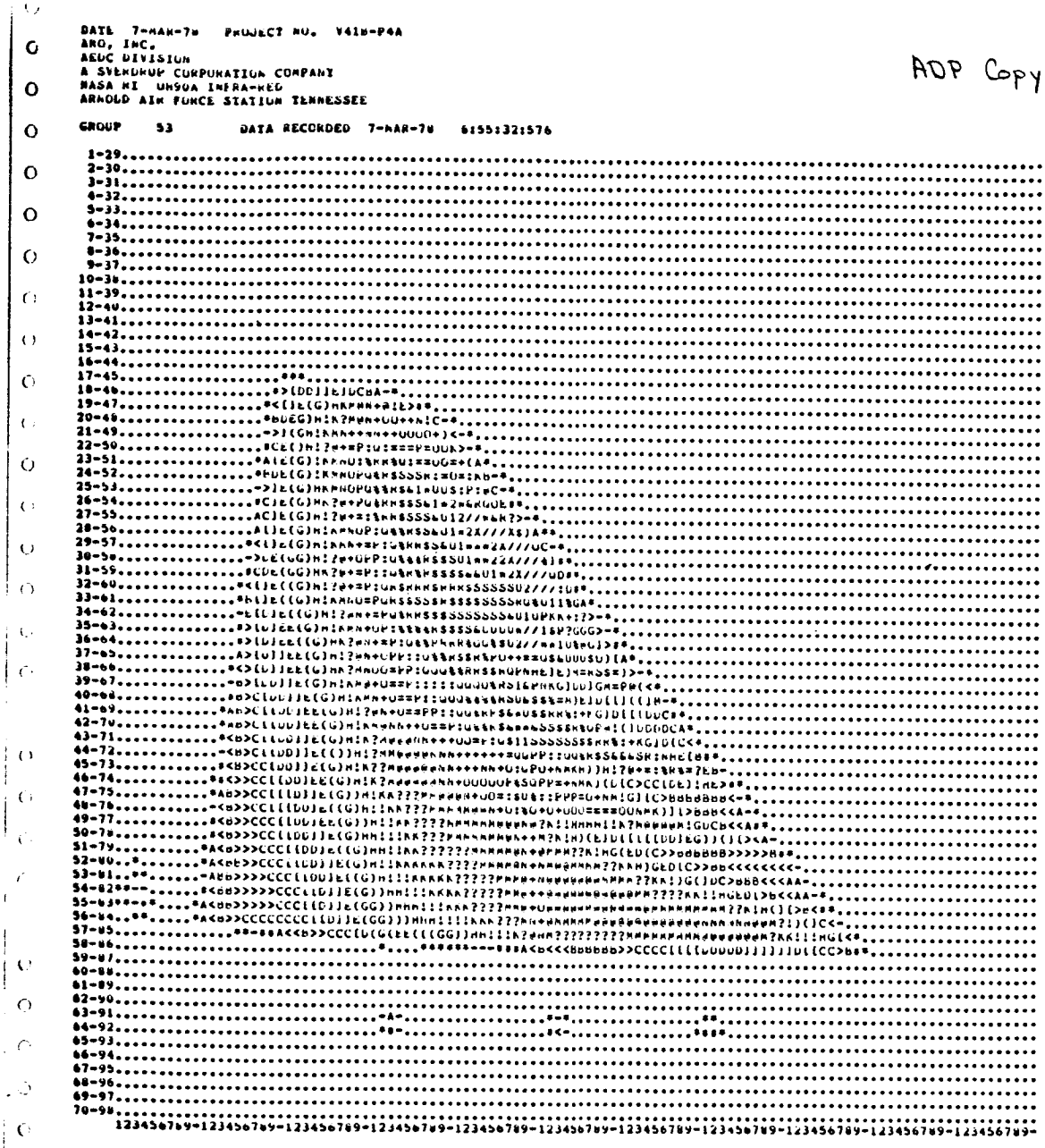
GROUP 46 DATA RECORDED 7-MAR-78 5: 2113:720



DATE 7-MAR-78 PROJECT NO. V41B-P4A
ARO, INC.
AEDC DIVISION
A SVERDRUP CORPORATION COMPANY
NASA MI UH90A INFRA-RED
ARNOLD AIR FORCE STATION TENNESSEE

ADP Copy

GROUP 53 DATA RECORDED 7-MAR-78 6:55:32:576

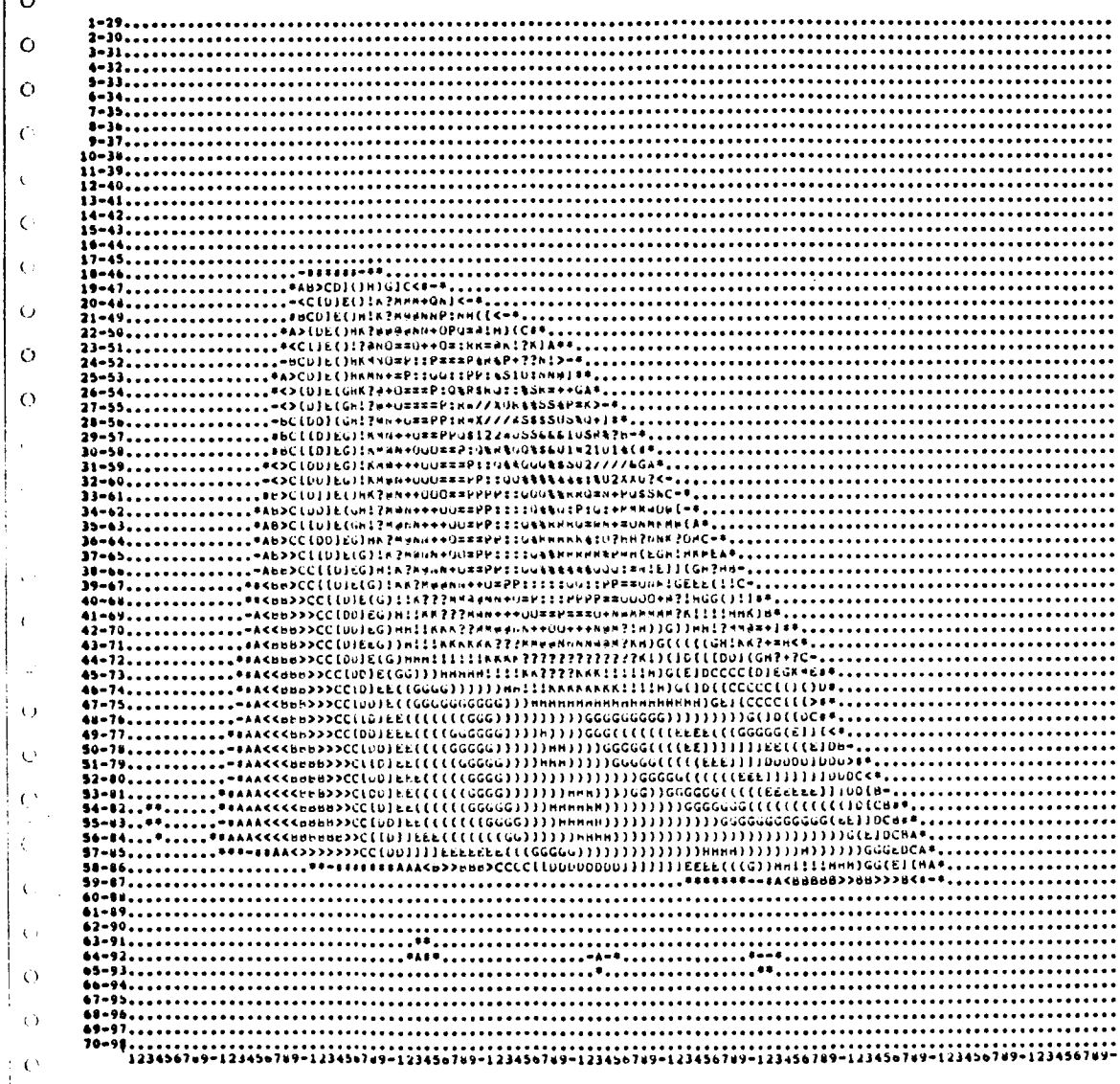


433

DATE 6-MAR-78 PROJECT NO. V41B-P4A
ARO, INC.
AEDC DIVISION
A SVERDRUP CORPORATION COMPANY
NASA RI ONSGA INFRA-RED
ARNOLD AIR FORCE STATION TENNESSEE

ADP Copy

GROUP 69 DATA RECORDED 6-MAR-78 11:36:22:499



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-590<	D < -525
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-5<	? < 60
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1295<	/

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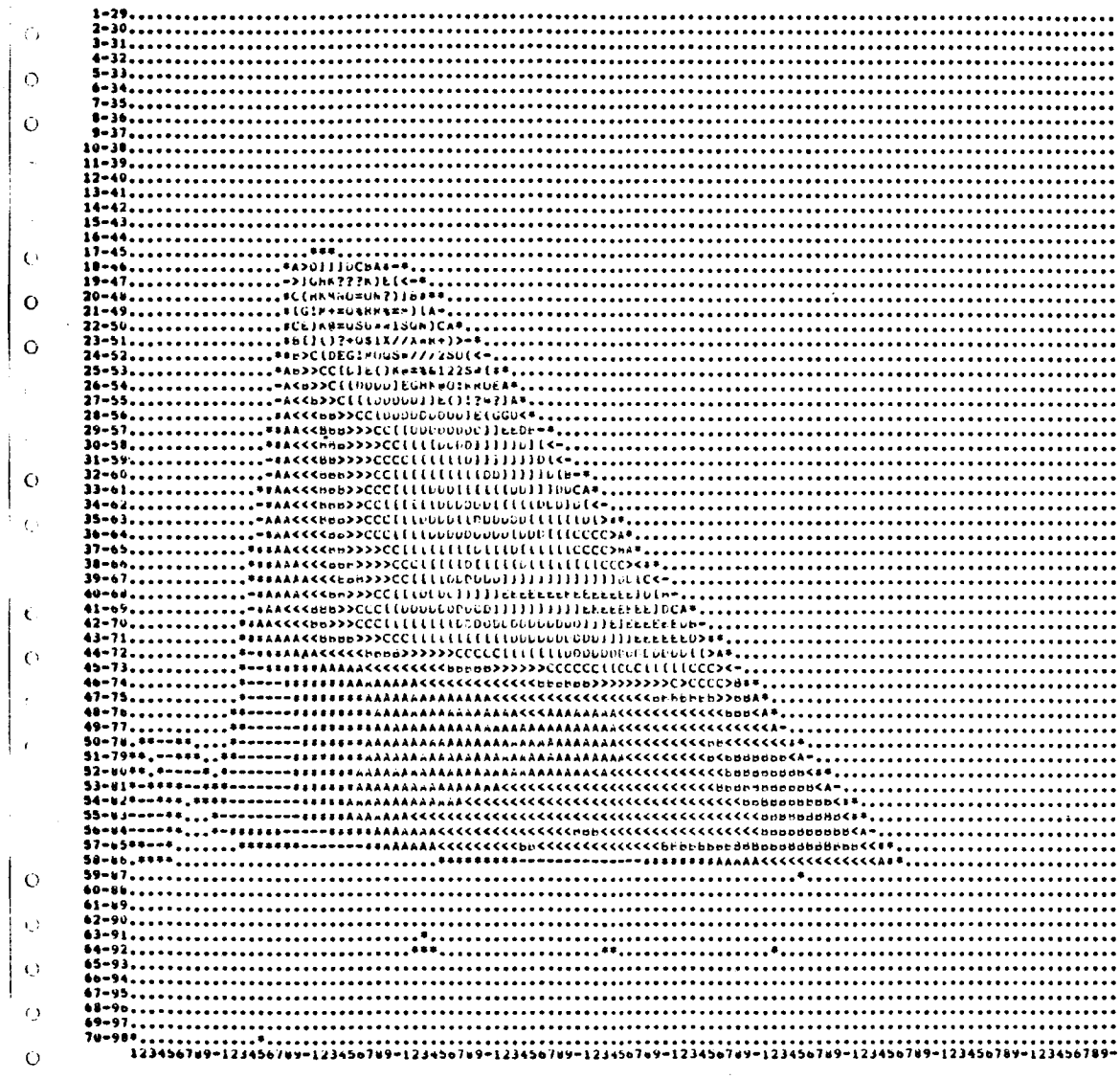
4:34

DATE 9-MAR-78 PROJECT NO. V41B-P9A
AKO, INC.
ALDC DIVISION
A SVERDRUP CORPORATION COMPANY
NASA HI UH90A INFRA-RED
ARNOLD AIR FORCE STATION TENNESSEE

GROUP 89 DATA RECORDED 9-MAR-78 23:21:13:822



435

DATE 9-MAR-76 PROJECT NO. V41B-P4A
ARO, INC.
AEDC DIVISION
A SVERDRUP CORPORATION COMPANY
NASA NI UNYUA INFRA-RED
ARNOLD AIR FORCE STATION TENNESSEE

GROUP 90 DATA RECORDED 9-MAR-76 23:29: 2:933

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 1-29.....                                                
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DATE  9-MAR-78   PROJECT NO.  V41B-P4A
ARO, INC.
AEDC DIVISION
A SVERDRUP CORPORATION COMPANY
NASA NI  OM90A INFRA-RED
ARNOLD AIR FORCE STATION TENNESSEE

GROUP    91        DATA RECORDED  9-MAR-78  23:33:55:  1
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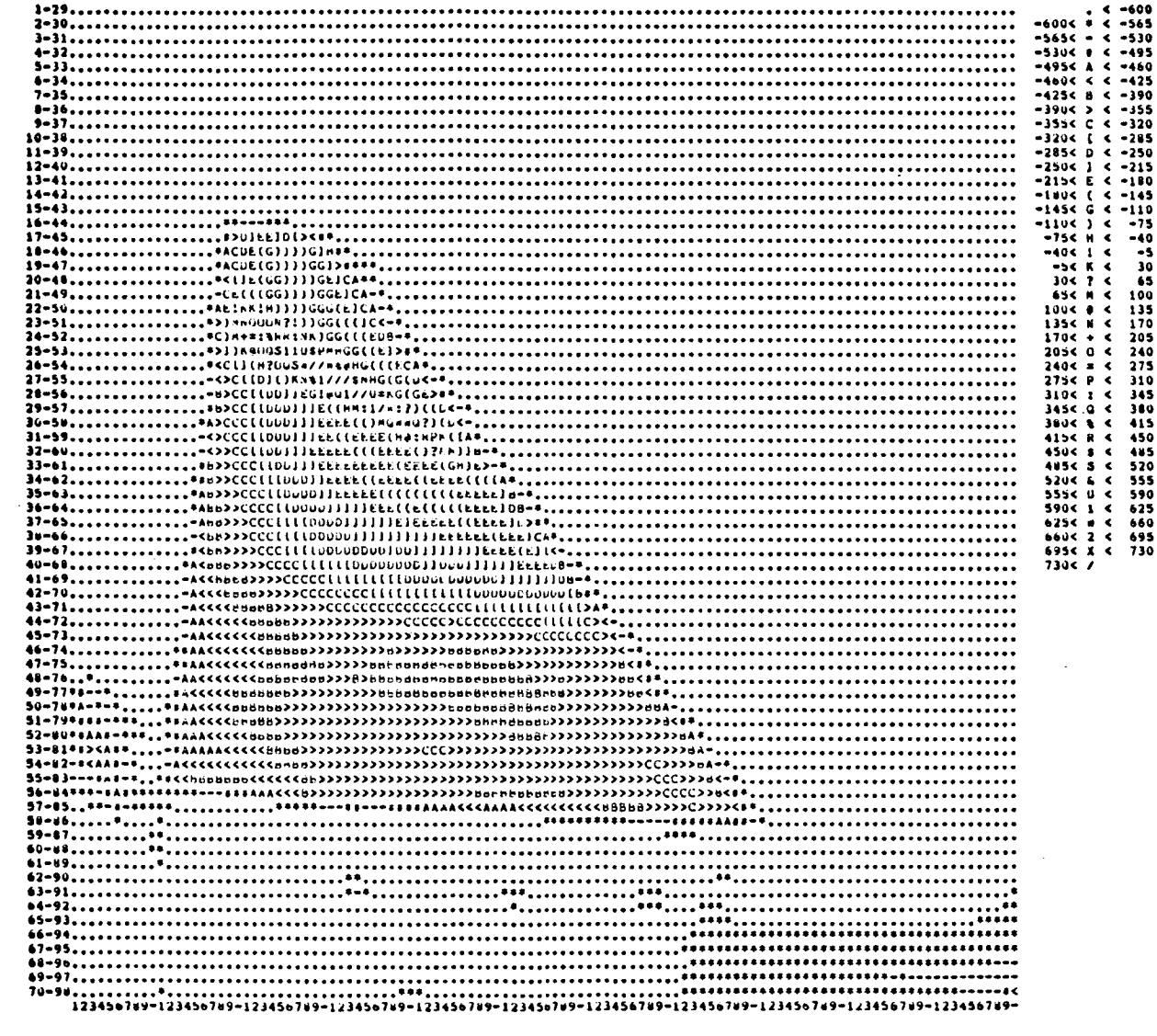
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8-36 -390< > < -355
9-37 -355< C < -320
10-38 -320< [< -285
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4 of
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DATE 10-MAR-78 PROJECT NO. V41B-P4A
ARO, INC.
AEDC DIVISION
A SVERDRUP CORPORATION COMPANY
NASA RI UH90A INFRA-RED
ARNOLD AIR FORCE STATION TENNESSEE

GROUP 95 96 DATA RECORDED 10-MAR-78 01531 91956

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3-31**********.*.....*********.....................................................  -221< - < -216
4-32*********.....*********.....................................................  -216< A < -211
5-33*******.*.*.....*********.....................................................  -211< B < -206
6-34*****.....********.....................................................  -206< C < -201
7-35*.*.....*.*****.....................................................  -201< D < -196
8-36**.....*.*******.....................................................  -196< E < -191
9-37.*********.....................................................  -191< F < -186
10-38**********.....................................................  -186< G < -181
11-39*********.....................................................  -181< H < -176
12-40*******.....................................................  -176< I < -171
13-41****.....................................................  -171< J < -166
14-42**.....................................................  -166< K < -161
15-43.....................................................  -161< L < -156
16-44.....................................................  -156< M < -151
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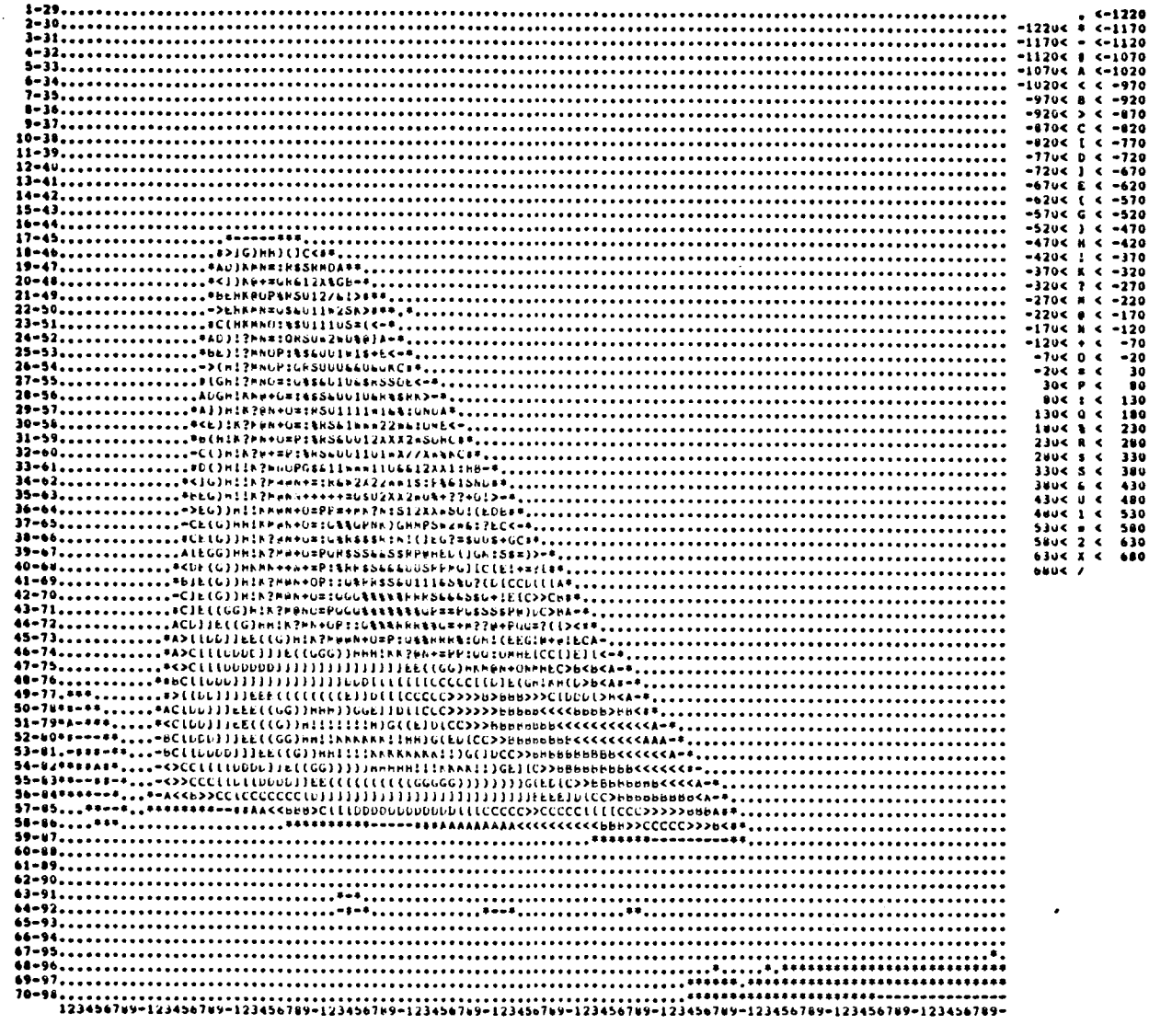
18-46.....ALG!?kO=+=H)C**.....................................................  -146< O < -141
19-47.....*CG!?P+P&UI!)>*-*.....................................................  -141< P < -136
20-48.....*)N?*OUUU=:U%UGP-******.....................................................  -136< Q < -131
21-49.....<L!?kUPOUU=:UO=+)B-...****.....................................................  -131< R < -126
22-50.....*bE)kPAU!%$K:UNNhnC-.....****.....................................................  -126< S < -121
23-51.....*>LH!?hh=IGK$$%:Ub?HI*.....**.....................................................  -121< T < -116
24-52.....*C()!kAh+C=P!UU%U!=hA(b*.....*.....................................................  -116< U < -111
25-53.....=[()H!?P+O=PP:P:::PU=:[*.....................................................  -111< V < -106
26-54.....AU()H!kP+*OP:PPPPP=UP(<*.....................................................  -106< W < -101
27-55.....BJ()H!k?P+*U=P:::PP=P==+!C-.....................................................  -101< X < -96
28-56.....*LE())H!??=hO=PP!:G:U!:P=LA.....................................................  -96< Y < -91
29-57.....*(E())H!??hh+OO==PP:U%%k%%!LH>*.....................................................  -91< Z < -86
30-58.....AU(G)HPk??P+hNOU=U==PPU%PK$%P!PE*.....................................................  -86< [ < -81
31-59.....bJ(G)H!k?=+#h+O=PPPPPPPU%%PS$$!hB*.....................................................  -81< \ < -76
32-60.....*>J(G)HPA?P+hO=P!P::::PP::U%%hP$$hU(*.....................................................  -76< ] < -71
33-61.....-LEGGHH!k?#h+U=P::GUUUUU:U:LUU%%hP%!:P.....................................................  -71< ^ < -66
34-62.....<DEG)P:!!?P+h+++P::LG%%%JGJUUUUUUU%%%:PC*.....................................................  -66< _ < -61
35-63.....*>J(G)H!k?P+#++G=PUL%1P%%%HPPK%%%GGG::::P+(A.....................................................  -61< ` < -56
36-64.....-CJ(G)P!!?P+h++OP:::L%%%%%PPPK%%%HK%:PPPP=h(A.....................................................  -56< a < -51
37-65.....AIE(G)HP!kP+h+=+=:PGU%:%%hG%U%%%GUU:::PPLHH>*.....................................................  -51< b < -46
38-66.....<UE(G)HP!kP+h+U=P:::L%%RS=KHHK$$$HHHHHP%PNE*.....................................................  -46< c < -41
39-67.....nLE(G)HPA?P+h+U=P:U%PK$S=%%UU1P=!!!!!UUUUS%PC*.....................................................  -41< d < -36
40-68.....>)E(G)H!?P+#hG=PU%%P$SS%%UUU11=*=====2222=*=1US!)A.....
41-69.....*CJ(G)HP!?P+#+U=P:%HKP$$SS%S$%%%%%%%%%UU1=*=*22#1SK(*.....
42-70.....#()E(G))HA?P#+#+U=P:U%%%PP$$$SSSSSSS%UU11=2XX/X2GGP.....
43-71.....AC())EE(LG)H!!A?PP#h+*UU=PPP:!GUU%HHH%S%%U%%U!!!!1US!HC-.....
44-72.....<C(LL))EE(GG)HH!!KA??P?P##hhhh+*L=#P:GUG%HHHPS$$P%%UPA>>*.....
45-73.....*bCC((DD))EE((G)HHHH!!!!!KAA??PP=*##hhh+UUUUU=PP!:::::PhU=.....
46-74.....=b>C(LL))EEE((G))))HHHHHH!!!!!KAAAAA?????PPPP#####H*+hU+CHUA.....
47-75.....*b>CC((LL))EE((GG))))HHHHHHH!!!!!!!!!!!!!!!!KAAA?????PHHH?)>*.....
48-76.....*b>CC((LL))EE((((GG))))HHHHHHHH!HP!!!!HHHHHHH!!!!!!!KAA????HHU#.....
49-77.....Ab>CC(DD)))EE(((GG)))))HHHHHHHHHHHHHHHHHHH!!!!!!KAA??????h!(B.....
50-78...**.-..*<>>CC((LL))EEE(((GG)))))))hHHHHH!HHH!HHHHHHHH!!!!KAAA??????H????hHH=.....
51-79**.*---A*.*b>>CC(DD)))EE(((GG)G))))HHH)HHHH!!!!!!!!!HHHH!!!KAA??????h?H****K(<.....
52-8U#A---*###A#<b>>CC((DD))EE(((GG)))))))HHHHHH!!!!!!!!!!!!!!!!KAAAA?????PHHHHHP*PAHC*.....
53-81<<A***-#A<b>>CC((DE)EE(((GG)))HHHHHHHH!!!!!!AA!AA!!!AAAAAA?KAAA??H?**HHHHHHH*#HU*.....
54-82b<A=*..*#b>CCCC(DDL)E(((G))HHHH!!!!!!!KAAAA?????PAAAAAAA?????????????????PHH*=*HHH*A(<.....
55-83>b<A=*...*>C(!!!LLDLC)E(((G))HHH!!!!!!KAA???PHHHHHHH?????????????????PH**0HHHH?hC=.....
56-84><<A=*...-A<b>CC((DLLL))E(G)HH!!!!!!AAAA????PHHHHHHHHHHHHHHHHH
```

DATE 10-MAR-78 PROJECT NO. V41B-P4A
ARO, INC.
AEDC DIVISION
A SVERDRUP CORPORATION COMPANY
NASA RI ON90A IWFNA-MLD
ARNOLD AIR FORCE STATION TENNESSEE

GROUP 111 DATA RECORDED 10-MAR-78 4:42:59:560



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DATE 10-MAR-78   PROJECT NO.  1416-P4A
ARO, INC.
AEDC DIVISION
A SVERDRUP CORPORATION COMPANY
NASA NI  UNYUA INFRA-RED
ARNOLD AIR FORCE STATION TENNESSEE

GROUP   112          DATA RECORDED 10-MAR-78   65521151 75
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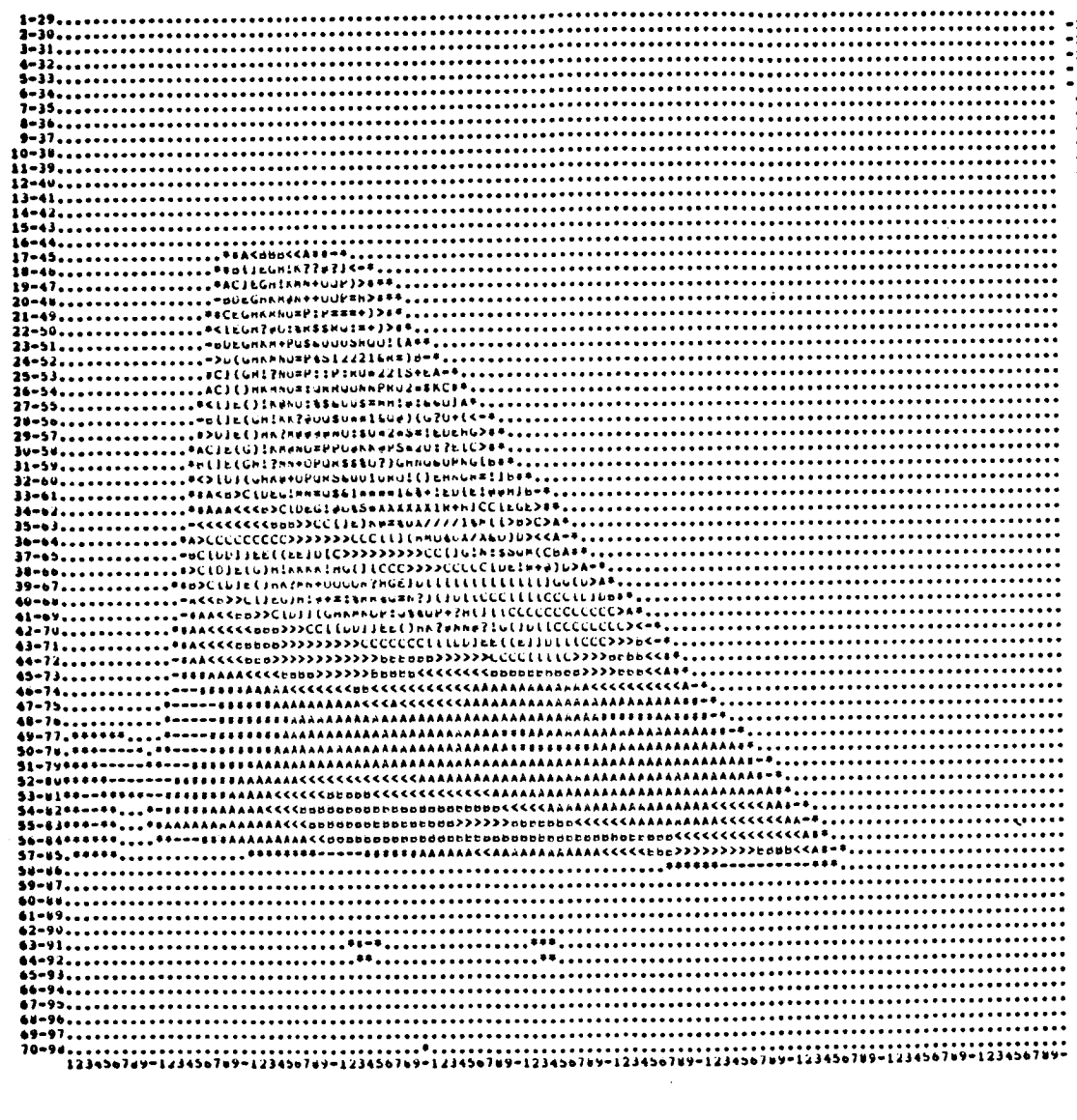

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DATE 10-MAR-78   PROJECT NO.  9418-P4A
ARO, INC.
AEDC DIVISION
A SVERDRUP CORPORATION COMPANY
NASA NI  UM90A INFRA-RED
ARNOLD AIR FORCE STATION TENNESSEE

GROUP   114        DATA RECORDED 10-MAR-78   5:16:49 13

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DATE 10-MAR-78   PROJECT NO. V41B-P4A
ARO, INC.
AEDC DIVISION
A SVERDRUP CORPORATION COMPANY
NASA RI  OHYUA INFRA-RED
ARNOLD AIR FORCE STATION TENNESSEE

GROUP   116        DATA RECORDED 10-MAR-78   5:35:12:773
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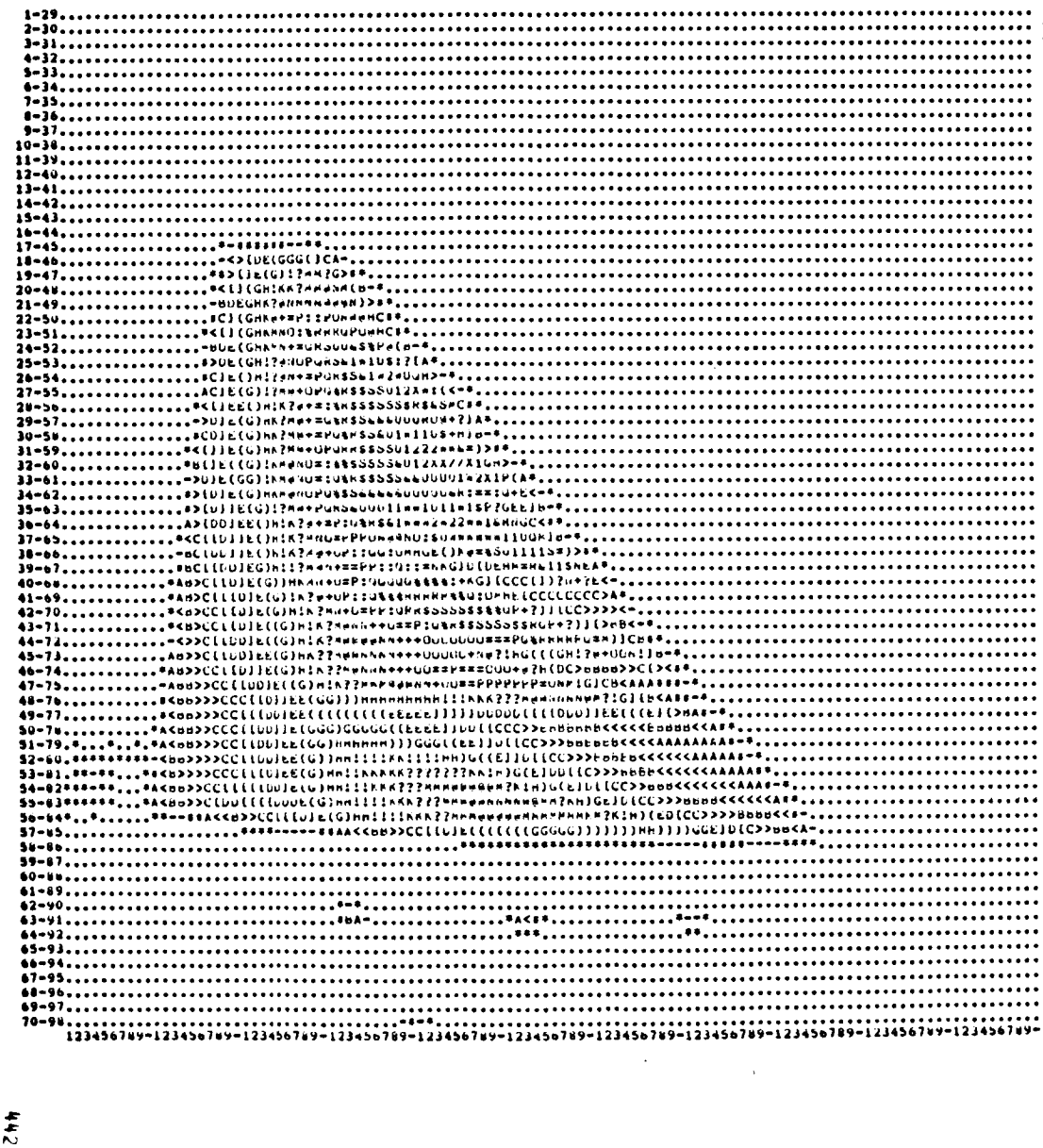
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   25< @ < 85
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  145< + < 205
  205< Q < 265
  265< = < 325
  325< P < 385
  385< T < 445
  445< Q < 505
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  685< S < 745
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  925< W < 985
  985< 2 < 1045
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 1105< /
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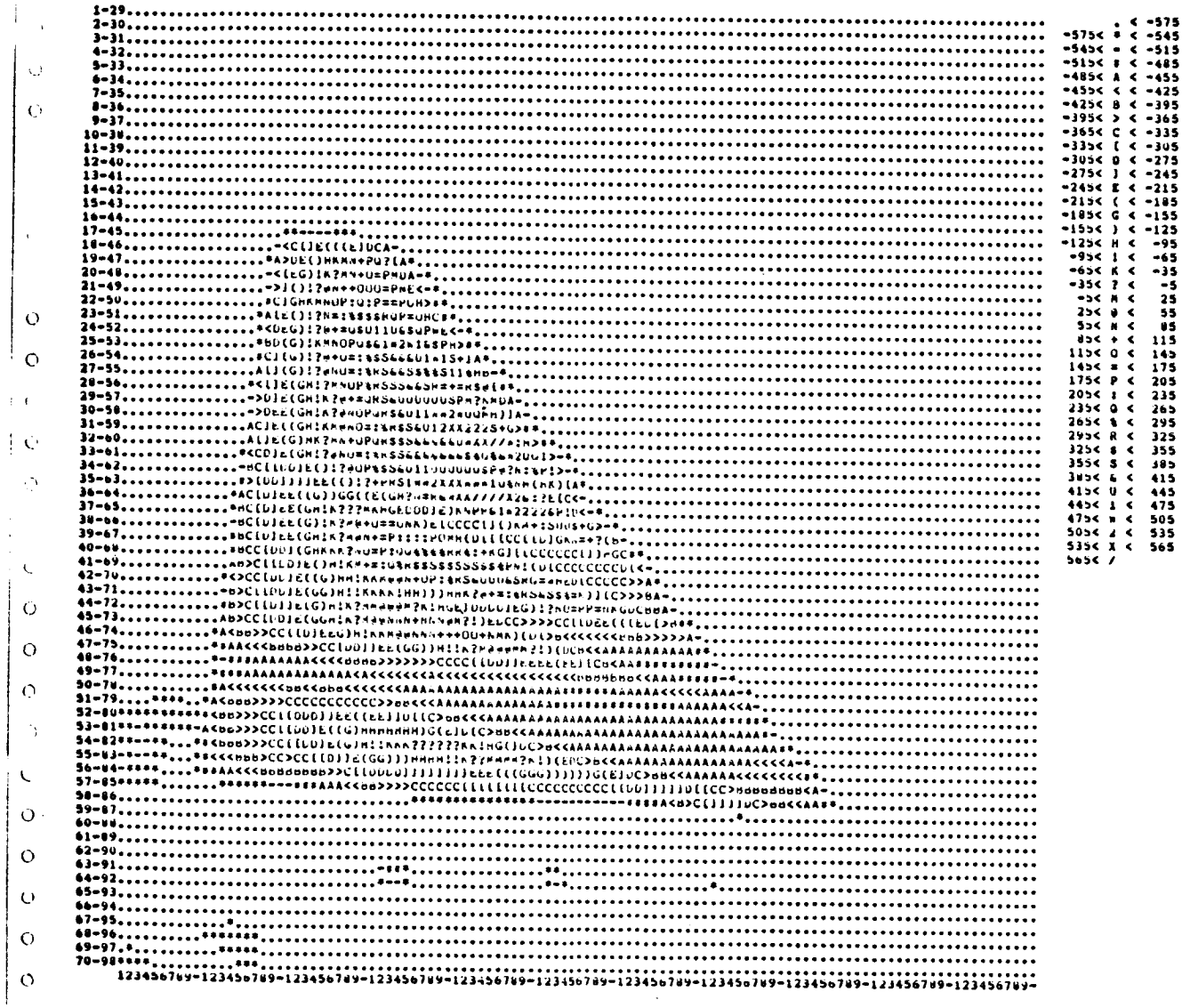
DATE 10-MAR-78 PROJECT NO. V418-P4A
AHO, INC.
AEDC DIVISION
A SVERDRUP CORPORATION COMPANY
NASA KI UNIVA INTRA-NED
ARNOLD AIR FORCE STATION TENNESSEE

GROUP 119 DATA RECORDED 10-MAR-78 6:13:11:596



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DATE 10-MAR-78   PROJECT NO.  7618-P4A
AEDC, INC.
AEDC DIVISION
A SVERDRUP CORPORATION COMPANY
NASA NI  UH9UA INFRA-KED
ARNOLD AIR FORCE STATION TENNESSEE

GROUP   122         DATA RECORDED 10-MAR-78   6141119120Y
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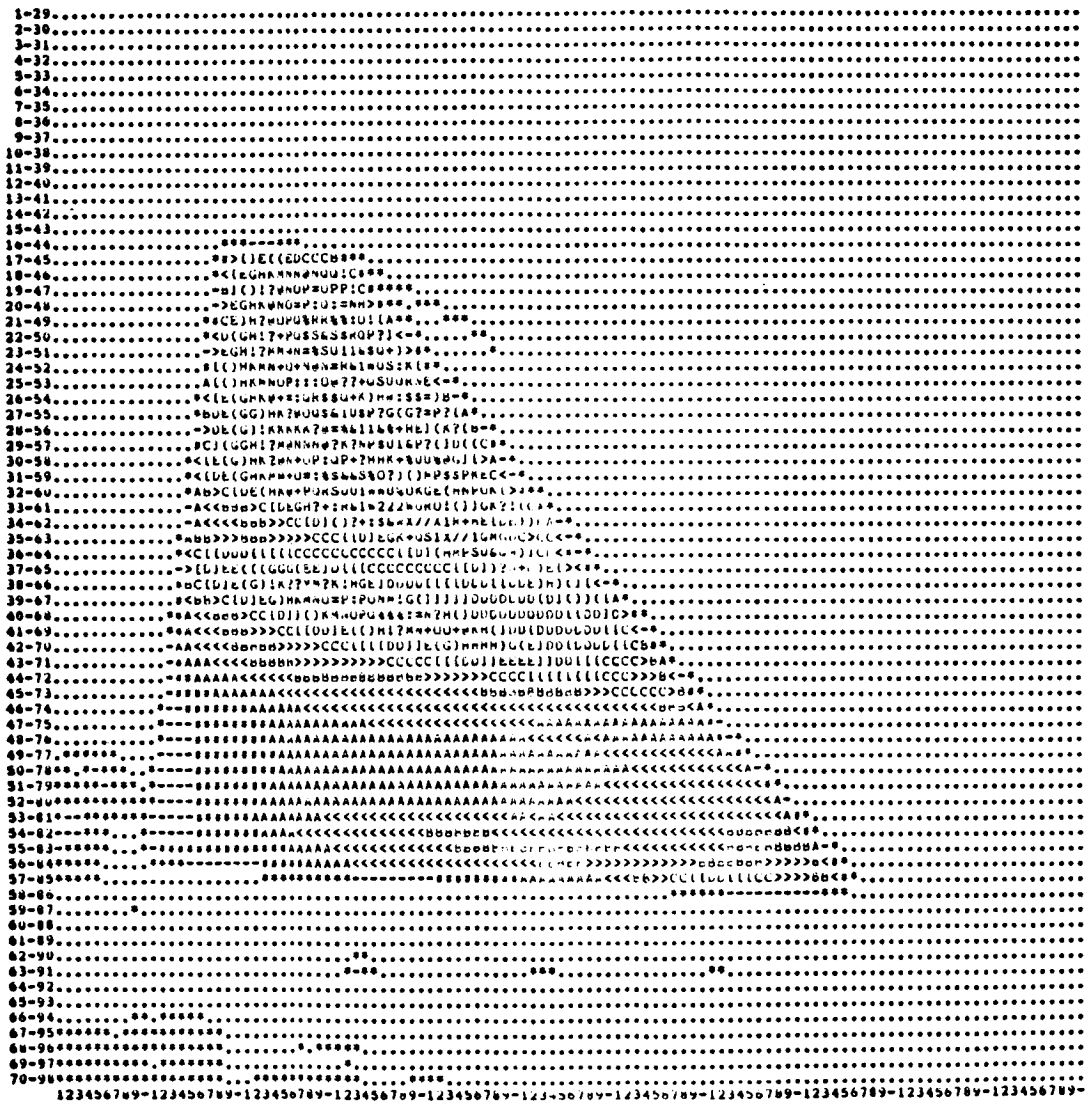
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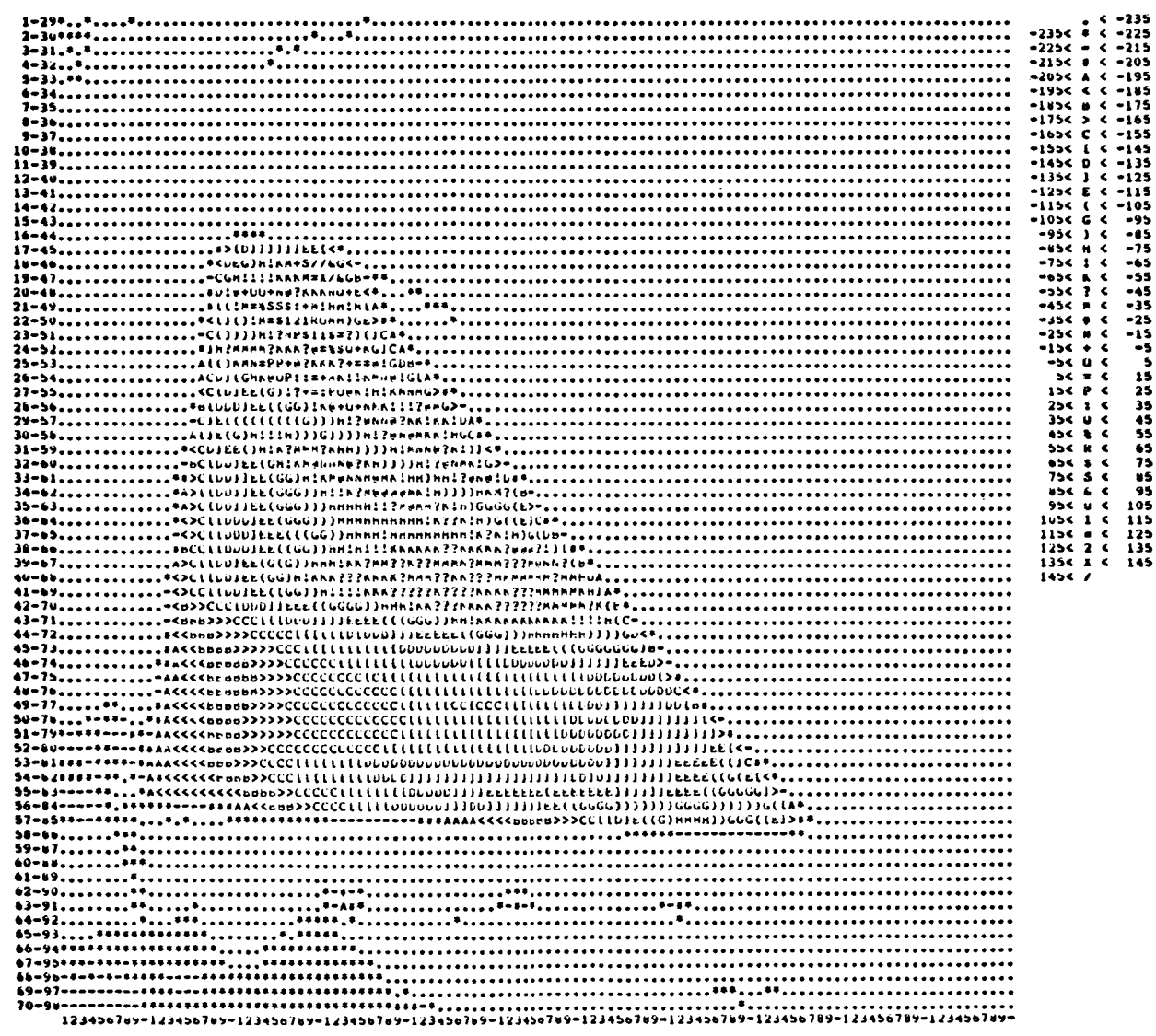
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DATE 10-MAR-78   PROJECT NO.  V41B-P4A
ARO, INC.
AEDC DIVISION
A SVERDRUP CORPORATION COMPANY
NASA NI  UHYUA INFRA-RED
ARNOLD AIR FORCE STATION TENNESSEE

GROUP   128        DATA RECORDED 10-MAR-78   7:40:33:682
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